African Population and Health Research Center

THE GIRL GENERATION

The Girl Generation: Support to the Africa-Led Movement to End Female Genital Mutilation Programme

Endline Evaluation for Ethiopia, Kenya, Senegal and Somalliand: A Consolidated Report

African Population and Health Research Center (APHRC)

Recommended citation: African Population and Health Research Center (2026). *The Girl Generation: Support to the African-Led Movement to End FGM Programme: Endline Evaluation report in Ethiopia, Kenya, Senegal and Somaliland. A consolidated report:* APHRC, Nairobi.

Contact email: rouedraogo@aphrc.org

About TGG-ALM Programme:

The Girl Generation: Support to the Africa-led Movement (TGG-ALM) to end Female Genital Mutilation (FGM) is a programme aimed at significantly reducing the practice of FGM in Ethiopia, Kenya, Senegal and Somaliland by 2026. The programme was implemented by a consortium of partners led by Options Consultancy, and including Amref Health Africa, ActionAid, Orchid Project and Africa Coordination Centre for Abandonment of FGM (ACCAF), and the University of Portsmouth. TGG-ALM worked closely with the Population Council-led FGM Data Hub, the programme's data and measurement arm providing TGG-ALM and the global community with evidence to inform the design, implementation, adaptation, and scaling of effective strategies to end FGM. The consortium implemented multilevel interventions to accelerate positive shifts in social attitudes towards ending FGM, fostering a vision where girls and women have agency and are free from violence. The programme was funded by UK International Development from the UK government; however, the views expressed do not necessarily reflect the UK government's official policies.

Acknowledgements

We express our sincere gratitude to the UK International Development through Options Consultancy for the funding to conduct this evaluation. We are grateful to Options for their unwavering institutional support throughout this evaluation.

We are deeply indebted to the TGG-ALM programme implementation partners, namely Options Consultancy, Action-Aid, Amref Health Africa, and the grantee organisations, for facilitating our access to the field, which was vital to our successful engagement with key stakeholders and data collection. We are also grateful to Population Council-led FGM Data Hub for their contribution to this report, through the findings and conclusions they drew from the data they collected in Kenya and Somaliland.

Special recognition also goes to our dedicated field research team, who worked tirelessly with the utmost professionalism and empathy to ensure the highest ethical standards were maintained during data collection.

Finally, we extend our most profound thanks to the grantee organisations, community leaders, healthcare professionals, and community members across the regions. Thank you for your warmth, your willingness to participate in this research, and your collective commitment to driving meaningful change.

Conflicts of interest statement

The African Population and Health Research Center (APHRC) was commissioned by Options Consultancy and the Population Council to conduct this evaluation. While the evaluation was collaborative rather than fully independent - given the involvement of Options and the Population Council in discussions on the evaluation approach, review of tools, and feedback on findings and conclusions - the research team confirms that no conflicts of interest existed. To ensure the credibility and integrity of the findings, APHRC applied rigorous internal protocols, ensuring that the study design, data collection, analysis, and conclusions were developed independently and without undue influence from the commissioning organisations.

Abbreviations and acronyms

AAS : ActionAid Senegal
ACCAF : Africa Coordinating Centre for the Abandonment of Female Genital Mutilation
APHRC : African Population and Health Research Center
CBO : Community Based Organisation
FGD : Focus Group Discussion
FGM : Female Genital Mutilation
GBV : Gender-Based Violence
IDI : In-depth Interview
KDHS : Kenya Demographic and Health Survey
KES : Kenyan Shillings
KII : Key Informant Interview
MCA : Multiple Correspondence Analysis
OH : Outcome Harvesting
TGG–ALM : The Girl Generation: Support to the Africa-Led Movement to End FGM programme
UOP : University of Portsmouth

Table of Contents

Abbreviations and acronyms iv
1. Executive Summary 1
1.1. Background and methods 1
1.2. Key findings, lessons learned and recommendations 1
1.2.1. Kenya: Garissa, Isiolo, Narok 1
1.2.2 Ethiopia: Amhara 2
1.2.3 Senegal: Kédougou-Tambacounda and Kolda-Sédhiou 2
1.2.4 Somaliland: Sool and Sanaag 3
1.3 Cross-country synthesis 3
1.4 Cross-country recommendations 3
2. Introduction 5
3. Evaluation methodology 6
3.1 Harmonisation of evidence across countries 7
3.2 Data management and analysis 9
3.2.1 Construction of composite outcome measures 9
3.2.2 Quantitative analysis 9
3.2.3 Qualitative data analysis 9
3.2.4 Limitations and interpretation of findings 9
4. Key Findings 10
4.1 Kenya (Garissa, Narok and Isiolo) 10
4.1.1 Programme reach, exposure and social diffusion 10
4.1.2 Knowledge and social norm outcomes 133
4.1.3 Behavioural intentions, agency and attitudes related to FGM 14
4.1.4 Substitution, adaptation and unintended patterns 15
4.2 Ethiopia (Amhara) 16
4.2.1 Programme reach, exposure and social diffusion 16
4.2.2 Normative outcomes and knowledge shifts 17
4.2.3 Attitudes and behavioural intentions related to FGM 18
4.2.4 Substitution and unintended patterns 19
4.3 Senegal (Kédougou–Tambacounda and Kolda–Sédhiou) 2020
4.3.1 Programme reach, exposure and social diffusion 20
4.3.2 Normative outcomes and knowledge shifts 22
4.3.3 Intentions, agency and attitudes related to FGM 24
4.3.4 Substitution and unintended patterns 25

4.4 Somaliland 26
4.4.1 Programme reach, exposure and social diffusion 26
4.4.2 Knowledge and social norms 27
4.4.3 Intentions, agency and attitudes 28
5. Voices of the community (cross-country synthesis) 30
6. Cross-country discussion 32
7. Lessons learned for multi-country programming 35
7.1 Country-specific lessons 35
7.2 Cross-cutting lessons for multi-country programming 37
8. Cross-country conclusions 37
9. Cross-Country Recommendations 38
9.1 Short-term recommendations 38
9.2 Long-term recommendations 38
References 40
Appendices vi
Appendix 1: Kenya tables ..... **vi**
Appendix 2: Ethiopia: Amhara tables ..... **ix**
Appendix 3: Senegal tables ..... **xiv**
Appendix 4: Somaliland ..... **ixii**

1. Executive Summary

1.1. Background and methods

FGM is a severe human rights violation and a form of gender-based violence classified into four types by the World Health Organization (WHO). Globally, over 230 million girls and women have undergone FGM, including an estimated 144 million in Africa.

The Girl Generation: Support to the Africa-Led Movement to End FGM (TGG-ALM) programme, funded by UK International Development, was a multi-country initiative designed to support progress toward the abandonment of Female Genital Mutilation (FGM). Implemented by a consortium of organisations including Options Consultancy, ActionAid, Amref Health Africa, Orchid Project, and ACCAF, the programme deployed multi-level interventions – including girl-centred, community-driven approaches - across Ethiopia, Kenya, Senegal, and Somaliland. These interventions combined community dialogue, youth engagement, support to grassroots organisations, advocacy, and institutional integration to address FGM. TGG-ALM worked closely with Population Council-led FGM Data Hub, the programme's data and measurement arm.

Following programme implementation, the African Population and Health Research Center (APHRC) and Population Council conducted complementary endline evaluations across the intervention regions and counties to examine programme reach, exposure-related associations, estimated effects where evaluation designs supported such inference, implementation experiences, and lessons for future programming.

The APHRC-led component in Ethiopia, Senegal, and Garissa (Kenya) used exposure-based analyses because delayed baseline data collection, exposure overlap, and other anti-FGM initiatives limited causal attribution. The Population Council evaluation in Isiolo and Narok used a repeated cross-sectional difference-in-differences approach, while Somaliland used a cross-sectional comparison of exposed and non-exposed respondents. Findings are therefore interpreted according to the strength of inference supported by each design. Because evaluation designs differed across countries, effect estimates were not pooled or directly compared across all studies. The Executive Summary therefore emphasises the direction and consistency of findings, while detailed quantitative results are presented in the full technical report and country and sub-national summary reports.

The evaluation assessed shifts in knowledge, beliefs, attitudes, agency, and social norms, while also documenting movement-building, institutional integration; and lessons for future programming and sustainability. This Executive Summary focuses primarily on findings from the evaluation of TGG-ALM's community-level interventions. The full technical report and accompanying learning briefs[1] present additional evidence on the programme's wider components, including grants to grassroots organisations, survivor leadership initiatives, advocacy, movement building, and institutional integration.

1.2. Key findings, lessons learned and recommendations

1.2.1. Kenya: Garissa, Isiolo, Narok

In Garissa, exposure to FGM-related activities was associated with stronger opposition to FGM, higher FGM-related knowledge, greater agency to oppose the practice, more frequent encouragement of abandonment, lower intention to subject daughters to FGM, and a more favourable overall social attitude toward abandonment. Qualitative evidence showed that community dialogues with religious

[1] See thegirlgeneration.org/endline-evaluation-reports/

and local leaders helped challenge the perception that FGM is a religious requirement. However, gender-inequality beliefs remained largely unchanged, and secrecy, medicalisation, cross-border practices, and continued acceptance of *"Sunna*" FGM persisted.

In Isiolo and Narok, exposure was associated with stronger personal opposition to FGM, more favourable perceptions of girls who had not undergone FGM, and stronger behavioural intentions not to cut daughters. Isiolo showed stronger diffusion – a process by which ideas and behaviors are spread through interpersonal relationships and social networks, whereby individuals influence one another's decisions regarding whether to abandon FGM – and larger exposure-related differences, while Narok, where opposition to FGM was already high, showed a reinforcing effect rather than large visible change. These findings illustrate how similar programme approaches can produce different outcomes depending on the local stage of normative change and community readiness for change.

1.2.2 Ethiopia: Amhara

In Amhara, exposure to FGM-related activities was associated with stronger FGM-related knowledge, stronger beliefs opposed to FGM, lower odds of unequal gender beliefs, greater agency, more encouragement of abandonment, and a more favourable overall social attitude toward abandonment. Qualitative evidence highlighted ripple effects across families and communities, the role of champions, religious leaders, health workers, and grassroots organisations, and growing recognition of FGM as harmful rather than religiously required. Persistent barriers included cultural beliefs, economic interests among practitioners, distrust of some messengers, uneven reach, and reports of families travelling to neighbouring kebeles with limited prevention coverage to have FGM performed. Overall, exposure to end FGM interventions was a stronger predictor of favourable outcomes than site assignment (whether a site had been directly targeted or not by TGG-ALM), highlighting the importance of programme reach and engagement beyond formally designated intervention sites.

1.2.3 Senegal: Kédougou-Tambacounda and Kolda-Sédhiou

Senegal: Across both regional clusters, exposure to FGM-related activities was associated with stronger FGM-related knowledge, greater agency to oppose FGM, and more frequent encouragement of abandonment.

Kédougou–Tambacounda: Exposure was associated with higher knowledge and stronger FGM-specific beliefs opposed to the practice, while gender inequality beliefs showed no meaningful association. This suggests that exposure may have influenced FGM-specific understanding and beliefs more readily than deeper gender norms.

Kolda–Sédhiou: Exposure was strongly associated with higher knowledge, but broader beliefs and attitudes remained less favourable among exposed respondents, likely reflecting selective exposure in more conservative communities. This pattern indicates that knowledge may increase earlier and more easily than wider social expectations, sanctions, and identity-related beliefs.

Together, the two clusters show that exposure consistently strengthened FGM-related knowledge and agency, but broader normative outcomes varied considerably according to local social expectations, community readiness for change, and the distribution of programme exposure.

Qualitative findings across Senegal highlighted uneven reach, repeated engagement of the same groups, logistical barriers, social sanctions, stigma against girls who had not undergone FGM, and concerns about discreet cutting, earlier cutting, cross-border continuation, and possible medicalisation.

1.2.4 Somaliland: Sool and Sanaag

In Somaliland's near-universal prevalence context, exposure was associated with stronger personal opposition to FGM, more favourable perceptions of girls who had not undergone FGM, stronger intentions not to subject daughters to FGM, and exceptionally high social diffusion. However, perceived family and community opposition remained lower than personal opposition, indicating a gap between private attitudes and perceived collective expectations. Gender gaps also persisted, with women showing stronger shifts than men, and continued acceptance of supposedly less severe forms of FGM commonly referred to as "Sunna" —often framed as religiously acceptable—constrained full abandonment despite encouraging early shifts in personal attitudes.

1.3 Cross-country synthesis

Across all countries, community-based, dialogue-driven interventions consistently strengthened FGM-related knowledge, increased agency, improved attitudes and intentions, and increased public discussion of FGM abandonment. Where opposition to FGM was still emergent, these approaches appeared to support early normative movement. Where opposition was already high, they helped reinforce existing favourable norms. These findings demonstrate that while the programme consistently strengthened knowledge and individual agency, longer-term investment is needed to transform deeper gender norms and collective social expectations.

However, progress was uneven. Knowledge and individual attitudes often shifted before broader collective norms. In several settings, people appeared more progressive in their own views than in what they perceived among families or communities. This gap between private attitudes and perceived community norms, combined with concerns on marriageability of girls, gender inequalities, social sanctions, secrecy, cross-border cutting, medicalisation, and continued acceptance of "Sunna", continues to constrain full abandonment.

The evaluation also shows that programme reach matters. Where exposure remained concentrated among organised participants, accessible communities, or conservative groups, wider community-level change was slower and more uneven. Conversely, strong diffusion through trusted leaders, youth networks, community champions, religious leaders, and peer networks helped extend messages beyond direct participants.

Beyond community-level outcomes, the evaluation also highlighted the contribution of TGG-ALM's broader movement-building and institutional strengthening efforts. Investments in training, mentorship, and small grants strengthened the capacity, confidence, and reach of grassroots organisations, while partnerships with anchor organisations supported local ownership and sustainability. In addition, integrating FGM prevention into school clubs, peer education, and health training curricula created sustainable platforms for learning, advocacy, and professional engagement, extending programme influence beyond direct community interventions.

1.4 Cross-country recommendations

Future programming should prioritise sustained, context-sensitive, and gender-transformative approaches rather than one-size-fits-all models. Immediate priorities include strengthening exposure intensity and reach of interventions while improving its measurement, improving coordination across partners, expanding outreach to remote and underserved communities, and using existing diffusion networks to reach beyond direct participants.

Longer-term priorities include making collective abandonment more visible, reframing cultural and religious narratives around all forms of FGM, strengthening male and youth engagement, linking families with protection and accountability structures, and integrating FGM prevention into

education, health, religious, and grassroots systems. Programmes should explicitly address adaptive forms of FGM, including Sunna, medicalisation, secrecy, earlier cutting, and cross-border continuation, while avoiding stigma toward women and girls who have already undergone FGM.

2. Introduction

Female Genital Mutilation (FGM)[2] is a severe human rights violation and a form of gender-based violence (1). The World Health Organization identifies four types of FGM, from clitoridectomy to infibulation and practices like pricking or piercing (1). Globally, more than 230 million girls and women have undergone FGM, including an estimated 144 million in Africa (2,3). In high-prevalence countries, FGM is a deeply entrenched social norm rather than an isolated act. Families are compelled to conform due to powerful structural enforcers, including the preservation of a daughter's marriageability, gender identity construction, and an intense fear of social exclusion or stigma (4–8). Prevalence and cultural enforcement vary substantially by region across the study sites. Somaliland holds a near-universal prevalence of 98% to 99%. While historically practicing Type III FGM (infibulation), the region is experiencing an evolutionary shift toward the "Sunna" FGM. This shift is a complex compromise driven by a 2018 religious ruling (Fatwa) that prohibited infibulation but endorsed the Sunna form, creating an obstacle for advocates by packaging a human rights violation with zero medical benefits as an acceptable alternative (7–10). In Kenya, the national prevalence stands at 15%, but severe localized hotspots persist, notably in Garissa County at 83%, Isiolo County at 66%, and Narok County at 51% (7,11). Ethiopia and Senegal, on the other hand exhibit entrenched regional prevalence rates of between 65-75% (12) and 76%-91% respectively (13).

Because these cultural dynamics are highly resistant to change through legal or policy measures alone, interventions must transform collective norms rather than address individual behaviour in isolation (5). To disrupt these systemic cycles, the UK Foreign, Commonwealth and Development Office (FCDO) funded "The Girl Generation – Support to the Africa-Led Movement to End FGM" (TGG-ALM) from 2022 to 2025. The programme was implemented by a consortium featuring Options Consultancy, ActionAid, Amref Health Africa, Orchid Project and the Africa Coordination Centre for Abandonment of FGM (ACCAF). Across countries, the programme used a multi-level approach linking individual engagement, community mobilisation, institutional strengthening, health-system integration, survivor leadership, strategic communications and advocacy, and movement-building.

At the individual and at community levels, the programme established safe spaces across the countries for critical reflection by deploying school and girl clubs, and peer-to peer sessions to engage youth before normative expectations solidify, alongside various forms of community and household dialogues (including intergenerational) that brought together men, women, health workers, and religious/community leaders (14). While the broad dialogues engaged men, women, youth, and elders in participatory learning, the dedicated women's circles provided a vital, safe environment. This allowed women and girls to openly explore bodily autonomy and gender inequality, building their agency to negotiate decisions within their households without mixed-gender social constraints. Apart from the intergenerational dialogues, the programme carried out structured couple-focused sessions. Recognising that FGM decisions are heavily negotiated within the family unit, these couple dialogues provided a trusted forum for partners to jointly re-evaluate marriage norms, gender roles, and their daughters' futures.

At the institutional and movement-building levels, the programme reinforced these dialogues by providing small grants to local community-based organisations, strengthening youth- and survivor-led networks, advocating for policy strengthening and law enforcement, and integrating FGM prevention directly into medical training curricula and existing systems (i.e., school clubs). Although implementation modalities differed across countries, the programme was guided by a shared theory of change: sustained locally-led community engagement, broader social dialogue, increased

[2] A note on language: Throughout this report, the term FGM is used by the authors. However, where direct quotations from respondents are included, the most direct translation of the term for FGM is used, which may be, for example, 'female circumcision', 'cut', or 'circumcised'. Names and other identifying features of respondents (e.g., case studies, in quotations) have been changed.

awareness, strengthened agency, and movement-building may be associated with more favourable attitudes and norms regarding FGM.

Following programme implementation, endline evaluations were conducted across participating countries using complementary methodological approaches. This consolidated report synthesises evidence from Kenya, Ethiopia, Senegal, and Somaliland to document programme reach, estimate effects where evaluation designs support such inference, examine exposure-related associations where attribution is more limited, analyse implementation experiences, and identify lessons for future programming across diverse contexts.

The specific objectives of this synthesis report were to:

- Examine patterns and associations between exposure to FGM-related activities and outcomes related to knowledge, beliefs, social norms, attitudes, agency, intentions and actions concerning FGM in the study areas
- Synthesize quantitative and qualitative evidence to identify common and context-specific implementation experiences, perceived pathways of influence, and lessons learned.
- Document factors associated with programme reach, implementation challenges, sustainability, and movement-building across different country contexts.

3. Evaluation methodology

The consolidated evaluation brings together findings from country evaluations conducted in Kenya, Ethiopia, Senegal, and Somaliland. It integrates two complementary evaluation components led by the APHRC and the Population Council. Although evaluation designs differed across countries because of implementation timelines, contextual realities, and the institutions leading data collection, all components examined comparable outcome measures covering FGM-related knowledge, beliefs related to FGM, gender inequality beliefs, attitudes toward social sanctions, intention regarding FGM on daughters, agency to oppose FGM, encouragement of abandonment, and overall social attitude toward FGM.

Across the evaluation sites, quantitative community-based surveys were complemented by qualitative, ethnographic, or Outcome Harvesting evidence where available. The consolidated report, therefore, does not treat the country evaluations as a single uniform impact evaluation. Instead, it synthesises comparable patterns across common outcome measures while recognising differences in study design, exposure measurement, and analytical strategy.

The level at which findings are reported also differs across countries because it reflects programme implementation and evaluation design rather than a uniform administrative unit. In Kenya, findings are presented separately for Garissa, Isiolo, and Narok because these sites were evaluated as distinct programme contexts. In Senegal, findings are presented for two regional clusters (Kédougou–Tambacounda and Kolda–Sédhiou), corresponding to the two programme implementation clusters managed by different consortium partners. In Ethiopia, the evaluation covered a single programme region (Amhara), while in Somaliland it covered the Sool and Sanaag programme area as a single implementation context.

For the APHRC-led component in Ethiopia, Senegal, and Garissa (Kenya), the design was originally structured to support a difference-in-differences analysis with intervention and comparison groups. However, because programme activities had already begun in some locations prior to the initial round of data collection, the baseline is characterised as a delayed baseline. In addition, widespread contamination—due to overlapping FGM-related interventions by multiple actors in both intervention and comparison areas—limited the feasibility of maintaining a clear counterfactual. As a result, the analysis shifted from site-based comparisons to an exposure-based framework, examining variation in individuals' levels of exposure to programme activities and focusing on

ecosystem-level patterns of engagement. This approach emphasises associations between reported exposure and outcomes rather than attributing isolated causal effects.

Quantitative baseline data for this component were collected by the University of Portsmouth between February and April 2023, with endline data collected by APHRC between April 2025 and January 2026. The study covered intervention sites in Guna and Farta districts (Amhara region, Ethiopia); Bura, Nanighi, and Dhekarhya (Garissa County, Kenya); and the regions of Tambacounda, Sédhiou, Kolda, and Kédougou (Senegal).

In parallel, Population Council implemented evaluations in Isiolo and Narok counties in Kenya, as well as in the Sool and Sanaag regions of Somaliland. In Isiolo and Narok, the baseline (first survey round) was conducted in June–July 2024, followed by the endline (second survey round) in November–December 2025. The analysis used a repeated cross-sectional difference-in-differences approach to estimate changes over time between exposed and unexposed groups. In Somaliland, a community-based cross-sectional survey was conducted among male and female respondents, enabling comparison of outcomes across groups with varying levels of programme exposure. Because the Somaliland design was cross-sectional, findings from Somaliland are interpreted primarily as exposure-related associations rather than estimated programme effects. Table 1 summarizes the different data sources and sample sizes.

Across the evaluation components, study populations generally included male and female respondents across adolescence and adulthood, with APHRC-led sites targeting respondents aged 15–65 years and Population Council sites targeting respondents aged 15–60 years. The inclusion of older respondents was important because grandparents, elders, religious leaders, and other traditional custodians often play a central role in maintaining or challenging FGM-related norms.

Together, these two components provide a complementary multi-country evidence base. The consolidated synthesis combines exposure-based, pre-post, and cross-sectional analytical strategies, while recognising the different levels of causal inference supported by each design. For this reason, the report prioritises the direction, strengths, and consistency of findings across common outcome measures rather than direct statistical comparison of effect sizes across countries.

3.1 Harmonisation of evidence across countries

Because evaluation designs differed across countries, this report does not pool effect estimates or directly compare odds ratios across all studies. Instead, findings are synthesised by examining the direction, strength, and consistency of results across common outcome measures. These outcome measures include FGM-related knowledge, beliefs related to FGM, gender inequality beliefs, attitudes toward social sanctions, intention regarding FGM on daughters, agency to oppose FGM, encouragement of abandonment, and overall social attitude toward FGM.

This approach allows the report to identify patterns that are consistent across contexts while also highlighting country-specific dynamics. Qualitative and participatory evidence are used to interpret the plausibility of observed patterns and to examine how programme exposure, community engagement, institutional structures, and broader social norms may explain them.

Table 1. Data sources and sample sizes

Evaluation phases	Lead	Timeline	Type of survey	Target population	Country and region/County	Sample size
QUANTITATIVE						
Baseline	UOP	February and April 2023:	Community-based survey	Men and Women aged 15 to 65 years	Ethiopia (Guna and Farta)	802
					Kenya (Garissa County)	536
					Senegal (Kolda, Sédhiou, Tambacounda regions)	750
	Pop Council	June-July 2024	Community-based survey	Men and Women aged 15 to 60 years	Kenya (Narok and Isiolo)	4859
Endline	APHRC	April-December 2025	Community-based survey	Men and women, 15-65 years	Ethiopia (Guna and Farta)	560
					Kenya (Garissa County)	554
					Senegal (Tambacouda, Kédougou, Kolda and Seldhiou regions)	2268
	Pop Council	Nov-Dec 2025	Community-based survey	Men and women, 15-60 years	Kenya (Isiolo, Narok)	4068
	Pop Council		Community-based survey	Men and women, 15-60 years	Somaliland (Sool and Sanaag regions)	2054
QUALITATIVE						
Endline ethnography	APHRC	April-July 2025	Ethnography (participant observation, IDI, KII, participatory methods/FGD)	Community members, champions, leaders, programme implementers	Kenya (Garissa County)	55
					Senegal (Tambacounda and Sédhiou)	90
Endline Qualitative	APHRC	November 2025 – January 2026	Qualitative (IDI, FGD and KII)	Champions, leaders, programme implementers, grantees	Ethiopia (Guna and Farta)	51
					Kenya (national)	72
					Senegal (Kédougou and Kolda + National)	92
Endline Outcome harvesting	APHRC	November 2025	Outcome harvesting	Programmes implementers, beneficiaries, national stakeholders	Kenya	22
					Senegal	55

*UOP-University of Portsmouth

3.2 Data management and analysis

3.2.1 Construction of composite outcome measures

Composite measures, including for FGM-related beliefs, gender inequality beliefs, FGM-related knowledge, social sanctions, and overall social attitude, were constructed to capture broader normative and attitudinal patterns. These composite measures were derived using Multiple Correspondence Analysis (MCA) to identify dominant patterns across related survey questions and then grouped using Jenks natural breaks to classify respondents into meaningful categories.

Overall social attitude toward FGM was conceptualised as an individual's overall evaluative position regarding the acceptability of FGM within their social environment. It reflects attitudes toward continuation or abandonment of the practice, willingness to oppose prevailing social expectations, and behavioural intentions regarding FGM. Operationally, overall social attitude was measured as a latent construct derived from survey items capturing attitudes toward social sanctions for FGM abandonment, intention to perform FGM on daughters, and whether respondents had ever encouraged someone to abandon FGM. These items collectively capture respondents' overall orientation toward the continuation or abandonment of FGM.

3.2.2 Quantitative analysis

For the APHRC-led component in Ethiopia, Senegal, and Garissa, quantitative analyses combined descriptive statistics and multivariate regression models to examine associations between reported exposure to FGM-related activities and key FGM-related outcomes. For the endline analysis, the primary explanatory variable was a three-category exposure variable: those exposed in intervention sites, those exposed in control sites, and those non-exposed in both sites. All models were adjusted for sex, age group, education, and marital status. For models examining overall social attitude, we further adjusted for beliefs related to FGM, gender inequality, and FGM-related knowledge, age, sex, and education.

For the pooled analysis, we combined baseline and endline data to distinguish between three groups: respondents exposed in intervention sites, respondents exposed elsewhere (baseline and control sites), and those not exposed in any site. These models were adjusted for sex, age group, and education. Like the endline analysis, the overall social attitude model included additional adjustments for beliefs, gender inequality, and knowledge.

3.2.3 Qualitative data analysis

Qualitative interviews and discussions were recorded using digital voice recorders, and the audio files were transcribed verbatim, then translated from local languages into English. The qualitative dataset was analysed using a thematic analysis approach. The study team went through the data to identify key themes and develop a codebook. The codebook and all transcripts and field notes were uploaded to Dedoose software and used to code and analyse the qualitative data.

Qualitative, ethnographic, and Outcome Harvesting evidence was triangulated with quantitative findings to contextualise observed patterns, explore perceived pathways of influence, document implementation experiences, and identify barriers, facilitators, and lessons for sustainability.

3.2.4 Limitations and interpretation of findings

The consolidated evaluation was shaped by several methodological and operational limitations. For the APHRC-led component, delayed baseline data collection, exposure overlap between intervention and comparison areas, and self-reported exposure limited causal attribution. Exposure measures

could not consistently distinguish TGG–ALM activities from activities implemented by other actors, nor capture the timing, frequency, or intensity of participation.

For the Population Council-led component, the Isiolo and Narok analyses supported stronger inference through a repeated cross-sectional difference-in-differences approach, while the Somaliland analysis remained cross-sectional and therefore more limited for causal interpretation.

Across all countries, the sensitive nature of FGM may have introduced social desirability bias, particularly for questions on attitudes, intentions, and support for abandonment. Concurrent interventions by other organisations, prior exposure to anti-FGM activities, implementation delays, insecurity, and uneven programme reach may also have influenced exposure patterns and observed outcomes.

These limitations do not undermine the value of the findings but indicate that results should be interpreted according to the strength of inference supported by each country evaluation design.

4. Key Findings

The key findings section presents results under four themes: programme coverage and reach; knowledge and social norm outcomes, attitudes, agency, intentions toward FGM abandonment; and substitution, adaptation, and unintended patterns. Findings are organised by country, beginning with Kenya (Garissa, Isiolo and Narok), followed by Ethiopia (Amhara), Senegal, where results are grouped into two clusters (Kédougou–Tambacounda and Kolda–Sédhiou), and Somaliland (Sool and Sanaag regions).

4.1 Kenya (Garissa, Narok and Isiolo)

4.1.1 Programme reach, exposure and social diffusion

Exposure patterns varied markedly by study site in Garissa as shown in Figure 1 below. At endline, 59% of respondents in intervention sites reported exposure to FGM-related activities, compared with 6% in control sites. At baseline, 40% of respondents reported exposure, which is consistent with the delayed baseline and the presence of other FGM-related initiatives before or during the evaluation period.

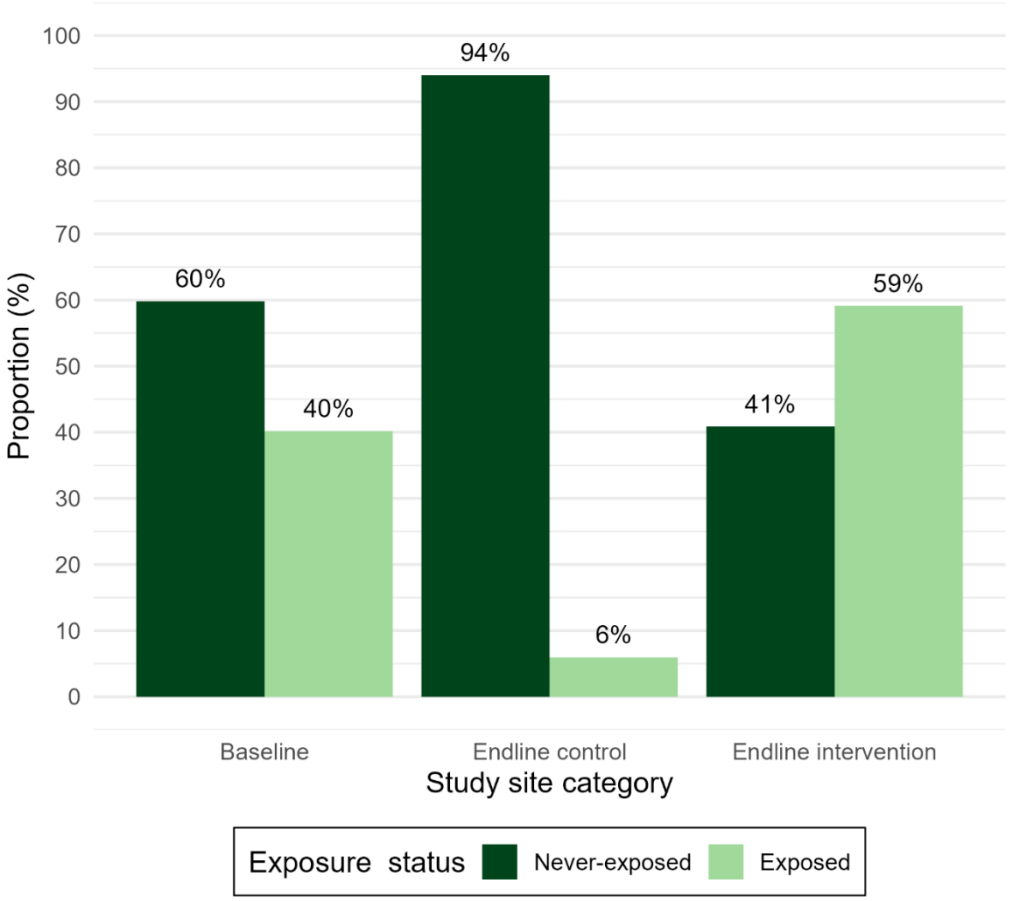

Figure 1: Exposure by study site in Garissa region

Qualitative findings show that training sessions, school club activities, community dialogues, and sensitisation efforts led by FGM survivors, champions, religious and community leaders, former practitioners, and health workers were the main channels through which communities engaged with programme messages, helping to create safe spaces for dialogue and strengthen advocacy against FGM in Garissa. These were complemented by door-to-door outreach, family discussions, and market-based sensitisation, which expanded programme reach and encouraged reflection on existing beliefs and attitudes. Intergenerational dialogues further deepened engagement by enabling younger and older community members to discuss cultural norms, with youth champions using these forums to challenge misconceptions and raise awareness of the harmful consequences of FGM.

However, programme reach was mainly concentrated in urban trading centres. Expansion into remote villages was hindered by poor road infrastructure, high operational costs, and insecurity. A woman champion highlighted these constraints:

> "It's true we haven't reached all the remote villages, and it's in our plan for this year to cover those areas. Some areas have security issues and cannot be fully accessed."
> *(KII, Woman Champion, Garissa)*

In Isiolo and Narok, exposure and diffusion patterns followed similar trajectories. In Isiolo, exposure channels were diverse and reinforced through both formal and informal interactions. There was substantial evidence of social diffusion, with participants reporting that programme messages were actively shared through interpersonal networks, radio, community networks, and local intermediaries. In Narok, diffusion was more limited and occurred primarily through formal channels such as religious leaders, administrators, and other authority figures. This suggests a more structured

and contained pattern of diffusion in Narok compared with the broader and more organic spread observed in Isiolo.

Overall, the findings suggest that the breadth and diversity of exposure channels shape the scale and nature of social diffusion (Figure 2). Isiolo demonstrated stronger diffusion dynamics, with 31% active diffusion and 56% passive diffusion, while Narok showed more limited diffusion, with 11% active diffusion and 20% passive diffusion, largely mediated through leaders and institutions.

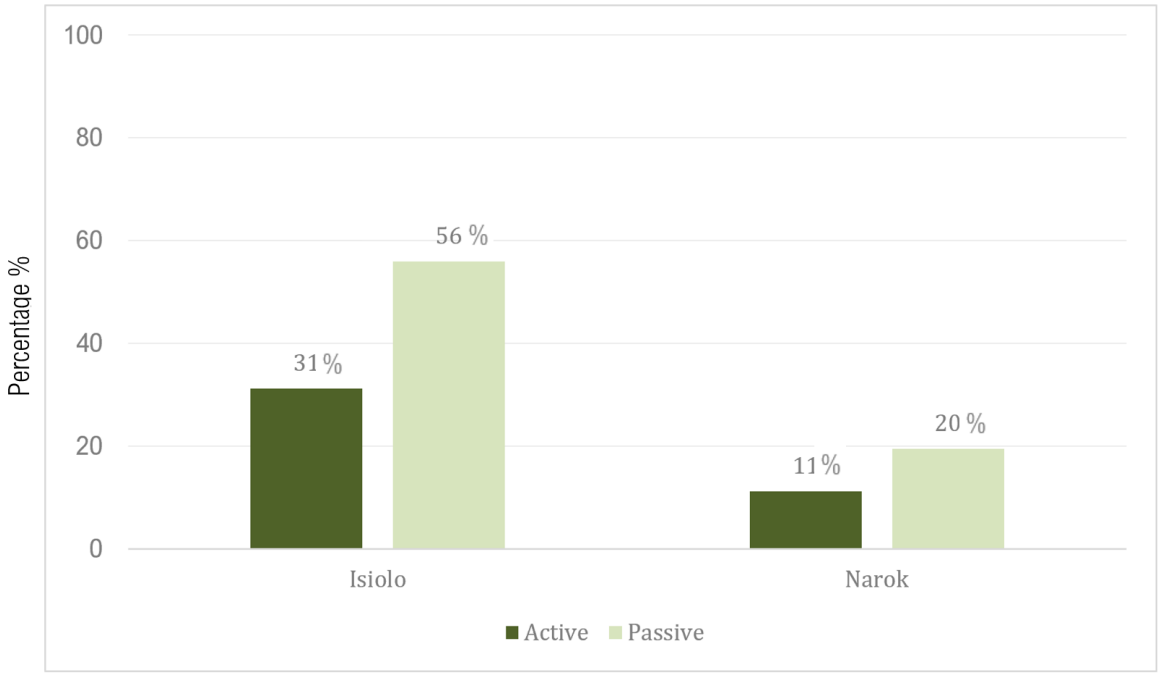

Figure 2: Levels of active and passive diffusion in Isiolo and Narok

Overall, people exposed to FGM-related activities tended to hold more favourable attitudes toward abandonment than non-exposed respondents. In Garissa intervention areas, 87% of exposed respondents had an overall attitude opposed to FGM, compared with 66% of non-exposed respondents across all sites. Exposed respondents in intervention sites were also more likely to hold beliefs opposed to FGM (54% compared with 34% among non-exposed respondents) and to have high FGM-related knowledge (53% compared with 39%). We did not observe meaningful difference between study site-related exposure groups in terms of gender inequality beliefs, suggesting that deeper social norms remain harder to shift (see Table A1 in the Appendix).

Exposure was also linked to less support for discrimination against girls who had not undergone FGM, less support for FGM continuation, and less intention to cut daughters. These are endline associations and should not be interpreted as direct evidence of change over time.

In Isiolo and Narok, opposition to FGM was consistently higher among exposed groups, with a larger gap in Isiolo where 79% of exposed respondents express complete opposition to FGM at endline compared with 64% for non-exposed respondents. In Narok, where opposition was already high, 91% of exposed respondents completely opposed FGM compared with 87% of non-exposed respondents, suggesting a reinforcing effect in this county.

4.1.2 Knowledge and social norm outcomes

The findings on the association between knowledge-social norm outcomes and exposure in Garissa are based on multivariate logistic models adjusted for demographic and contextual factors. According to the summary of the logistic regression results provided in Appendix Table A2, respondents exposed in intervention sites were:

- About 2.1 times more likely than non-exposed respondents to hold beliefs opposed to FGM.
- About 1.9 times more likely than non-exposed respondents to report high FGM-related knowledge.
- No clear association between exposure and gender-inequality beliefs was noticed.

These findings suggest that exposure to FGM-related activities is a determinant of beliefs opposed to FGM as well as FGM-related knowledge level in Garissa. However, we did not find evidence of an association between exposure and gender-inequality beliefs. This suggests that FGM-specific knowledge and beliefs may be more responsive to programme exposure than deeper gender norms, which often require longer-term engagement.

In Isiolo, the findings suggest that the programme was associated with changes in the social meanings attached to FGM and with more gender-equitable beliefs. Exposed participants were less likely to describe girls who had undergone FGM as "healthy" (34%) compared with non-exposed participants (51%). Concurrently, attributes such as cleanliness, health, and purity were increasingly assigned to girls who had not undergone FGM. In Narok, where favourable attitudes toward abandonment were already relatively high, the programme contributed to reinforce positive perceptions of girls who have not undergone FGM.

The qualitative findings complemented the quantitative findings by describing the "why "and "how" the programme influenced beliefs, norms, and knowledge in the study areas. Through community dialogues that included religious and other community leaders, participants described efforts to challenge the perception of FGM as a religious requirement and mandatory cultural obligation. The findings also shed light on how targeted messaging on the consequences of FGM—particularly Type III FGM, delivered by champions such as Hawa (see box below), contributed to increased awareness of both the physical and psychological harms associated with FGM.

> "Back then, no one asked why. We were told it was for our benefit, that cutting made us clean, made us women. It was not just a practice; it was our pride, our identity. Many women said, 'FGM is only wrong when it is Firauni. Sunna is good, it is religious.' But slowly, something began to shift…After the ActionAid trainings, we started inviting imams and elders and they began to speak, some even questioning what they had always preached. Women who once whispered now spoke out in public meetings. Girls started asking their mothers, 'Why should I be cut?' At weddings and barazas, I now hear people debating, not defending.
> *(Hawa, 36-year-old FGM survivor and community champion, Nanighi)*

Hawa's account highlights the important role of community champions in facilitating dialogue and challenging long-standing norms. Her story reflects emerging shifts in beliefs and community conversations around FGM. However, qualitative findings also show that FGM continues to be viewed by some community members as important for girls' transition to womanhood and purification. While community members reported declining acceptance of forms of FGM they perceived as more severe, probably due to programme efforts, the form commonly referred to as

'Sunna' persists and is often justified on religious grounds. Contradictory messaging from community and religious leaders has sometimes reinforced these beliefs - condemning forms perceived as more severe such as Pharaonic FGM while simultaneously endorsing or legitimising 'Sunna' as religiously acceptable. This has contributed to the persistence and adaptation of FGM rather than full abandonment.

> "Pharaonic has mostly stopped, but Sunna still happens."
> *(IDI, Woman, Garissa)*

4.1.3 Behavioural intentions, agency and attitudes related to FGM

In Garissa, exposure to FGM-related activities in intervention sites was associated with more anti-FGM attitudes and behaviours (see Tables A2 and A3 in Appendix). Respondents exposed in intervention sites were:

- About 3 times more likely than non-exposed respondents to oppose the imposition of social sanctions for FGM abandonment.
- Sixty-seven percent (67%) less likely than non-exposed respondents to be in favour of discrimination against uncut girls.
- About 4 times more likely than non-exposed respondents to have ever encouraged others to abandon FGM.
- Sixty-five percent (65%) less likely than non-exposed respondents to be in favour of FGM continuation.
- Seventy percent (70%) less likely than non-exposed respondents to intend to subject their daughters to FGM.
- About 5 times more likely than non-exposed respondents to report agency to oppose FGM.
- Above 3 times more likely than non-exposed respondents to hold an overall social attitude opposed to FGM.

In Isiolo, the programme was associated with stronger personal opposition to FGM, more favourable attitudes toward uncut girls, increased women's agency, and strong social diffusion. Exposure to community dialogues and women's reflection circles was associated with stronger behavioural intentions not to cut daughters. At endline, 67% of exposed respondents reported being very unlikely to cut their daughters, compared with 48% among unexposed respondents. Exposed participants were also more likely to believe that men would accept marriage to uncut girls.

In Narok, favourable attitudes and behavioural intentions against FGM were already highly prevalent at baseline. The programme therefore appears to have played a reinforcing role rather than producing large visible shifts. Couple dialogues were particularly important in strengthening household-level reflection and engaging men in discussions around daughters' futures, marriageability, and abandonment.

Qualitative findings in Garissa show that attitudes were shifting across different social groups, including women, men, girls and boys regarding FGM. Survivors and grantee organisations described how personal experiences of FGM-related harm motivated advocacy and community mobilisation.

> *"[..] And the doctor told me it's because when you are very young, you know, you have undergone FGM. And because of that cut and the way it has been done, you cannot deliver your children normally. That's why I was delivering the children through CS [caesarean section]... I decided to form this organisation so that I save young girls who have the same problem that I have. The girls that have the same disability that I have. I have just decided to save them through the organisation that I formed"*
> *(KII, FGM survivor, Grantee Manager, Garissa)*

Communities were reported to be more receptive to advocacy messages, with local leaders increasingly supporting abandonment efforts. Increased awareness has encouraged more open discussions, with families questioning the practice, especially the harm caused by so-called 'severe' forms of FGM, and expressing willingness to protect girls.

4.1.4 Substitution, adaptation and unintended patterns

The shift from 'Pharaonic' to 'Sunna' (Sunnatul Muakadha)

FGM-related knowledge appeared to increase awareness of the dangers associated with the practice. However, qualitative findings suggest that, in some communities, this was accompanied by a transition from Type III FGM (*Pharaonic*), toward *Sunna* FGM, generally understood locally as Type I or Type II. *Sunna* is often perceived as less harmful and more acceptable because it is viewed as fulfilling religious or cultural expectations, and "important" to safeguard girls' purity. However, *Sunna* remains a form of FGM and should not be framed as acceptable or safe.

> "Some men supported us at first but later pulled back, afraid of being mocked. The elders accused us of betraying our culture. Some still hold on to the old ways, performing cuttings in secret, but many more are beginning to doubt. The belief that cutting defines womanhood is fading, replaced by another belief—that a girl can be whole, uncut, and still respected. Change here does not come fast, but it is taking root in people's hearts" **(Observation notes, Nanighi)**

Adaptation and secrecy

Mapping exercises with adolescent girls showed that active FGM practitioners remain present, and they identified high-risk areas such as riverbanks, remote homesteads, and forests. Girls identified "unsafe paths" and places where they felt most at risk of being forcibly taken for FGM.

The increasing secrecy surrounding FGM has created challenges in enforcing the Anti-FGM law. Other adaptive practices included i) cross-border movement to areas where the practice remains prevalent which poses a challenge to abandonment and law enforcement; ii) cutting at younger ages. This shift toward younger ages was attributed to increased empowerment and awareness among older girls, who are now more likely to resist, refuse, or report the practice. Participants also noted that younger girls are perceived to heal faster and are less able to oppose the procedure, making them more vulnerable.

> *"Another thing that is contributing to the change in age is [they are now] realising the younger girls heal faster than the older girls. The older girls are more empowered enough to say no. The baby has no consent, and you can literally pin her down while the older girls can fight you. She can even report you because they don't want it."*
> *(FGD, Grantee Organisation, Garissa)*

In response, training former practitioners as advocates against FGM emerged as a key strategy for addressing FGM carried out in secret.

Medicalisation

Medicalisation emerged as another adaptation strategy used by some communities to continue FGM by reducing perceived pain and trauma. Framed as a "safer" alternative, this approach allowed families to preserve cultural expectations while attempting to reduce visible harm and avoid legal consequences.

"They (community members) moved to a practice called "Kisasa" [modern] FGM. This is medicalised FGM that is being practiced. Why was it being practiced? Because as much as so much awareness had gone around FGM being a violation of the rights of women and girls, there was still that cultural attachment to it"
(KII, Advocacy manager, Kenya).

4.2 Ethiopia (Amhara)

4.2.1 Programme reach, exposure and social diffusion

In the combined baseline and endline sample of 1,361 respondents, exposure to FGM-related activities was higher in intervention sites compared to control sites. At endline, 39% of respondents in intervention areas reported exposure, compared with 22% in control sites. At baseline, 24% of respondents reported exposure. These figures highlight that exposure was present across sites but more pronounced in intervention sites, consistent with greater programme reach while also reflecting the delayed baseline and wider anti-FGM ecosystem (Figure 3).

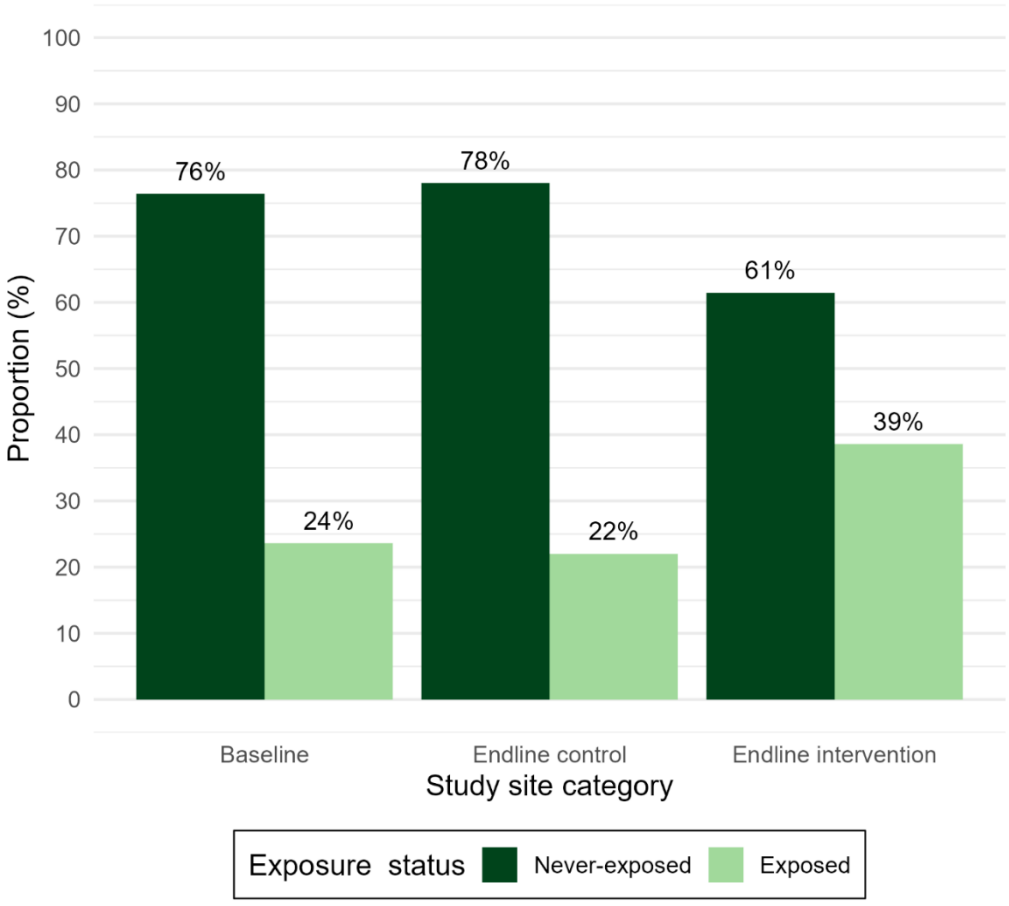

Figure 3: Overall exposure at baseline and endline by study site in the Amhara region, Ethiopia

Qualitative findings indicate varying levels of exposure across intervention sites, primarily facilitated through embedded community channels rather than accidental contact. Through programme implementers such as ActionAid, students were first engaged through school-based "Safe Space" dialogues and gender clubs, which later shifted to community-based peer-to-peer sessions after

conflict-related school closures. Adult men and mothers were reached through sensitisation sessions led by religious and community leaders, whose invitations were often perceived as highly authoritative. Health extension workers also integrated anti-FGM education into routine services such as antenatal and postnatal care, vaccination schedules, and community outreach. Mass mobilisation events, including "Montarbo" mobile loudspeakers and public dramas, further expanded reach.

Beyond direct activities, community champions created a ripple effect by sensitising their families and social circles. Consistent interactions with family and broader community members contributed to wider discussion of harmful effects of FGM and legal sanctions. However, non-exposure was shaped by structural barriers like physical distance and insecurity, economic interests of FGM practitioners seeking to protect their livelihoods, and cultural perceptions that dismissed programme advocates as financially motivated by NGOs.

> *"The main challenge is that not all kebeles have received the same education. Our kebele is fully free... but neighbouring kebeles still practice it. When we interact during religious celebrations... ideas mix."*
> *(KII, Religious Leader)*

4.2.2 Normative outcomes and knowledge shifts

Table A5 in the Appendix presents endline cross-tabulations of study site and exposure category against FGM-related outcomes. For beliefs related to FGM, the proportions of respondents opposed to the practice are nearly identical (81% in both control and intervention sites), with no statistically significant difference. For gender-inequality beliefs, intervention sites have a higher proportion of respondents classified as holding "equal" beliefs (88%) compared with control sites (82%), and this difference is statistically significant. Intervention sites also show a higher proportion of respondents with high FGM-related knowledge (65% vs. 55% in control sites).

However, when outcomes are examined by exposure category, clearer differences emerge. Respondents exposed in intervention sites generally have the highest proportions of favourable responses across multiple indicators. The findings showed that 90% opposed FGM-supportive beliefs, compared with 78% among the non-exposed; 94% held equal gender beliefs, compared with 82% among the non-exposed; and 74% had high FGM-related knowledge, compared with 55% among the non-exposed.

After adjusting for age, sex, marital status and educational level, the multivariate logistic regression models summarised in Appendix Table A6 showed that respondents exposed to FGM-related activities in intervention sites were:

- About two times more likely than non-exposed respondents to have higher FGM-related knowledge.
- About two and a half times more likely than non-exposed respondents to hold beliefs opposed to FGM.
- About 68% less likely than non-exposed respondents to hold gender-unequal beliefs.

The qualitative findings show a clear shift from traditional hearsay to evidence-based health awareness, with participants now recognising FGM as a physical injury rather than a cultural and religious necessity that protects girls' future. This understanding dismantled myths such as uncut girls being "rocks" or destined to break household tools. Many also identified FGM as a source of marital discord rather than fidelity. Unequal gender beliefs have notably declined, with boys

emerging as unexpected advocates. After training, some boys began engaging mothers and peers, amplifying the programme's reach and impact.

This [new] knowledge base specifically highlights the biological mechanics of the harm, such as the loss of "elasticity" in reproductive tissue, and the direct link between FGM and traumatic childbirth. This is reported by two of the participants:

> *"In the training, we have seen that it is very harmful. We didn't know about it previously... I understand that many couples have divorced due to it. Because FGM leads to pain during intercourse, a scar on the vagina, and loss of sexual pleasure." (FGD, member, grantee organization):*

The perceived religious necessity of FGM was replaced by the belief that FGM is a sin or a harmful tradition without spiritual merit or religious obligation.

4.2.3 Attitudes and behavioural intentions related to FGM

Bivariate cross-tabulations between exposure and attitudes outcomes are summarised in Appendix Table A5. At site level, levels of opposition to social sanctions, discrimination against girls who had not undergone FGM, agency to oppose FGM, and overall social attitudes were broadly similar across control and intervention sites. However, exposure-based patterns were more pronounced. Respondents exposed in intervention sites generally had the highest proportions of favourable responses across several indicators: 91% opposed social sanctions for FGM abandonment, compared with 76% among non-exposed respondents; none supported FGM continuation, compared with 9% among the non-exposed; 68% had ever encouraged someone to abandon FGM, compared with 25% among non-exposed respondents; all opposed cutting daughters, compared with 87% among the non-exposed; and 91% held an overall social attitude opposed to FGM, compared with 75% among non-exposed respondents.

Tables A6 and A7 in the Appendix provide a summary of multivariate logistic regression models in Amhara for intention and attitude outcomes. The results showed that respondents exposed in intervention sites were:

- Above three times higher odds to oppose social sanctions for FGM abandonment compared with non-exposed respondents.
- Above six times more likely than non-exposed respondents to have ever encouraged someone to abandon FGM.
- Over two and a half times more likely than non-exposed respondents to report agency opposing FGM compared to non-exposed.
- Over two and a half times more likely than non-exposed respondents to holding an overall social attitude opposing FGM.

Overall, the findings suggest that exposure to FGM-related activities was associated with more favourable attitudes, stronger agency, greater encouragement of abandonment, and lower support for continuing FGM. However, these results should be interpreted as exposure-related associations rather than definitive evidence of programme impact.

Qualitative findings help explain these interconnected outcomes by illustrating how exposure was linked to resistance to social sanctions, active encouragement of abandonment, and intentions not to subject daughters or female relatives to FGM. Participants described using new knowledge to speak with family members and neighbours, challenge assumptions, and refer others to training.

> *"Currently, the community's attitude toward FGM has changed. I remember going to Debre Tabor town for training. When I returned, my family members and neighbours asked me why*

I had gone there. I explained that the training was about FGM, focusing on its harmful consequences, complications, and the existing laws against the practice. After this discussion, their attitudes and practices began to change." (Young male champion, Amhara region)

Some participants described how personal experience of FGM-related harm became a basis for family-level advocacy.

"As I understand, my knowledge has changed. I am circumcised, and when I delivered my first daughter, I delivered through an operation. After I received training, I understood that my operation during my delivery was due to my circumcision. My father was a cutter, and he asked me to carry out FGM. I resisted, and I directed him to receive training about the consequences of FGM by our organisation. Currently, he is not doing it due to the knowledge he obtained from the training" (FGD member, grantee, Amhara region)

Qualitative findings also suggest that boys and young men played an unexpected role as advocates. They exercised agency in advocating and opposing FGM on behalf of the girls and women in the community. After training, some boys reported engaging mothers, peers, and school communities, thereby extending the reach of anti-FGM messages beyond formal programme activities.

"In our village, there was one mother who gave birth. Then I went there, and I told her not to perform FGM on her daughter, 'If you are going to do it,' I said, 'I will report to women's watch groups.' And even when you told us about it, we weren't surprised, we know it. Then she thanked me for my activity. (...) I may not speak at ceremonies and churches, but, at school, I am advocating about it by preparing the lesson in the form of a poem".
(IDI, boy champion, Amhara).

4.2.4 Substitution and unintended patterns

The findings show that despite reported programme successes, resistance persisted in some communities. Participants linked this resistance to fear of social sanctions, cultural inertia, and economic interests. One grantee member described a mother's fear of treating her youngest daughter differently from her older daughters: *"I have circumcised all my daughters. So why should I leave the youngest one uncircumcised? I would be harming her. Later, when she grows up, she would resent me."*

Such concerns reflect fears that girls who have not undergone FGM may face social exclusion or later blame their families for making them different. Qualitative accounts suggested that these beliefs were particularly entrenched among some older women who were described as important custodians of tradition.

Distrust of programme messengers, for instance, undermined the credibility of anti-FGM messages, with communities suspecting health professionals and NGOs of personal gain. This resistance led to unintended outcomes, including secret cross-border migration to perform FGM in unreached kebeles. These adaptive strategies highlight how entrenched beliefs continue to challenge full abandonment of FGM.

4.3 Senegal (Kédougou–Tambacounda and Kolda–Sédhiou)

4.3.1 Programme reach, exposure and social diffusion

4.3.1.1 Kédougou–Tambacounda

Reported exposure to FGM-related activities showed an uneven pattern across baseline and endline. At baseline, in Tambacounda only, 56% of respondents reported exposure to FGM-related activities. At endline, exposure was lower: 19% in control sites and 34% in intervention sites. This indicates greater reach in intervention areas than in control areas, but exposure remained far from universal, even within programme-supported communities (Figure 4).

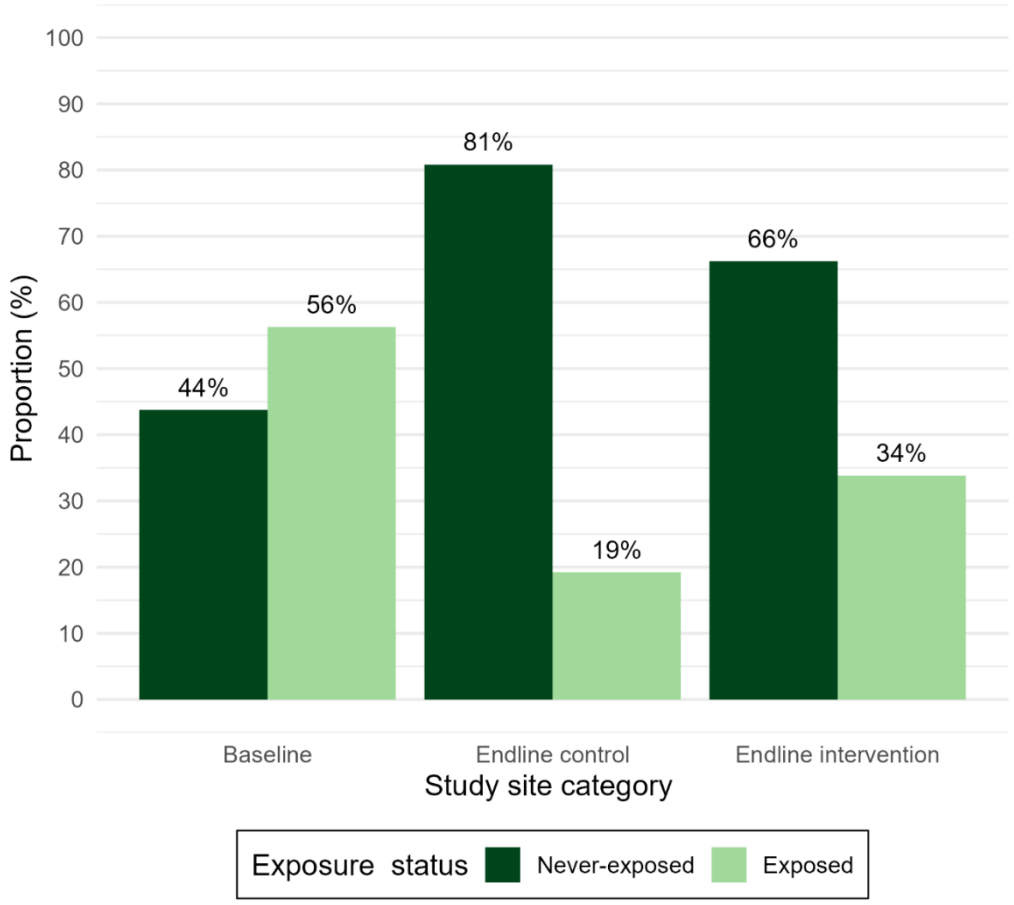

Figure 4: Exposure by study site in Kédougou and Tambacounda

Qualitative findings showed that exposure in Kédougou–Tambacounda occurred mainly through training sessions, champions, youth clubs, peer education, community dialogues, and local mobilisation activities, with discussions on FGM sometimes extending beyond initially targeted groups. However, the exposure appeared concentrated in more accessible communities and organised groups, while distance, transport challenges, and limited field resources constrained outreach to surrounding villages. As a result, respondents who reported exposure may not represent the wider population.

"We are not sufficiently equipped; there are things that need to be improved for field activities. For example, if we want to go to the surrounding villages to carry out activities with the other champions, we will have trouble getting there. Problems like transportation, access to other villages, so we need to be equipped so that we can continue the fight."
(IDI, Girl champion, Tambacounda)

4.3.1.2 Kolda-Sédhiou

As shown in Figure 5, reported exposure varied across survey rounds and study sites. Exposure was higher at baseline than at endline, while at endline it was slightly higher in intervention sites than in control sites. As in Kédougou–Tambacounda, the exposure measure reflects any FGM-related activity and cannot distinguish TGG–ALM activities from those delivered by other actors, nor determine the timing of exposure.

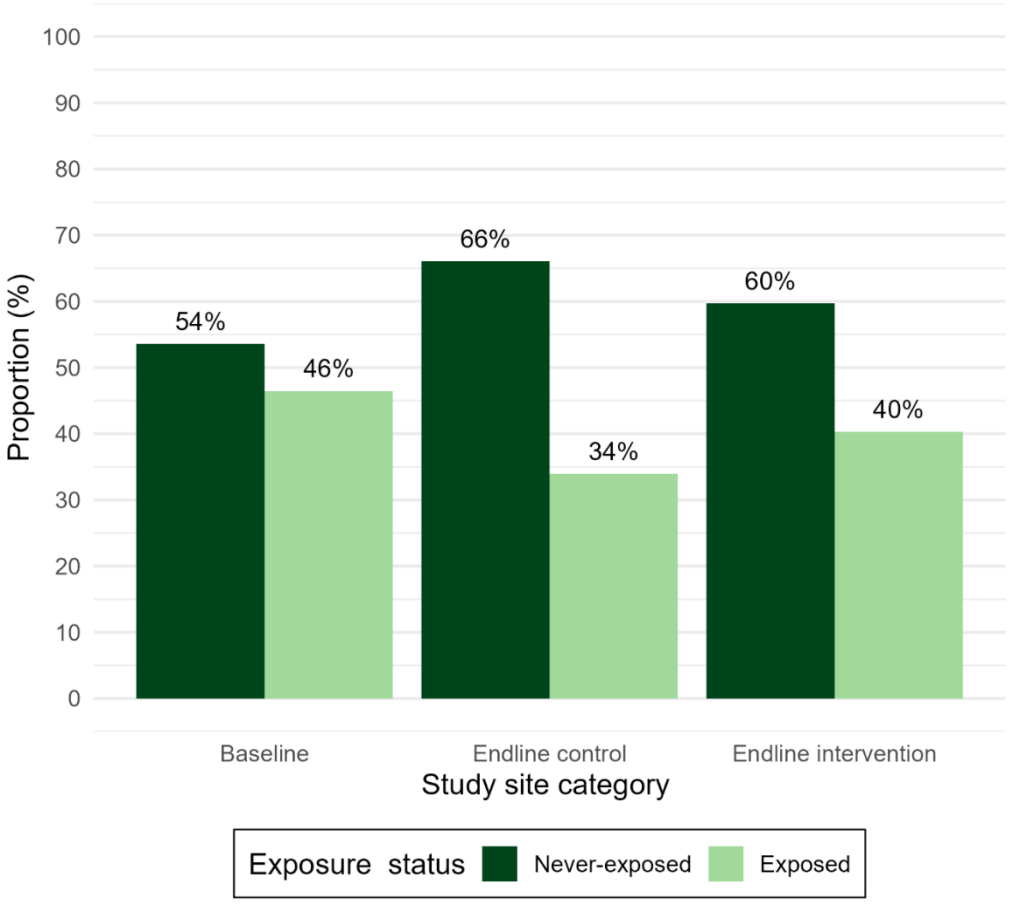

Figure 5: Exposure by study site in Kolda and Sédhiou

This pattern needs to be interpreted in light of the local context. Kolda and Sédhiou are among the regions most affected by FGM in Senegal, where the practice remains strongly embedded in social identity, intergenerational expectations, marriageability, and community norms. Qualitative evidence suggests that repeated participation by the same individuals contributed to perceptions of exclusivity and, in some cases, programme fatigue, with community members noting that activities often engaged a relatively narrow set of participants.

Taken together, exposure patterns in Kolda–Sédhiou suggest selective and uneven reach. Reported exposure appears to have been concentrated among organised groups and communities where FGM remains strongly embedded. This makes interpretation more complex: in highly conservative settings, early engagement may reveal persistent resistance before broader favourable differences in attitudes become visible. This interpretation is consistent with qualitative accounts of repeated engagement of the same actors, limited reach into rural and remote areas, and continued social pressure around FGM.

4.3.2 Normative outcomes and knowledge shifts

4.3.2.1 Kédougou–Tambacounda

The findings are adjusted for demographic and contextual factors to clarify how exposure aligns with key outcomes at endline (see Appendix Table A10). Respondents exposed in intervention sites were:

- About 2.6 times more likely than non-exposed respondents to hold beliefs opposed to FGM.
- About 5 times more likely than non-exposed respondents to report high FGM-related knowledge, one of the strongest associations observed in this cluster.
- No meaningful association was observed between exposure and gender inequality beliefs.

These findings suggest that, in Kédougou–Tambacounda, exposure to FGM-related activities may have acted mainly through FGM-specific knowledge and beliefs. Exposed respondents were more likely to know about FGM-related harms and to hold beliefs opposed to FGM, indicating that information, dialogue, and mobilisation were relatively effective in shaping understanding of FGM itself.

However, the absence of a meaningful association with gender inequality beliefs suggests that broader gender norms were less responsive to exposure. This distinction is important: FGM-specific beliefs may shift through awareness and dialogue, but deeper gender norms linked to power, roles, and decision-making may require longer-term, explicitly gender-transformative approaches.

These are in line with the qualitative quote below:

> "I can say that they (family) are happier. I shared with my sister about the programme I was attending and what I was learning. Thanks to the information I shared, none of my older siblings had their daughters circumcised. During school holidays, everyone brought their daughters to be circumcised, and my older sister refused for her daughters to undergo FGM. When asked why, she said that it was because her little sister was involved in a programme and had explained all the consequences to her, and that her daughters would not undergo this". *(Girl Champion, Kédougou)*

4.3.2.2 Kolda–Sédhiou

Bivariate findings in Appendix Table A12 show that intervention sites had higher FGM-related knowledge and slightly higher opposition to FGM than control sites. However, when results were disaggregated by exposure status, exposed respondents showed higher FGM-related knowledge but less favourable results for some broader normative and attitudinal outcomes. This pattern suggests that exposure may have been concentrated in communities or groups where FGM remains more strongly embedded.

Findings in Table A13 (see Appendix) show adjusted associations between exposure and key outcomes at endline, after controlling for demographic and contextual factors. Respondents exposed in intervention sites were:

- About 12 times more likely than non-exposed respondents to report high FGM-related knowledge, one of the strongest associations observed across the Senegal analysis.
- About 62% less likely than non-exposed respondents to hold beliefs opposed to FGM, which is quite counter-intuitive.
- No meaningful association was observed between exposure and gender inequality beliefs.

These findings suggest that, in Kolda–Sédhiou, exposure to FGM-related activities was strongly associated with higher FGM-related knowledge, which is an expected and consistent pattern across the Senegal clusters. Exposed respondents were far more likely to report high knowledge about FGM, indicating that information and mobilisation efforts effectively strengthened understanding of the practice and its consequences.

However, the association with FGM-related beliefs moved in the opposite direction: exposed respondents were less likely to hold beliefs opposed to FGM. This reversed pattern is counter-intuitive and likely reflects that exposure occurred in communities where support for FGM remains strong and conservative norms dominate. In such settings, increased knowledge does not necessarily translate into opposition to FGM and may coexist with entrenched expectations that continue to favour the practice.

As in Kédougou–Tambacounda, no meaningful association was observed between exposure and gender inequality beliefs, indicating that broader gender norms remained stable and were not influenced by short-term information or dialogue.

Overall, exposure in Kolda–Sédhiou appears to have strengthened FGM-specific knowledge, but did not shift anti-FGM beliefs or gender inequality norms. The reversed association for beliefs highlights the strong influence of deeply rooted social expectations in this cluster, where knowledge alone may not be sufficient to challenge prevailing support for FGM.

This pattern should not be interpreted as exposure worsening beliefs toward FGM. Rather, it likely reflects that reported exposure was concentrated in communities where FGM remains strongly embedded. In such settings, knowledge often shifts earlier and more easily than deeper beliefs or social expectations. Overall, the results suggest that information alone does not produce normative change where FGM is closely tied to cultural identity, marriageability, social belonging, and perceived sanctions.

> "During that same discussion with the woman, she told me that to succeed in this fight, we need to rethink the messages conveyed during awareness-raising and communication with the public; we shouldn't use expressions or terms like 'fight against,' but rather 'raising awareness about the risks associated with female genital mutilation.' She also noted that the region is complex due to its socio-cultural realities, meaning that if you are not from the area, you cannot effectively lead these awareness campaigns within the communities..."
> *(Field Notes, Sédhiou)*

The findings point to a need for broader community saturation, stronger engagement with conservative groups, use of acceptable language in campaigns, and more deliberate strategies to move beyond awareness-raising toward norm transformation.

4.3.3 Intentions, agency and attitudes related to FGM

4.3.3.1 Kédougou-Tambacounda

Findings in Table A10 (see Appendix) highlight the association between key attitudinal outcomes and exposure after adjusting for demographic and contextual factors. Although no clear association was observed between exposure in intervention sites and opposition to social sanctions for FGM abandonment, discrimination against uncut girls, support for FGM continuation, or intention to perform FGM on daughters, respondents exposed in intervention sites were:

- About 2.8 times more likely than non-exposed respondents to have ever encouraged someone to abandon FGM.
- About 4.5 times more likely than non-exposed respondents to report agency to oppose FGM.
- About 79% less likely than non-exposed respondents to hold an overall social attitude opposed to FGM, suggesting a more complex pattern for broader attitudinal outcomes.

When pooling baseline–endline data, the counter-intuitive association observed at endline for the overall social attitude was no longer statistically significant.

These findings indicate that exposure to FGM-related activities was associated with stronger action-oriented outcomes: exposed respondents were more likely to have encouraged someone to abandon FGM and to report greater agency to oppose the practice. These patterns suggest that exposure may have strengthened respondents' confidence and willingness to challenge FGM beyond awareness alone.

In contrast, the composite measure of overall social attitude showed a more complex pattern. Although exposed respondents demonstrated stronger action-oriented outcomes, they were less likely to hold an overall social attitude opposed to FGM. This reflects that reported exposure was concentrated in communities where FGM norms remain strongly rooted, while support for abandonment was already high across both intervention and comparison sites.

The pooled baseline–endline analysis reinforces the earlier interpretation: once both survey rounds were combined, the counter-intuitive endline association for overall social attitude disappeared (see Appendix Table A11). Since the overall social attitude model includes FGM-related knowledge, FGM-related beliefs, and gender inequality beliefs as potential explanatory factors, the pooled analysis suggests that broader attitudes are more closely shaped by these underlying normative dimensions than by exposure alone. Individuals who hold beliefs opposed to FGM and those with more egalitarian gender beliefs were more likely to hold an overall attitude against the practice—patterns that are consistent with expectations. By contrast, respondents with high FGM-related knowledge were less likely to hold an attitude opposed to FGM, a counter-intuitive finding that suggests that knowledge on its own does not shift attitudes in contexts where FGM remains deeply embedded in cultural identity, marriageability, and social belonging.

The pooled findings indicate that while exposure may strengthen action-oriented outcomes such as encouragement and agency, broader normative and attitudinal outcomes remain uneven in settings where deeply rooted social expectations and identity pressures continue to sustain the practice.

4.3.3.2 Kolda–Sédhiou

These findings adjust for demographic and contextual factors, helping to clarify how exposure aligns with key outcomes at endline (see Appendix Table A13). Respondents exposed in intervention sites were:

- About 94% less likely than non-exposed respondents to oppose social sanctions for FGM abandonment.
- About 3.7 times more likely than non-exposed respondents to be in favour of discrimination against uncut girls
- About 3.7 times more likely than non-exposed respondents to have ever encouraged someone to abandon FGM.
- About 74% less likely than non-exposed respondents to support FGM continuation.
- About 59% less likely than non-exposed respondents to intend FGM for daughters.
- About 5.9 times more likely than non-exposed respondents to report agency to oppose FGM.
- About 86% less likely than non-exposed respondents to hold an overall social attitude opposed to FGM.

Findings in Kolda-Sédhiou show that abandonment-related actions and intentions were more favourable among exposed respondents in intervention sites. They reported higher agency to oppose FGM, were more likely to have encouraged someone to abandon, were less supportive of continuation, and were less likely to intend FGM for daughters. These patterns suggest greater confidence and willingness to act among respondents exposed in intervention sites, even where broader social norms remain conservative.

At the same time, respondents exposed in intervention sites were more likely to support social sanctions for FGM abandonment and more likely to favour discrimination against uncut girls. These community-pressure outcomes, together with the overall social attitude measure, remained less favourable among respondents exposed in intervention sites compared to non-exposed respondents.

Pooled baseline–endline findings confirmed this pattern. Even after adjusting for FGM-related knowledge, beliefs opposed to FGM, gender inequality beliefs, and regional differences, respondents exposed in intervention sites were substantially less likely than non-exposed respondents to hold an overall social attitude opposed to FGM as highlighted in Appendix Table A14. This suggests that exposure is occurring in communities where social norms and sanctioning mechanisms remain strongly rooted, limiting shifts in broader attitudinal outcomes despite improvements in individual agency.

This divergence between individual-level agency and perceived community norms suggests that people may feel more empowered to act or encourage abandonment, yet still operate within communities where social expectations, sanctions, and identity pressures continue to support FGM. This matters because future programming must address not only individual knowledge and confidence but also the community-level pressures and socially reinforced expectations that sustain the practice.

4.3.4 Substitution and unintended patterns

Besides the uneven reach of the programme activities (as reported earlier), challenges related to the perceived legitimacy of some anti-FGM messengers also appeared to constrain broader normative change. In several communities, girls and young champions were expected to communicate with older adults in social contexts where authority to speak publicly traditionally rests with elders. This

limited the influence of some awareness activities on broader beliefs and gender-related norms. As a result, beliefs related to gender inequality, marriageability, family honour, purity, and social belonging persisted and continued to reinforce support for FGM in several communities.

In Kolda–Sédhiou, stigma and discrimination against girls who have not undergone FGM remained strong, reflecting the continued influence of socially reinforced expectations.

> *"She was considered impure. If she prepared food, no one wanted to eat. In society, she was rejected and marginalised. Even for marriage, boys weren't interested in an uncircumcised girl. They were called Bilakoro, meaning uncircumcised girls. But today, this perception is changing; it's not like before."*
> *(IDI, Girl Champion, Tambacounda)*

The findings also suggest that increased knowledge does not automatically translate into normative change where social sanctions remain strong. Individuals may privately question the practice while continuing to perceive strong community expectations to conform, illustrating the gap between individual attitudes and perceived collective norms that was also observed in the quantitative analyses.

Concerns around discreet FGM, early FGM, cross-border continuation, and possible medicalisation also suggest that the practice may adapt rather than disappear as public opposition increases.

> *"I learned that the girl had stayed in Guinea, and that is where she underwent female genital mutilation. So, the practice was not performed here, but in another country. This shows that FGM continues to exist elsewhere, particularly in neighbouring countries like Guinea, where some families still strongly adhere to the tradition".*
> *(KII, Midwife, Tambacounda)*

Taken together, these findings help explain the mixed quantitative results observed across the two Senegal clusters. While exposure was consistently associated with stronger FGM-related knowledge and, in many instances, greater individual agency and encouragement of abandonment, broader community norms remained resistant in several settings. Persistent social sanctions, concerns about marriageability and social acceptance, selective programme reach, and adaptive practices such as cross-border FGM illustrate that sustained community-wide engagement is needed for individual-level changes to translate into broader normative transformation.

4.4 Somaliland

4.4.1 Programme reach, exposure and social diffusion

Social diffusion emerged as one of the strongest features of the Somaliland programme. As shown in Figure 6, approximately 91% of participants reported actively discussing FGM and related issues with others, while 66% reported hearing such discussions within their communities.

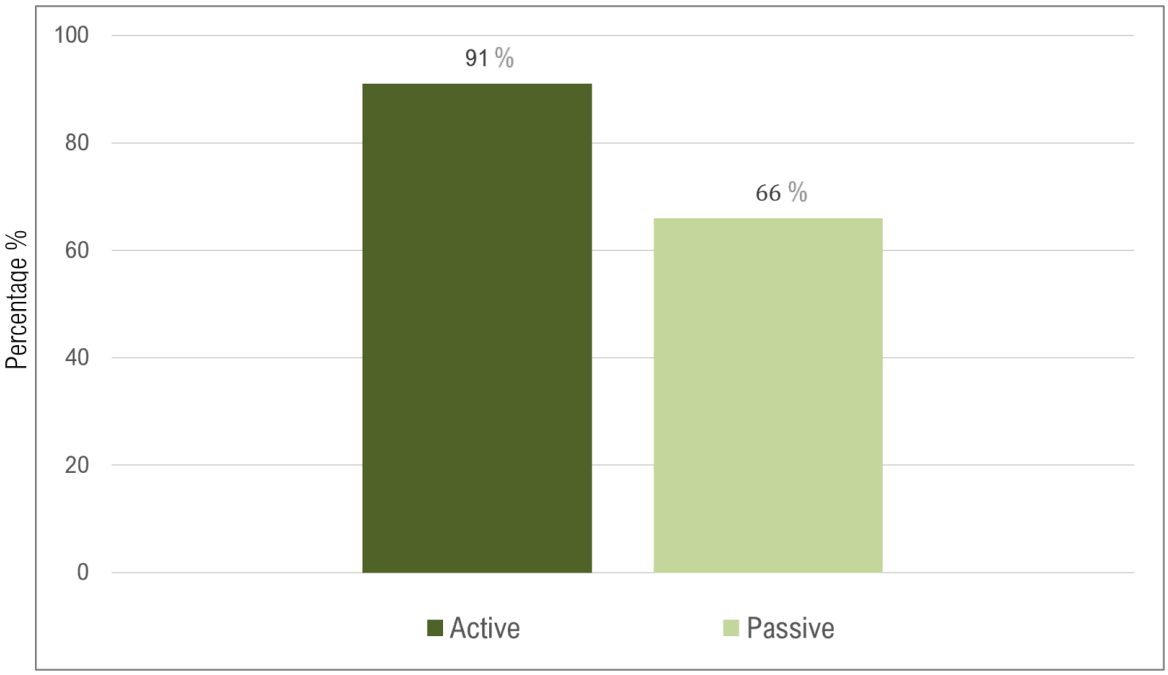

Figure 6: Active and passive social diffusion in Somaliland

These findings suggest that programme messages extended well beyond direct participants through interpersonal communication and existing community structures. Community champions, religious leaders, peer networks, and community dialogues appeared to play an important role in disseminating information and stimulating broader public discussion around FGM.

The high level of social diffusion suggests that programme messages reached beyond those directly participating in activities, creating opportunities for wider community engagement and normative dialogue. Although the Somaliland evaluation was cross-sectional and therefore cannot establish programme effects, the findings indicate that exposure was associated with substantial dissemination of FGM-related information across social networks.

4.4.2 Knowledge and social norms

The Somaliland findings suggest early but encouraging changes in knowledge, symbolic meanings and perceived social norms surrounding FGM, while also highlighting the continued influence of deeply rooted social expectations.

These symbolic meanings are closely linked to perceived community expectations. Although many respondents personally questioned FGM, perceived opposition was lower when they considered their families, peers, communities, and wider society. This suggests that individuals may see themselves as more ready for abandonment than the people around them. Such “norms misalignment” can slow collective abandonment, because people may hesitate to act on their own beliefs if they think others still expect FGM to continue.

Exposure was also associated with important changes in the symbolic meanings attached to FGM as shown in Figure 7. Only 15% of exposed respondents described girls who had undergone FGM positively, compared with 37% among those not exposed. Conversely, 80% of exposed respondents described girls who had not undergone FGM positively, compared with 57% of unexposed respondents. These findings suggest that exposure was associated with more favourable perceptions of girls who remain uncut and with greater questioning of traditional justifications for FGM.

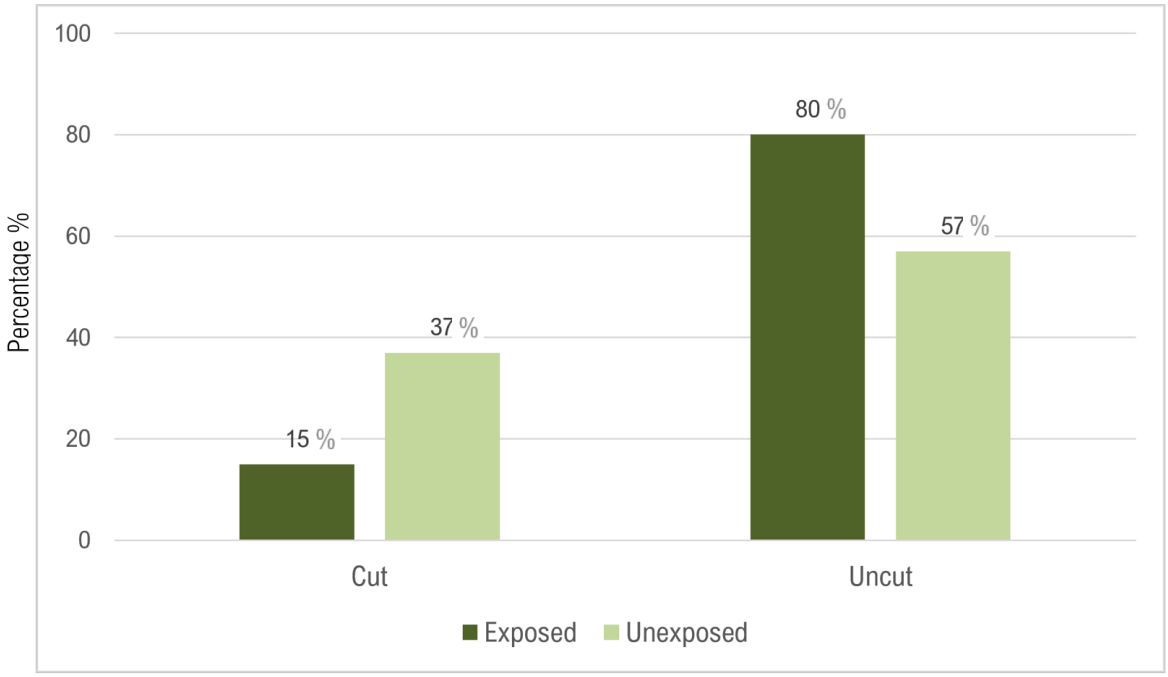

Figure 7: Perception of cut and uncut girls

Gender-equitable beliefs also appeared more favourable among exposed participants, particularly among women, who frequently reported changes in their views regarding gender equality, girls' education, and women's participation in decision-making. In contrast, normative change among men was more limited, suggesting that prevailing gender norms remain more resistant within male populations.

Despite these encouraging patterns, qualitative findings indicate that normative change remains incomplete. In several communities, respondents described rejecting the most severe forms of FGM while continuing to accept forms perceived as less severe, particularly "Sunna FGM". Marriageability, social acceptance, and religious interpretations therefore continue to reinforce community expectations that sustain the practice.

Taken together, these findings suggest that programme exposure was associated with more favourable individual normative perceptions, but broader community expectations continue to constrain deeper social norm transformation.

4.4.3 Intentions, agency and attitudes

Behavioural intentions showed a favourable exposure-related pattern. As illustrated in Figure 8, 48% of exposed respondents reported being very unlikely to subject their daughters to FGM, compared with 24% among those not exposed.

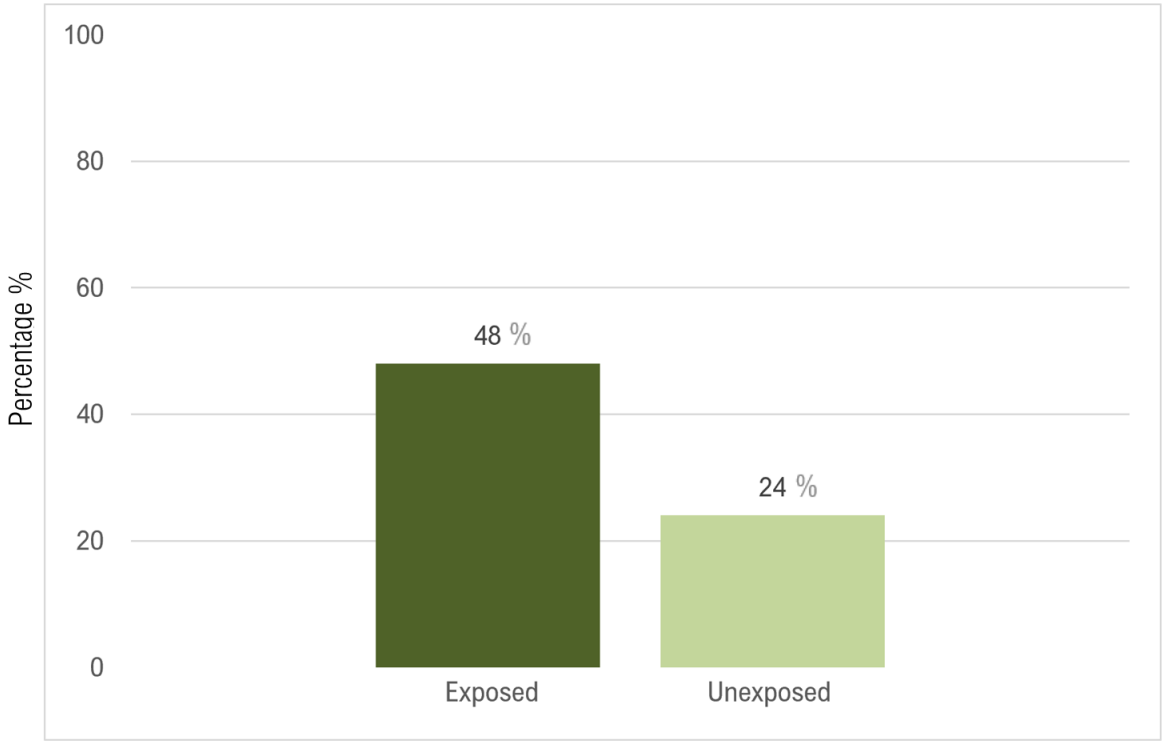

Figure 8: Respondents reporting being very unlikely to subject their daughters to FGM by exposure status

Despite this difference, intentions to abandon FGM remained moderate overall, reflecting the continued influence of broader community expectations. Acceptance of marriage to girls who had not undergone FGM also remained relatively low, although it was higher among exposed participants, suggesting that concerns around marriageability remain an important barrier to abandonment.

Exposure was also associated with stronger agency, particularly among women. Female participants more frequently reported increased confidence in exercising decision-making, discussing FGM openly, and supporting abandonment of the practice. In contrast, changes among men were less pronounced, especially regarding women's participation in public life and actions to end FGM. This points to the need for stronger male engagement alongside women's empowerment.

Finally, exposure was associated with stronger personal opposition to FGM as shown in Figure 9. At the individual level, 62% of respondents completely opposed FGM. This opposition was higher among exposed respondents: 74% completely opposed FGM, compared with 30% among unexposed respondents. This suggests a stronger individual orientation toward abandonment among exposed respondents, even though perceived community expectations continue to constrain collective change.

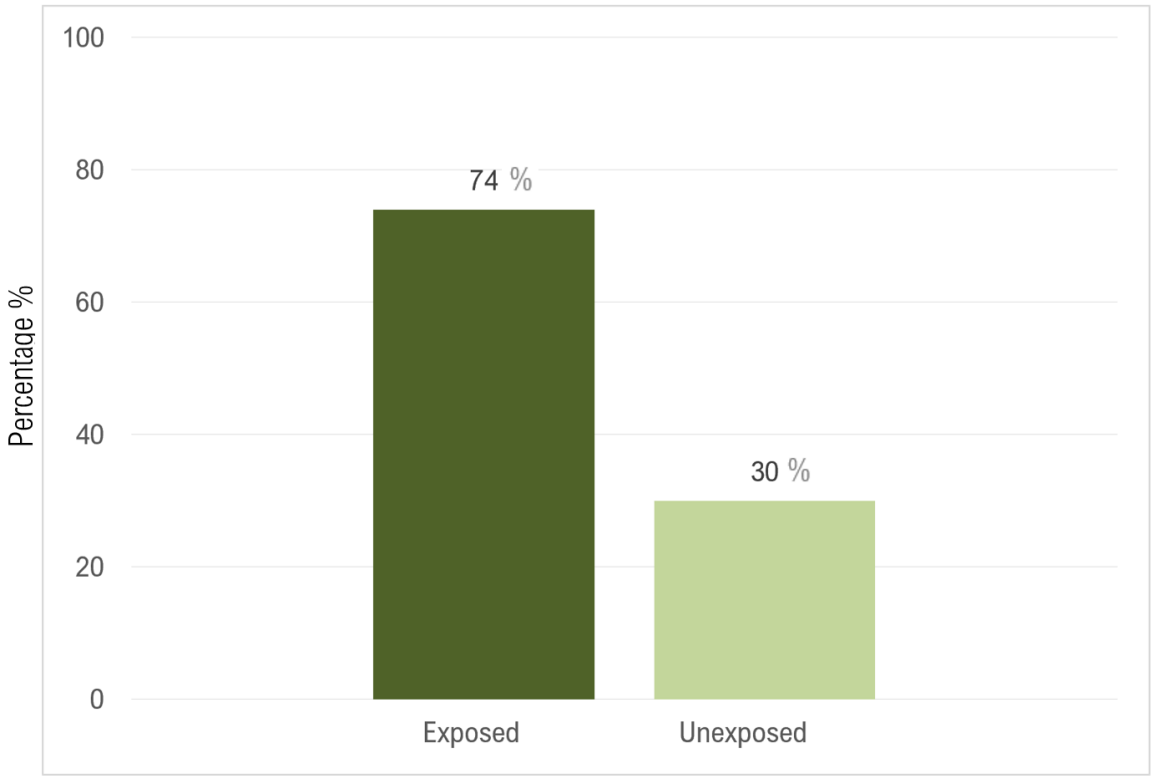

Figure 9: Opposition to FGM by exposure status

5. Voices of the community (cross-country synthesis)

Across Kenya, Ethiopia, Somaliland, and Senegal, six common themes emerged from community voices: the legitimising role of local leaders, the growing influence of youth, the importance of community dialogue, gradual shifts in household decision-making around FGM, the strengthening of grassroots organisations, and the institutionalisation of FGM prevention within education and health systems.

Local leaders provided legitimacy and authority to anti-FGM efforts. In Kenya, teachers, champions, religious leaders, and community actors supported school clubs, dialogues, and community outreach. In Ethiopia, religious leaders, Iddir[3] leaders, kebele administrators, and health volunteers helped create trusted spaces for discussion. In Senegal, imams, health workers, champions, and former practitioners contributed to public dialogue and helped challenge the perception that FGM is a religious requirement. In Somaliland, religious leaders, champions, and peer networks supported the wider diffusion of programme messages.

Across countries, these trusted actors helped make anti-FGM messages more acceptable and credible within communities. As one Kenyan participant noted, "*Our teachers guide us to speak openly about human rights and protection from violence,"* while an Ethiopian respondent reflected, *"When the priest spoke against cutting, the community listened differently."* In Senegal, families recalled, *"When the imam explained that FGM is not required, families began to question the practice."*

Youth networks were equally influential, mobilising peers and challenging entrenched norms. In Kenya, school-based clubs and 'Men4Change' networks amplified young voices, with one student saying, *"We tell our friends that girls deserve confidence and leadership, not cutting."* In Ethiopia,

[3] Iddir is a traditional Ethiopian self-help association that serves as a significant example of social capital by providing essential financial, emotional, and practical support to its members, particularly during times of bereavement.

peer-to-peer sessions continued even after schools closed, as youth insisted, *"We meet in the community now, because the issue cannot wait for classrooms to reopen."* Similarly, Senegalese girls' clubs fostered solidarity and confidence, with champions affirming, *"We stand together as champions, so no girl feels alone in saying no"*.

Community dialogues, intergenerational and couple-specific dialogues were instrumental platforms for collective reflection on FGM, gender norms, family expectations, and support for girls and women who had not undergone FGM. Women-only reflection circles were associated with large gains in empowerment and in participants' confidence to act against FGM. In Narok, levels of support for gender equality were already high at baseline and remained high at endline. Overall levels of egalitarian belief and agency remained strong, suggesting that the programme helped maintain and stabilize these norms over time.

Finally, household power dynamics began to shift, with women, girls, and sometimes boys influencing family decisions. In Kenya, survivor forums and outreach strengthened agency, as one girl shared, *"I told my parents I will not be cut, and they listened because others supported me."* In Ethiopia, survivor and activist training empowered voices within families, with one youth noting, *"My mother said she changed her mind after hearing me speak at the Iddir meeting."* In Senegal, intergenerational dialogues reshaped norms, with grandmothers acknowledging, *"We did not know before, but today we protect our girls."*

Another common theme was the strengthening of grassroots organisations and community movements. Across countries, investments in training, mentorship, and small grants increased the organisational capacity, confidence, and credibility of local civil society organisations, enabling them to extend advocacy beyond their original communities. Partnerships between larger anchor organisations and smaller community-based organisations strengthened local ownership while expanding programme reach. As one participant reflected, "*They have also helped our organisation grow, and they have also helped us individually ourselves also grow.*"

The evaluation also highlighted the value of institutionalising FGM prevention within existing education and health systems. School clubs, peer-to-peer sessions, and the integration of FGM prevention into health training curricula created sustainable platforms for learning and advocacy. Across countries, young people described schools as spaces where they could learn about FGM and support one another in resisting the practice, while health professionals reported greater confidence in educating communities about the health consequences of FGM and rejecting its medicalisation. As one participant explained, *"These clubs do indeed carry out many activities in schools and in the community, to help young people become more aware of all the consequences that can result from the practice of female genital mutilation."* Another health professional added, *"They also introduced the concept of medicalisation of FGM, and at the end we took a—let me call it a vow—not to be part of those who engage in medicalisation of FGM."*

Survivors also emerged as influential advocates and movement leaders. By drawing on their lived experiences, they gave greater credibility and urgency to anti-FGM messages, supported other women and girls, and helped translate personal experiences of harm into community mobilisation, grassroots organising, and advocacy for abandonment. Survivor-led spaces also created opportunities for women and girls to speak openly, build confidence, and participate more visibly in programme and community decision-making.

Together, these experiences show how community authority, youth activism, survivor leadership, family dialogue, grassroots movement-building, and institutional integration intersect to challenge FGM and foster emerging, community-level support for abandonment.

6. Cross-country discussion

Kenya exhibited the broadest pattern of favourable outcomes across the measures examined, although the nature and extent of progress varied across Garissa, Isiolo, and Narok. In Garissa, reported exposure was consistently associated with more progressive outcomes across most measures, although gender-inequality beliefs remained less responsive and the shift toward '*Sunna'* FGM illustrates how abandonment can remain incomplete even where opposition to perceived 'more severe' forms increases. In Isiolo, exposure and diffusion patterns were especially strong, leading to progressive outcomes among participants exposed to the interventions, while in Narok, where opposition to FGM was already high, the programme appeared to reinforce existing favourable attitudes rather than produce large visible shifts. Across the Kenya sites, emerging adaptations such as 'Sunna', cross-border FGM, and medicalisation also underline the need for clear messaging that all forms of FGM remain harmful and constitute rights violations.

Ethiopia also showed favourable outcomes across several measures, with exposure-based associations stronger than site-level contrasts, though sparse data and unexpected youth conservatism tempered some associations. The findings also point to early signs of social norm change, including greater agency, more encouragement of FGM abandonment, stronger opposition to FGM continuation, and partial responsiveness in gender-inequality beliefs. However, sustaining these gains will require extending interventions to remote and insecure areas, embedding FGM prevention in health and education systems, strengthening grassroots organisations, and engaging elders and religious leaders to address entrenched cultural beliefs and risks such as concealment or families travelling to neighbouring areas with limited prevention coverage to have FGM performed.

Senegal shows more mixed patterns of progress, with strong gains in knowledge and agency but mixed or negative associations for attitudes, sanctions, and discrimination, reflecting contested norms, uneven readiness for change, and selective exposure in more conservative environments. Somaliland showed encouraging early progress, with exposure associated with stronger personal opposition, more favourable perceptions of uncut girls, stronger intentions not to cut daughters, and very high social diffusion. However, perceived community expectations, marriageability concerns, gender gaps, and continued acceptance of "*Sunna FGM"* constrained deeper collective abandonment.

In Kenya and Ethiopia, the most favourable distributions consistently appeared among respondents exposed in intervention sites, while non-exposed respondents were more concentrated at the least favourable end of the distributions. In Senegal's two clusters, exposure was clearly associated with knowledge, agency, and encouragement of abandonment, but broader attitudinal outcomes remained uneven**.** In Kédougou–Tambacounda, exposure aligned moderately with positive outcomes, though attitudes were mixed. In Kolda–Sédhiou, knowledge and agency improved strongly, yet exposure was linked to less favourable attitudes, including support for sanctions and discrimination against uncut girls. In Somaliland, social diffusion was exceptionally high, suggesting that community dialogue messages travelled beyond direct participants; nevertheless, personal attitudes appeared more progressive than perceived family and community norms, indicating a persistent gap between private opposition and perceived collective expectations.

Taken together, these patterns highlight that the breadth and nature of progress associated with programme exposure were highly context-dependent. In settings where norms are already shifting or where exposure aligns with broader community readiness as in Kenya and Ethiopia, engagement tends to reinforce and accelerate progressive attitudes across multiple outcome measures. In these settings, gender-inequality beliefs remain among the least responsive measures, consistent with global evidence that gender norms shift more slowly than other normative constructs.

In contrast, in settings where norms remain deeply entrenched or where exposure is concentrated among more conservative groups as in Kolda-Sédhiou and parts of Somaliland (Sool and Sanaag), increases in knowledge do not necessarily translate immediately into broader attitudinal change. In

Senegal, exposure was associated with higher knowledge, greater agency, and lower intention to cut daughters, yet also with lower odds of holding a progressive overall attitude and higher support for sanctions or discrimination against uncut girls in some settings. In Somaliland, exposure was associated with more favourable individual attitudes and intentions, but personal opposition remained stronger than perceived family and community opposition, suggesting that people may privately question FGM while still believing that others expect the practice to continue.

Across settings, behaviour-proximal outcomes such as encouragement, agency, and intention often appeared more responsive than deeper collective expectations. This divergence reflects early-stage normative change, selective participation, and persistent social pressure rather than programme-specific backlash. It underscores the importance of understanding who is reached, whether exposure diffuses beyond core participants, and whether public norms shift alongside private attitudes.

Table 2. Consistency across secondary outcomes and overall social attitude within each country

Country/context	Pattern across intermediary outcome measures	Pattern for (overall) social attitude	Cross-outcome pattern/interpretation
Kenya Garissa	Strong and consistent progressive associations for most secondary outcomes. Only unequal gender beliefs remained non-significant across comparisons. Exposure-based associations were stronger than site-level contrasts.	Strongly progressive and aligned with exposure.	High internal consistency: exposure was associated with more progressive attitudes, intentions, and behaviours, but gender norms and Sunna acceptance remained resistant.
Kenya Isiolo*	Strong exposure and social diffusion patterns, with favourable differences in attitudes toward uncut girls, intentions, and perceived acceptability.	Progressive and aligned with exposure.	High internal consistency: exposure appeared to reinforce broader normative movement, supported by strong diffusion and multiple exposure channels.
Kenya Narok*	Favourable attitudes were already high, leaving less room for large observable shifts. Exposure appeared to reinforce existing opposition to FGM and support for abandonment.	Generally favourable, with smaller exposure gaps than in Isiolo.	Moderate to high internal consistency: programme exposure likely played a reinforcing role in a context already more favourable to abandonment.
Ethiopia Amhara	Mixed site-level significance, but exposure-based associations were strong and consistent for most outcomes. Some models were not estimable due to sparse data.	Moderately progressive and aligned with exposure.	Moderate to high internal consistency: exposure was a better predictor than study site assignment; gender norms showed partial responsiveness.
Senegal Kédougou–Tambacounda	Strong positive associations for knowledge and FGM-related beliefs. Gender inequality beliefs were similar across groups.	Encouragement of abandonment and agency to oppose FGM were favourable; sanctions, discrimination, continuation, and intention were mixed.	Mixed internal consistency: exposure aligned with knowledge and agency, but broader attitudes were less consistent.
Senegal Kolda–Sédhiou	Very strong positive associations for knowledge. FGM-related beliefs and gender norms remained resistant.	Agency and intention were favourable, but sanctions, discrimination, and overall social attitude were less favourable among exposed respondents.	Low to mixed internal consistency: exposure appeared concentrated in more conservative settings; knowledge and agency improved before broader social expectations shifted.
Somaliland*	Exposure was associated with stronger opposition to FGM, more favourable perceptions of uncut girls, stronger intentions not to cut daughters, and high social diffusion.	Personal opposition was stronger among exposed respondents, but perceived family and community opposition remained lower.	Early-stage normative change: exposure was associated with favourable attitudes and diffusion, but norms misalignment, marriageability concerns, gender gaps, and "Sunna FGM" acceptance continued to constrain collective abandonment.

(*) These are evaluations carried out by Population Council

These findings also point to several cross-cutting programming priorities. First, messaging needs to clearly reinforce that all forms of FGM, including 'Sunna' and medicalised forms, remain harmful and constitute FGM. This is particularly important in Kenya and Somaliland, where partial rejection of perceived 'more severe' forms may coexist with continued acceptance of forms perceived as less severe. Second, programmes should preserve and strengthen the leadership of girls, women, survivors, and women-led organisations while also engaging men, boys, elders, religious leaders, older community members, and other influential decision-makers. Engagement with power holders should complement—not displace—the voices, agency, and leadership of those most affected by FGM. This balanced approach is needed to address gendered power relations, marriageability concerns, and resistance within household and communities. Third, cross-border coordination, legal enforcement, and community surveillance remain important where families may seek cutting in neighbouring areas or countries. Finally, programmes need to extend beyond core participants and accessible communities to reach remote, insecure, and conservative settings where social expectations remain strongest.

Across the country evaluations, differences in study design, exposure measurement, programme overlap, spillover, and the presence of multiple actors affected the level of inference that could be drawn. In the APHRC-led settings, these ecosystem effects blurred distinctions between intervention and control sites, while the Somaliland cross-sectional design limited causal interpretation. The repeated cross-sectional difference-in-differences analyses in Isiolo and Narok supported stronger inference about estimated programme effects. Findings should therefore be interpreted according to the strength of evidence provided by each design: estimated effects where the design supports them, and exposure-related associations where attribution is more limited.

Overall, the degree of internal consistency appears to reflect the broader normative landscape. Where norms are already shifting or where programme messages diffuse through multiple trusted channels, exposure aligns more clearly with progressive attitudes, intentions, and action. Where norms remain deeply rooted, exposure may first be associated with knowledge, agency, and private questioning, while collective expectations, sanctions, marriageability concerns, and gender norms remain more resistant. Taken together, these findings show that exposure alone is insufficient. Durable abandonment requires sustained, coordinated, context-sensitive, and gender-transformative approaches that combine knowledge, agency, community dialogue, visible collective commitment, and action against adaptive forms of FGM.

7. Lessons learned for multi-country programming

The multi-country evaluation highlights several lessons that can inform future programming to accelerate progress toward the abandonment of FGM. Although programme implementation and normative contexts differed across countries, common patterns emerged regarding what appears to facilitate—or constrain—progress toward abandonment. These lessons emphasize that effective programming requires sustained, context-sensitive, and adaptive approaches rather than uniform intervention packages.

7.1 Country-specific lessons

Kenya

☞ **Lesson 1. Programme approaches need to be adapted to the local stage of normative change.**

The three Kenyan contexts demonstrated different levels of readiness for change. Garissa showed broad improvements across knowledge, attitudes, intentions, and agency, whereas Isiolo illustrated

the importance of intervention exposure in changing attitudes, behavioural intentions and agency, and Narok showed that programmes can play an important role in maintaining favourable norms even where opposition to FGM is already high.

☞ **Lesson 2. Emerging adaptations of FGM—including 'Sunna' FGM, medicalisation and cross-border cutting—require programmes to continuously adapt their strategies.**

The persistence of Sunna FGM, medicalisation, and cross-border cutting illustrates that abandonment efforts must anticipate adaptive responses rather than assuming that declining prevalence reflects complete abandonment.

Ethiopia

☞ **Lesson 3. Early improvements in knowledge, agency and selected normative outcomes need sustained institutional and community support if they are to translate into broader normative change.**

The evaluation suggests that improvements in knowledge, agency, and some normative outcomes can occur relatively early, but sustaining these gains requires continued engagement through health systems, schools, community structures, and religious institutions, particularly in remote or conflict-affected settings.

☞ **Lesson 4. Community legitimacy remains central to normative change.**

Religious leaders, elders, grassroots organisations, and local institutions played an important role in facilitating dialogue and increasing community acceptance of anti-FGM messages.

Senegal

☞ **Lesson 5. Increased knowledge does not automatically translate into normative change.**

The Senegal findings demonstrate that respondents may acquire knowledge and develop greater agency while broader social expectations, sanctions, identity, and marriageability continue to sustain support for FGM.

☞ **Lesson 6. The breadth and distribution of programme exposure influence observed normative patterns.**

Where exposure remained concentrated among organised groups or more conservative communities, broader community-level shifts appeared slower, highlighting the importance of achieving wider community saturation.

Somaliland

☞ **Lesson 7. Social diffusion can substantially amplify programme reach.**

High levels of interpersonal discussion demonstrate the potential for using religious leaders, youth networks, and community champions to extend programme messages beyond direct participants.

☞ **Lesson 8. Closing the gap between private attitudes and perceived community expectations remains essential.**

Many respondents personally opposed FGM while continuing to believe that others supported it, illustrating the importance of making collective abandonment visible and socially acceptable.

7.2 Cross-cutting lessons for multi-country programming

Several lessons were consistent across countries despite differences in context and evaluation design.

☞ **Lesson 1. Social norm change is gradual and multidimensional**

Knowledge, awareness, agency, and private attitudes often improve before broader community expectations and gender norms begin to shift. Across several countries, respondents appeared more progressive in their own views than in what they perceived among families or communities, indicating that changes in knowledge and individual attitudes may precede shifts in collective norms.

☞ **Lesson 2. Community legitimacy matters.**

Trusted leaders—including religious leaders, teachers, community champions, health workers, elders, and survivors—enhance the credibility and acceptance of programme messages.

☞ **Lesson 3. Community dialogue is a key mechanism for normative change.**

Intergenerational dialogue, couple dialogue, youth engagement, and women-only reflection spaces create opportunities for communities to question long-standing social expectations surrounding FGM.

☞ **Lesson 4. Gender-transformative approaches remain essential.**

Across countries, gender inequality beliefs were among the least responsive outcomes, suggesting that programmes should address broader gender norms alongside FGM-specific messaging.

☞ **Lesson 5. Normative change requires broad community reach and coordinated engagement across multiple actors.**

Where programme exposure remained concentrated among organised participants, wider community expectations appeared slower to change. The findings also suggest that change is reinforced when community leaders, civil society organisations, health systems, schools, and other actors contribute to a common normative environment.

☞ **Lesson 6. Adaptive forms of FGM require adaptive programming.**

The persistence of Sunna FGM, medicalisation, concealment, and cross-border cutting demonstrates that programmes must continuously adapt to evolving manifestations of the practice.

☞ **Lesson 7. Sustainable abandonment depends on long-term engagement.**

The evaluation suggests that durable normative change requires sustained investment, repeated community engagement, institutional integration, and continued support for local movements rather than short-term awareness campaigns alone.

8. Cross-country conclusions

Across Kenya, Ethiopia, Senegal, and Somaliland, programme exposure was linked to FGM-related knowledge, greater opposition to FGM, stronger agency, and more favourable intentions and attitudes toward abandonment in several settings.

In Kenya and Ethiopia, gains in awareness were associated with stronger support for abandonment and early behavioural shifts. In Somaliland, despite deeply entrenched norms, exposure was also associated with stronger personal intentions to abandon FGM. However, progress remains uneven because many people who privately question the practice still feel strong social pressure to conform. Somaliland's high level of social diffusion offers an important opportunity to support longer-term change.

The programme faced different challenges in highly conservative settings and in places where opposition to FGM was already strong. In Senegal, exposure improved individual knowledge and confidence to oppose FGM, but wider community attitudes remained resistant, particularly where exposure appeared concentrated in more conservative communities or where social sanctions and identity-based expectations remained strong. Ultimately, these findings show that similar programme approaches can operate differently across contexts, depending on the local stage of normative change, exposure patterns, and the strength of social expectations. Achieving lasting global abandonment requires moving away from one-size-fits-all models in favour of sustained, context-responsive, and gender-transformative programming tailored directly to each community's normative baseline, key decision-makers, and emerging adaptive forms of FGM.

9. Cross-Country Recommendations

To translate these cross-country insights into actionable priorities for Kenya, Senegal, Ethiopia, and Somaliland, the programming framework should be divided into immediate operational improvements (short-term) and systemic structural strategies (long-term). This approach ensures programs can respond to immediate community needs while building the foundations for permanent, population-level norm change.

9.1 Short-term recommendations

This includes immediate, actionable adjustments to current programme designs to maximise immediate reach, coordination, and implementation quality.

Strengthen metrics and measurement: Develop standard indicators to track how often, how intensively, and through which channels people engage with programme activities. Use common monitoring tools across partners so data are comparable and programme contribution can be assessed more clearly.

Improve coordination and asset mapping: Map existing organisations, community structures, champions, and communication channels. Align messages across partners, develop common tools, and hold regular joint reviews to reduce duplication and ensure communities receive consistent messages.

Utilise inclusive, targeted engagement: Reach groups that are often left out by going beyond general community meetings. Create targeted platforms for youth, households, couples, men and boys, elders, and people with disabilities to support earlier and more inclusive attitude and norm change.

Leverage existing social diffusion networks: Use existing communication networks in areas such as Somaliland and Isiolo to spread anti-FGM messages more widely. Equip community champions, religious leaders, health workers, teachers, youth leaders, and elders with simple tools to reach people beyond direct programme participants.

9.2 Long-term recommendations

This includes deep, sustained strategies designed to shift the underlying social architecture and support anchor the abandonment of FGM over time.

Close the attitude-norm gap through visibility: Help communities see that many people already oppose FGM. Use public commitments, collective actions, and trusted leaders to make support for abandonment more visible and reduce fear of social backlash.

Reframe cultural narratives with sensitivity: Challenge beliefs that link FGM with purity, cleanliness, marriageability, religion, or social acceptance, while promoting positive views of girls who not undergone FGM. Messages should be carefully framed so they do not stigmatise women and girls who have already undergone FGM.

Use gender-transformative approaches: Link FGM programming to wider gender equality work, including women's leadership, girls' education, economic empowerment, and household decision-making, so that efforts to end FGM also strengthen women's agency.

Strengthen male engagement spaces: Create structured spaces where men and boys can reflect on peer pressure, social expectations, gender roles, and the marriageability of girls who have not undergone FGM. This can help align attitudes and behaviour across genders and support lasting change.

Turn intentions into protective action: Help families move from intending not to practice FGM to sustaining that decision. Link families to community accountability structures, local protection systems, peer networks, and cross-border coordination mechanisms that can prevent relapse, secrecy, or cross-border cutting.

References

1. Office of the High Commissioner for Human Rights (OHCHR)., WHO, UNICEF, UNFPA, UN Women. Eliminating Female Genital Mutilation: An interagency statement. . Geneva; 2008.
2. United Nations Children's Fund. UNICEF Kenya Annual Report. UNICEF, New York; 2024 Feb.
3. Shell-Duncan B, Naik R, Feldman-Jacobs C. A State-of-Art-Synthesis of Female Genital Mutilation/Cutting: What Do We Know Now? [Internet]. 2016 [cited 2026 Apr 25]. Available from: http://www.popcouncil.org/EvidencetoEndFGM/C-C.
4. KNBS, Ministry of Health, The DHS Program. Kenya Demographic Health Survey. Nairobi; 2022.
5. Matanda D, Obare F, Omondi R, Kizito S, Muthuri S, Undie CC. Endline evaluation of community-based interventions addressing social attitudes and behavioural intentions related to female genital mutilation in Isiolo and Narok counties, Kenya. Nairobi; 2026 Mar. doi:10.31899/sbsr2026.1009
6. Newell-Jones K. Action Aid International Somaliland (AAIS) programme on FGM/C: Midterm Review. . Somaliland; 2018.
7. Powell R, Yussuf M, Shell-Duncan B, Kabiru C. Exploring the nature and extent of normative change in FGM/C in Somaliland. 2020. doi:10.31899/rh11.1027
8. Yussuf M, Matanda DJ, Powell RA. Exploring the capacity of the Somaliland healthcare system to manage female genital mutilation / cutting-related complications and prevent the medicalization of the practice: a cross-sectional study. BMC Health Serv Res. 2020 Dec 12;20(1):200. doi:10.1186/s12913-020-5049-2
9. Mohamed AS, Bjertness E, Htet AS, Aye WT, Madar AA. Attitudes towards wife-beating justification and its association with female genital mutilation – analysis of ever-married Somali women in the 2020 Somali Health and Demographic Survey. Int Health. 2025 May 1;17(3):251–8. doi:10.1093/inthealth/ihae047
10. Nuh AY. Attitudes towards the practice of female genital mutilation/cutting in Somaliland: evidence from the Somali Demographic Health Survey 2020. BMC Public Health. 2025 Mar 29;25(1):1196. doi:10.1186/s12889-025-22371-6
11. KNBS and ICF. Kenya Demographic and Health Survey 2022 Key Indicators Report . Nairobi, Kenya, and Rockville, ; 2023.
12. Ethiopian Demographic and Health Survey (EDHS). Key Indicators Report. . Addis Ababa:; 2016.
13. Matanda D, Atilola G, Moore Z, Komba P, Mavatikua L, Nnanatu CC, et al. Female genital mutilation/cutting in Senegal: Is the practice declining? Descriptive analysis of Demographic and Health Surveys, 2005–2017. Reprod Health. 2020 Feb 28. doi:10.31899/rh11.1040
14. Obare F, Dennis Matanda, Tchaiwe Zulu, Stephen Kizito. "Using the Confidante method to measure new or recent cases of female genital mutilation: insights from Narok County, Kenya." [Internet]. Nairobi: Kenya; 2023 [cited 2026 Apr 30]. Available from: https://knowledgecommons.popcouncil.org/cgi/viewcontent.cgi?article=1394&context=focus_sexual-health-repro-choice

Appendices

Appendix 1 : Kenya tables

Garissa

Table A1. Overall bivariate association of study sites and related exposure with outcome variables at endline in the Garissa County, Kenya

Characteristic	Overall	Study sites			Study site related Exposure			
		Control	Intervention	p-value[2]	Non-exposed all sites	Exposed control site	Exposed intervention site	p-value[2]
	N = 554[1]	N = 302[1]	N = 252[1]		N = 389[1]	N = 16[1]	N = 149[1]	
Beliefs related to FGM				0.002				<0.001
In favour	331 (60%)	198 (66%)	133 (53%)		256 (66%)	6 (38%)	69 (46%)	
Opposed	223 (40%)	104 (34%)	119 (47%)		133 (34%)	10 (63%)	80 (54%)	
Gender inequality beliefs				0.289				0.288
Equal	495 (89%)	266 (88%)	229 (91%)		343 (88%)	16 (100%)	136 (91%)	
Unequal	59 (11%)	36 (12%)	23 (9%)		46 (12%)	0 (0%)	13 (9%)	
FGM-related knowledge				0.004				0.01
Low	318 (57%)	190 (63%)	128 (51%)		239 (61%)	9 (56%)	70 (47%)	
High	236 (43%)	112 (37%)	124 (49%)		150 (39%)	7 (44%)	79 (53%)	
Social sanction for FGM abandonment				<0.001				<0.001
In favour	159 (29%)	113 (37%)	46 (18%)		135 (35%)	2 (13%)	22 (15%)	
Opposed	395 (71%)	189 (63%)	206 (82%)		254 (65%)	14 (88%)	127 (85%)	
Discrimination against uncut girls				0.276				<0.001
Not for discrimination	403 (73%)	214 (71%)	189 (75%)		260 (67%)	16 (100%)	127 (85%)	
In favour of discrimination	151 (27%)	88 (29%)	63 (25%)		129 (33%)	0 (0%)	22 (15%)	
Opinion about FGM continuation				<0.001				<0.001
Not for continuation	265 (48%)	121 (40%)	144 (57%)		157 (40%)	13 (81%)	95 (64%)	
In favour of continuation	289 (52%)	181 (60%)	108 (43%)		232 (60%)	3 (19%)	54 (36%)	
Ever encouraged FGM abandonment				<0.001				<0.001
Never	494 (89%)	290 (96%)	204 (81%)		364 (94%)	13 (81%)	117 (79%)	
Ever encouraged	60 (11%)	12 (4.0%)	48 (19%)		25 (6.4%)	3 (19%)	32 (21%)	
Intention to perform FGM on daughters				<0.001				<0.001
Opposed	228 (41%)	95 (31%)	133 (53%)		130 (33%)	9 (56%)	89 (60%)	
In favour	326 (59%)	207 (69%)	119 (47%)		259 (67%)	7 (44%)	60 (40%)	
Agency to oppose FGM				<0.001				<0.001
Can't oppose	466 (84%)	278 (92%)	188 (75%)		347 (89%)	13 (81%)	106 (71%)	
Can oppose	88 (16%)	24 (7.9%)	64 (25%)		42 (11%)	3 (19%)	43 (29%)	
Overall social attitude to FGM				<0.001				<0.001
In favour	156 (28%)	112 (37%)	44 (17%)		134 (34%)	2 (13%)	20 (13%)	
Opposed	398 (72%)	190 (63%)	208 (83%)		255 (66%)	14 (88%)	129 (87%)	

[1] n (%)

[2] Pearson's Chi-squared test; Fisher's exact test

Table A2. Adjusted Odd ratios associated with study site and exposure by outcome variables in endline in the Garissa region, Kenya

Outcomes	Intervention VS Control			Exposed control site VS Non-exposed both sites			Exposed intervention site VS Non-exposed both sites		
	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
Holding beliefs opposed to FGM	**1.78**	**1.25, 2.54**	**0.001**	**2.90**	**1.02, 8.95**	**0.050**	**2.14**	**1.44, 3.19**	**<0.001**
Holding unequal gender related beliefs	0.75	0.42, 1.32	0.3				0.90	0.44, 1.75	0.8
Having high FGM-related knowledge	**1.86**	**1.31, 2.67**	**<0.001**	1.20	0.40, 3.41	0.7	**1.91**	**1.28, 2.87**	**0.002**
Being opposed to social sanctions for FGM-abandonment	**2.88**	**1.92, 4.37**	**<0.001**	3.49	0.93, 22.8	0.11	**3.21**	**1.95, 5.51**	**<0.001**
Being in favour of discrimination against uncut girls	0.78	0.53, 1.15	0.2				**0.33**	**0.19, 0.55**	**<0.001**
Being in favour of FGM continuation	**0.44**	**0.31, 0.63**	**<0.001**	**0.16**	**0.03, 0.50**	**0.005**	**0.35**	**0.23, 0.52**	**<0.001**
Having ever encouraged anyone to abandon FGM	**7.14**	**3.65, 15.1**	**<0.001**	2.79	0.56, 10.4	0.2	**3.91**	**2.16, 7.21**	**<0.001**
Intention to undergo FGM on daughters	**0.37**	**0.25, 0.52**	**<0.001**	0.40	0.14, 1.12	0.081	**0.30**	**0.20, 0.46**	**<0.001**
Agency to oppose FGM	**5.15**	**3.05, 8.96**	**<0.001**	2.37	0.51, 8.29	0.2	**4.79**	**2.82, 8.27**	**<0.001**

Note: Models adjusted for sex, age, marital status and education level

Table A3. Endline exposure to intervention and associated adjusted Odds-ratio to social attitude against FGM in endline in Garissa, Kenya

Characteristic	Holding an overall social attitude opposed to FGM		
	OR	95% CI	p-value
Exposure			
Non-exposed all sites (ref)	—	—	
Exposed in control site	1.89	0.42, 13.4	0.4
Exposed in intervention site	**3.5**	**1.92, 6.66**	**<0.001**
Marital status			
No (ref)	—	—	
Yes	1.12	0.65, 1.92	0.7
Sex			
Men (ref)	—	—	
Women	0.72	0.44, 1.18	0.2
Age group			
≥ 45yrs (ref)	—	—	
35-44	0.91	0.45, 1.81	0.8
25-34	1.43	0.73, 2.79	0.3
< 25yrs	**2.09**	**0.99, 4.50**	**0.056****
Education			
No formal education* (ref)	—	—	
Primary	**0.31**	**0.16, 0.59**	**<0.001**
Secondary+	**0.39**	**0.19, 0.78**	**0.008**
FGM-related knowledge			
Low (ref)	—	—	
High	0.85	0.53, 1.38	0.5
Beliefs related to FGM			
In favour (ref)	—	—	
Opposed	**17.6**	**8.67, 41.1**	**<0.001**
Gender inequality beliefs			
Equal (ref)	—	—	
Unequal	**0.16**	**0.08, 0.32**	**<0.001**

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

Table A4. Baseline-endline exposure to intervention and associated adjusted odds-ratio to social attitude against FGM practice in the Garissa County, Kenya

Characteristic	Holding an overall social attitude opposed to FGM		
	OR	95% CI	p-value
Exposure			
Non-exposed all sites (ref)	—	—	
Exposed Control and baseline	**0.3**	**0.21, 0.44**	**<0.001**
Exposed Intervention site	**4.01**	**2.35, 7.17**	**<0.001**
Sex			
Men (ref)	—	—	
Women	0.91	0.66, 1.25	0.6
Age group			
≥ 45yrs	—	—	
35-44	0.86	0.51, 1.43	0.6
25-34	0.8	0.50, 1.28	0.4
< 25yrs	0.96	0.58, 1.58	0.9
Education		F	
No formal education* (ref)	—	—	
Primary	0.68	0.41, 1.13	0.14
Secondary+	0.91	0.57, 1.47	0.7
FGM-related knowledge			
Low (ref)	—	—	
High	**1.35**	**1.00, 1.83**	**0.052****
Beliefs related to FGM			
In favour (ref)	—	—	
Opposed	**7.43**	**5.41, 10.3**	**<0.001**
Gender inequality beliefs			
Equal (ref)	—	—	
Unequal	**3.23**	**2.03, 5.20**	**<0.001**

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

Note: (*) No formal education refers to respondents with no schooling or those who are literate but have not attended formal education (other literates)

(**) borderline significance

Isiolo and Narok

Table 13. Exposure to TGG-ALM interventions by background characteristics at baseline and endline, Isiolo County [a]

Category	Community dialogues (%)	Women Only Circles (%)	Community or Women Only Circles (%)	N	Community dialogues (%)	Women Only Circles (%)	Community or Women Only (%)	N
Sex	p<.010		p<.010		p=.441		p=.220	
Female	22.7	10.1	26.5	1291	42.7	31.0	35.3	993
Male	13.8		13.8	910	44.8		32.5	735
Age	p=.017	p=.182	p=.154		p<.010	p=.125	p<.010	
15-19	13.3	13.8	16.3	263	28.3	31.0	20.5	229
20-29	17.6	11.0	20.9	748	42.7	24.2	33.2	546
30-39	21.5	8.7	23.0	671	46.2	34.3	37.3	499
40-60	20.8	8.1	22.2	519	48.7	37.4	38.8	454
Has any form of disability [b]	p<.010	p=.875	p<.010		p=.064	p=.747	p=.032	
No form of disability	17.7	10.0	19.7	1739	42.3	30.6	32.9	1371
Any form of disability	24.0	10.3	27.1	462	48.5	32.3	38.9	357
Education level	p=.621	p=.063	p=.599		p=.030	p=.802	p=.048	
Never attended school	20.4	7.6	22.5	711	42.9	32.7	34.0	620
Primary	19.1	12.0	21.7	674	39.8	30.2	31.9	536
Secondary	18.0	12.1	20.2	629	45.7	30.8	33.9	446
College/university	17.1	6.6	18.7	187	55.4	22.7	45.2	124
Marital status [c]	p=.086	p=.945	p=.116		p<.010	p=.285	p<.010	
Never/formerly married	17.1	10.1	19.4	778	37.1	34.7	28.5	601
Married/living together	20.1	10.0	22.3	1423	46.8	29.4	37.2	1127
Ethnicity	p<.010	p=.163	p<.010		p=.088	p=.078	p<.010	
Somali	23.5	13.0	24.7	170	41.2	63.6	23.6	72
Borana	16.4	11.0	19.1	1380	42.0	28.0	32.4	944
Samburu	23.6	7.4	25.2	644	46.5	33.1	38.6	682
Religion	p<.010	p=.047	p<.010		p=.017	p=.142	p<.010	
Christian	26.1	8.3	28.3	459	48.8	35.5	43.5	513
Muslim	17.2	11.2	19.7	1549	41.4	29.7	31.2	1041
No religion/Other	17.2	3.7	17.2	192	37.1	15.0	24.1	174
Administrative ward	p<.010	p=0.056	p<.010		p=.155	p=.295	p<.010	
Kinna	18.6	10.4	21.5	1038	40.8	27.9	33.1	768
Burat	14.3	13.1	16.1	517	43.9	38.6	26.2	279
Oldonyiro	23.5	7.4	25.1	646	46.5	32.9	38.6	681

[a] Exposure to TGG-ALM interventions refers to participation in either community intergenerational or women only dialogues at least once; [b] Based on indicators of functional limitations developed by the Washington Group on Disability Statistics; [c] Formerly married refers to separated, divorced or widowed.

Appendix 2: Ethiopia tables

Table 14. Exposure to TGG-ALM interventions by background characteristics at baseline and endline, Narok County [a]

Amhara

Table A5. Bivariate association of study sites and study-site related exposure by outcomes variables at endline in the Amhara region, Ethiopia

	Community dialogues (%)	Couple dialogues (%)	Community or couple dialogues (%)	N	Community dialogues (%)	Couple dialogues (%)	Community or couple dialogues (%)	N
	p<.010	p=.736	p=.214		p<.010	p<.010	p<.010	
Sex								
Female	52.2	27.6	31.3	1272	54.2	54.4	43.2	1222
Male	41.4	28.8	29.1	1386	41.3	38.3	32.6	1118
Age	p=.045	p<.010	p=.155		p=.741	p=.116	p=.507	
15-19	41.0	8.1	27.1	376	45.1	42.1	35.2	418
20-29	43.7	25.4	28.9	953	47.3	46.9	38.6	830
30-39	50.0	35.2	33.1	674	51.6	43.2	40.5	528
40-60	48.8	34.6	30.7	655	48.2	50.0	37.4	564
Has any form of disability [b]	p=.539	p=.483	p=.942		p<.010	p=.137	p<.010	
No form of disability	45.7	27.9	30.2	2055	48.3	44.4	38.4	1907
Any form of disability	47.5	31.1	30.0	603	47.2	52.6	36.7	433
Education level	p<.010	p<.010	p<.010		p<.010	p=.629	p<.010	
Never attended school	51.4	37.3	26.8	740	50.0	51.7	38.5	551
Primary	48.5	28.8	31.1	692	49.0	47.9	39.5	577
Secondary	41.0	20.6	29.6	918	48.1	45.8	37.4	885
College/university	47.1	35.9	37.6	306	43.8	36.1	37.0	327
Marital status [c]	p<.010	p<.010	p=.038		p<.010	p<.010	p<.010	
Never/formerly married	40.0	11.4	27.3	788	40.7	35.4	30.3	814
Married/living together	48.9	35.0	31.3	1870	51.8	50.8	42.3	1525
Ethnicity	p<.010	p=.025	p<.010		p=.442	p=.173	p=.832	
Kalenjin	6.3	0.0	2.4	41	20.0	12.5	10.9	46
Kikuyu	28.3	10.0	17.9	195	25.5	33.3	14.7	190
Maasai	49.2	30.0	32.7	2304	50.6	47.4	42.2	1990
Religion	p<.010	p=.221	p<.010		p<.010	p=.125	p<.010	
Christian	47.5	28.8	31.4	2497	48.8	46.7	39.2	2229
Muslim	14.3	0.0	7.7	13	0.0		0.0	5
No religion/Other	17.8	14.3	9.0	145	29.0	26.7	17.9	106
Administrative ward	p<.010	p=.227	p<.010		p=.349	p=.614	p=.387	
Suswa	50.1	28.1	41.0	921	54.1	44.1	44.7	759
Keekonyokie	49.2	27.9	39.2	949	49.7	48.0	40.6	973
Mosiro	22.7	47.1	6.5	788	36.2	43.2	26.0	608

[a] Exposure to TGG-ALM interventions refers to participation in either intergenerational or couple dialogues at least once; [b] Based on indicators of functional limitations developed by the Washington Group on Disability Statistics; [c] Formerly married refers to separated, divorced or widowed.

Characteristic	Overall	Study sites			Study site-related Exposure			
		Control	Intervention	p-value[2]	Non-exposed all sites	Exposed control site	Exposed intervention site	p-value[2]
	N = 560[1]	N = 350[1]	N = 210[1]		N = 439[1]	N = 40[1]	N = 81[1]	
Beliefs related to FGM				0.803				0.015
In favour	107 (19%)	68 (19%)	39 (19%)		95 (22%)	4 (10%)	8 (9.9%)	
Opposed	453 (81%)	282 (81%)	171 (81%)		344 (78%)	36 (90%)	73 (90%)	
Gender inequality beliefs				0.046				0.014
Equal	471 (84%)	286 (82%)	185 (88%)		359 (82%)	36 (90%)	76 (94%)	
Unequal	89 (16%)	64 (18%)	25 (12%)		80 (18%)	4 (10%)	5 (6.2%)	
FGM-related knowledge				0.03				0.001
Low	230 (41%)	156 (45%)	74 (35%)		198 (45%)	11 (28%)	21 (26%)	
High	330 (59%)	194 (55%)	136 (65%)		241 (55%)	29 (73%)	60 (74%)	
Social sanction for FGM abandonment				0.51				0.007
In favour	123 (22%)	80 (23%)	43 (20%)		107 (24%)	9 (23%)	7 (8.6%)	
Opposed	437 (78%)	270 (77%)	167 (80%)		332 (76%)	31 (78%)	74 (91%)	
Discrimination against uncut girls				0.257				0.457
Not for discrimination	531 (95%)	329 (94%)	202 (96%)		413 (94%)	39 (98%)	79 (98%)	
In favour of discrimination	29 (5.2%)	21 (6.0%)	8 (3.8%)		26 (5.9%)	1 (2.5%)	2 (2.5%)	
Opinion about FGM continuation				0.01				0.004
Not for continuation	518 (93%)	316 (90%)	202 (96%)		401 (91%)	36 (90%)	81 (100%)	
In favour of continuation	42 (7.5%)	34 (9.7%)	8 (3.8%)		38 (8.7%)	4 (10%)	0 (0%)	
Ever encouraged FGM abandonment				<0.001				<0.001
Never	375 (67%)	260 (74%)	115 (55%)		331 (75%)	18 (45%)	26 (32%)	
Ever encouraged	185 (33%)	90 (26%)	95 (45%)		108 (25%)	22 (55%)	55 (68%)	
Intention to perform FGM on daughters				0.017				<0.001
Opposed	497 (89%)	302 (86%)	195 (93%)		382 (87%)	34 (85%)	81 (100%)	
In favour	63 (11%)	48 (14%)	15 (7.1%)		57 (13%)	6 (15%)	0 (0%)	
Agency to oppose FGM				0.206				0.077
Can't oppose	450 (80%)	287 (82%)	163 (78%)		361 (82%)	31 (78%)	58 (72%)	
Can oppose	110 (20%)	63 (18%)	47 (22%)		78 (18%)	9 (23%)	23 (28%)	
Overall social attitude to FGM				0.335				0.005
In favour	127 (23%)	84 (24%)	43 (20%)		110 (25%)	10 (25%)	7 (8.6%)	
Opposed	433 (77%)	266 (76%)	167 (80%)		329 (75%)	30 (75%)	74 (91%)	

[1] *n (%)*

[2] *Pearson's Chi-squared test; Fisher's exact test*

Table A6. Adjusted Odd ratios associated with study site and exposure by outcome variables in endline in the Amhara region, Ethiopia

Models	Intervention VS Control			Exposed in control site VS Non-exposed both sites			Exposed in intervention site VS Non-exposed both sites		
	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
Holding beliefs opposed to FGM	1.03	0.66, 1.61	>0.9	2.59	0.99, 8.93	0.083	**2.50**	**1.22, 5.83**	**0.020**
Holding unequal gender related beliefs	0.63	0.37, 1.04	0.078	0.47	0.14, 1.27	0.2	**0.32**	**0.11, 0.74**	**0.017**
Having high FGM-related knowledge	**1.51**	**1.05, 2.19**	**0.028**	1.95	0.95, 4.26	0.077	**2.21**	**1.30, 3.90**	**0.005**
Being opposed to social sanctions for FGM-abandonment	1.11	0.73, 1.72	0.6	1.02	0.48, 2.40	>0.9	**3.17**	**1.49, 7.82**	**0.006**
Being in favour of discrimination against uncut girls	0.61	0.25, 1.37	0.3	0.43	0.02, 2.12	0.4	0.43	0.07, 1.48	0.3
Being in favour of FGM continuation	**0.38**	**0.16, 0.80**	**0.017**	1.17	0.33, 3.18	0.8	—		
Having ever encouraged anyone to abandon FGM	**2.39**	**1.65, 3.46**	**<0.001**	**4.25**	**2.16, 8.48**	**<0.001**	**6.47**	**3.86, 11.1**	**<0.001**
Intention to undergo FGM on daughters	**0.51**	**0.27, 0.92**	**0.032**	1.16	0.42, 2.77	0.8	—		
Agency to oppose FGM	1.69	0.94, 3.09	0.082	0.67	0.23, 1.84	0.4	**2.56**	**1.19, 5.50**	**0.015**

Abbreviations: CI = Confidence Interval, OR = Odds Ratio * both sites refer to the control and intervention site

Table A7. Endline exposure to intervention and associated adjusted Odd-ratio to social attitude against FGM practice in endline in the Amhara region, Ethiopia

Characteristic	Holding overall social attitude opposed to FGM		
	OR	95% CI	p-value
Exposure			
Non-exposed all sites (ref)	—	—	
Exposed in control site	0.64	0.29, 1.49	0.3
Exposed in intervention site	**2.56**	**1.15, 6.55**	**0.032**
Marital status			
No (ref)	—	—	
Yes	0.69	0.38, 1.22	0.2
Sex			
Men (ref)	—	—	
Women	0.86	0.54, 1.36	0.5
Age group			
≥ 45yrs (ref)	—	—	
35-44	0.92	0.51, 1.67	0.8
25-34	1.13	0.57, 2.28	0.7
< 25yrs	0.78	0.36, 1.67	0.5
Education			
No formal education* (ref)	—	—	
Primary	**2.16**	**1.25, 3.81**	**0.007**
Secondary+	**2.6**	**1.22, 5.74**	**0.015**
FGM-related knowledge			
Low (ref)	—	—	
High	1.16	0.73, 1.85	0.5
Beliefs related to FGM			
In favour (ref)	—	—	
Opposed	**5.07**	**3.11, 8.34**	**<0.001**
Gender inequality beliefs			
Equal (ref)	—	—	
Unequal	**0.45**	**0.26, 0.78**	**0.004**

Abbreviations: CI = Confidence Interval, OR = Odds Ratio
Note: (*) No formal education refers to respondents with no schooling or those who are literate but have not attended formal education (other literates)
(**) borderline significance

Table A8. Baseline-endline exposure to intervention and associated adjusted odds-ratio to attitude against FGM practice in the Amhara region, Ethiopia

Characteristic	Holding overall social attitude opposed to FGM		
	OR	95% CI	p-value
Exposure			
Non-exposed all sites (ref)	—	—	
Exposed Control and baseline	1.32	0.88, 2.01	0.2
Exposed Intervention site	1.65	0.76, 4.16	0.2
Sex			
Men (ref)	—	—	
Women	**1.69**	**1.22, 2.33**	**0.002**
Age group			
≥ 45yrs	—	—	
35-44	1.2	0.79, 1.82	0.4
25-34	1.21	0.75, 1.94	0.4
< 25yrs	1.04	0.63, 1.73	0.9
Education			
Low education* (ref)	—	—	
Primary	**1.7**	**1.15, 2.53**	**0.008**
Secondary+	**2.23**	**1.28, 3.94**	**0.005**
FGM-related knowledge			
Low (ref)	—	—	
High	1.3	0.95, 1.78	0.11
Beliefs related to FGM			
In favour (ref)	—	—	
Opposed	**4.04**	**2.95, 5.56**	**<0.001**
Gender inequality beliefs			
Equal (ref)	—	—	
Unequal	**0.46**	**0.33, 0.64**	**<0.001**

Abbreviations: CI = Confidence Interval, OR = Odds Ratio
Note: (*) No formal education refers to respondents with no schooling or those who are literate but have not attended formal education (other literates)
(**) borderline significance

Appendix 3: Senegal tables

Kédougou-Tambacounda

Table A9. Overall bivariate association of study sites and related exposure with outcome variables at endline in Kédougou and Tambacounda, Senegal

Characteristic	Overall	Study sites			Study site related Exposure			
		Control	Intervention	p-value[2]	Non-exposed all sites	Exposed control site	Exposed intervention site	p-value[2]
	N = 1,1331	N = 719[1]	N = 414[1]		N = 925[1]	N = 68[1]	N = 140[1]	
Beliefs related to FGM				0.277				**<0.001**
In favour	278 (25%)	26%	23%		27%	19%	12%	
Opposed	855 (75%)	74%	77%		73%	81%	88%	
Gender inequality beliefs				0.557				0.273
Equal	951 (84%)	84%	83%		84%	88%	80%	
Unequal	182 (16%)	16%	17%		16%	12%	20%	
FGM-related knowledge				**<0.001**				**<0.001**
Low	457 (40%)	45%	33%		46%	22%	13%	
High	676 (60%)	55%	67%		54%	78%	87%	
Social sanction for FGM abandonment				0.611				0.895
In favour	19 (1.7%)	1.50%	1.90%		1.60%	1.50%	2.10%	
Opposed	1,114 (98%)	98%	98%		98%	99%	98%	
Discrimination against uncut girls				0.672				>0.999
Not for discrimination	1,094 (97%)	96%	97%		97%	97%	96%	
In favour of discrimination	39 (3.4%)	3.60%	3.10%		3.50%	2.90%	3.60%	
Opinion about FGM continuation				0.593				0.672
Not for continuation	1,033 (91%)	92%	91%		91%	94%	91%	
In favour of continuation	100 (9%)	8%	9%		9 %	6%	9%	
Ever encouraged FGM abandonment				**0.01**				**<0.001**
Never	928 (82%)	84%	78%		85%	79%	63%	
Ever encouraged	205 (18%)	16%	22%		15%	21%	37%	
Intention to perform FGM on daughters				>0.999				0.391
Opposed	1,029 (91%)	91%	91%		90%	93%	94%	
In favour	104 (9%)	9%	9%		10%	7%	6%	
Agency to oppose FGM				**0.007**				**<0.001**
Can't oppose	550 (49%)	52%	43%		55%	21%	20%	
Can oppose	583 (51%)	48%	57%		45%	79%	80%	
Overall social attitude to FGM				0.483				0.712
In favour	18 (1.6%)	1.40%	1.90%		1.50%	1.50%	2.10%	
Opposed	1,115 (98%)	99%	98%		98%	99%	98%	

[1] *n (%)*
[2] *Pearson's Chi-squared test*
[3] *Pearson's Chi-squared test; Fisher's exact test*

Table A10. Association between both study site and related exposure with FGM-related outcomes at Endline in Kédougou and Tambacounda

Outcome	Study site			Exposure					
	Intervention vs Control			Exposed Control site vs non-exposed			Exposed Intervention site vs non-exposed		
	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
Holding beliefs opposed to FGM	1.23	0.91, 1.66	0.2	1.33	0.72, 2.63	0.4	**2.6**	**1.55, 4.61**	**<0.001**
Holding unequal gender related beliefs	1.3	0.92, 1.84	0.14	0.66	0.28, 1.36	0.3	1.3	0.80, 2.07	0.3
Having high FGM-related knowledge	**1.87**	**1.43, 2.47**	**<0.001**	**2.51**	**1.39, 4.78**	**0.003**	**5.31**	**3.22, 9.26**	**<0.001**
Being opposed to social sanctions for FGM-abandonment	0.8	0.30, 2.16	0.6	0.89	0.17, 16.5	>0.9	0.75	0.23, 3.38	0.7
Being in favour of discrimination against uncut girls	0.89	0.43, 1.79	0.7	0.92	0.14, 3.24	>0.9	1.01	0.33, 2.49	>0.9
Being in favour of FGM continuation	1.25	0.78, 2.00	0.4	0.78	0.23, 2.09	0.7	0.87	0.43, 1.63	0.7
Having ever encouraged anyone to abandon FGM	**1.62**	**1.15, 2.26**	**0.005**	1.22	0.62, 2.28	0.5	**2.75**	**1.81, 4.16**	**<0.001**
Intention to undergo FGM on daughters	0.96	0.59, 1.53	0.9	0.94	0.30, 2.41	>0.9	0.58	0.26, 1.19	0.2
Agency to oppose FGM	**1.41**	**1.09, 1.83**	**0.009**	**4.29**	**2.39, 8.21**	**<0.001**	**4.46**	**2.90, 7.06**	**<0.001**
Overall social attitude opposed to FGM	0.49	0.16, 1.53	0.2	0.81	0.11, 17.8	0.9	**0.21**	**0.05, 1.15**	**0.049**

Table A11. Pooled baseline-endline exposure to intervention and associated adjusted odds-ratio to social attitude against FGM practice in Kédougou and Tambacounda, Senegal

Characteristic	Holding an overall social attitude opposed to FGM		
	OR	95% CI	p-value
Exposure			
Non-exposed all sites	—	—	
Exposed Control and baseline	**0.24**	**0.15, 0.38**	**<0.001**
Exposed Intervention site	1.56	0.52, 6.81	0.5
Sex			
Men	—	—	
Women	0.99	0.59, 1.64	>0.9
Age Group			
≥ 45yrs	—	—	
35-44	0.74	0.40, 1.38	0.3
25-34	1.87	1.00, 3.57	0.053
< 25yrs	**0.43**	**0.23, 0.77**	**0.005**
Ethnicity			
Pulaar	—	—	
Soninké	1.75	0.98, 3.19	0.062
Mandingue	**0.4**	**0.24, 0.68**	**<0.001**
Wolof	2.33	0.72, 10.8	0.2
Others	0.31	0.10, 1.19	0.061
Religion			
Christian	—	—	
Muslim	0.64	0.11, 3.72	0.6
Education			
No formal education*	—	—	
Primary	1.18	0.70, 2.02	0.5
Secondary+	**2.64**	**1.32, 5.59**	**0.008**
Region			
Kédougou	—	—	
Tambacounda	**0.07**	**0.02, 0.18**	**<0.001**
FGM-related knowledge			
Low	—	—	
High	**0.36**	**0.21, 0.59**	**<0.001**
Beliefs related to FGM			
In favour	—	—	
Opposed	**6.4**	**4.13, 10.1**	**<0.001**
Gender inequality beliefs			
Equal	—	—	
Unequal	**0.38**	**0.24, 0.58**	**<0.001**

(*) No formal education refers to respondents with no schooling or those who are literate but have not attended formal education (other literates)

Kolda-Sédhiou

Table A12. Overall bivariate association of study sites and related exposure with outcome variables at endline in Kolda and Sédhiou, Senegal

Characteristic	Overall	Study sites			Study site related Exposure			
		Control	Intervention	p-value[2]	Non-exposed all sites	Exposed control site	Exposed intervention site	p-value[2]
	N = 1,135[1]	N = 748[1]	N = 387[1]		N = 828[1]	N = 151[1]	N = 156[1]	
Beliefs related to FGM				0.125				**<0.001**
In favour	599 (53%)	54%	50%		44%	83%	67%	
Opposed	536 (47%)	46%	50%		56%	17%	33%	
Gender inequality beliefs				0.131				0.769
Equal	1,023 (90%)	89%	92%		90%	89%	92%	
Unequal	112 (9.9%)	11%	8.00%		10%	11%	8.30%	
FGM-related knowledge				**<0.001**				**<0.001**
Low	554 (49%)	54%	40%		61%	21%	12%	
High	581 (51%)	46%	60%		39%	79%	88%	
Social sanction for FGM abandonment				0.436				**<0.001**
In favour	246 (22%)	21%	23%		8.80%	58%	55%	
Opposed	889 (78%)	79%	77%		91%	42%	45%	
Discrimination against uncut girls				0.56				**<0.001**
Not for discrimination	988 (87%)	87%	88%		92%	70%	77%	
In favour of discrimination	147 (13%)	13%	12%		8.00%	30%	23%	
Opinion about FGM continuation				**<0.001**				**0.004**
Not for continuation	970 (85%)	82%	91%		84%	83%	94%	
In favour of continuation	165 (15%)	18%	8.50%		16%	17%	5.80%	
Ever encouraged FGM abandonment				0.145				**<0.001**
Never	1,007 (89%)	90%	87%		92%	83%	76%	
Ever encouraged	128 (11%)	10%	13%		7.90%	17%	24%	
Intention to perform FGM on daughters				**0.004**				**0.042**
Opposed	921 (81%)	79%	86%		80%	79%	88%	
In favour	214 (19%)	21%	14%		20%	21%	12%	
Agency to oppose FGM				0.082				**<0.001**
Can't oppose	659 (58%)	60%	55%		71%	20%	27%	
Can oppose	476 (42%)	40%	45%		29%	80%	73%	
Overall social attitude to FGM				0.38				**<0.001**
In favour	247 (22%)	21%	23%		8.90%	58%	55%	
Opposed	888 (78%)	79%	77%		91%	42%	45%	

[1] *n (%)*

[2] *Pearson's Chi-squared test*

[3] *Pearson's Chi-squared test; Fisher's exact test*

Table A13. Association between both study site and related exposure with FGM-related outcomes at Endline in Kolda and Sédhiou

Outcome	Study site			Exposure					
	Intervention vs Control			Exposed Control site vs non-exposed			Exposed Intervention site vs non-exposed		
	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
Holding beliefs opposed to FGM	1.21	0.93, 1.57	0.15	**0.16**	**0.10, 0.25**	**<0.001**	**0.38**	**0.26, 0.55**	**<0.001**
Holding unequal gender related beliefs	0.74	0.46, 1.17	0.2	0.7	0.37, 1.24	0.2	0.69	0.35, 1.29	0.3
Having high FGM-related knowledge	**1.62**	**1.24, 2.13**	**<0.001**	**7.12**	**4.53, 11.5**	**<0.001**	**12**	**7.23, 21.1**	**<0.001**
Being opposed to social sanctions for FGM-abandonment	0.98	0.72, 1.34	0.9	**0.04**	**0.03, 0.07**	**<0.001**	**0.06**	**0.04, 0.09**	**<0.001**
Being in favour of discrimination against uncut girls	0.93	0.62, 1.37	0.7	**3.73**	**2.34, 5.93**	**<0.001**	**3.66**	**2.23, 5.95**	**<0.001**
Being in favour of FGM continuation	**0.51**	**0.33, 0.78**	**0.003**	0.6	0.35, 1.00	0.056	**0.26**	**0.12, 0.53**	**<0.001**
Having ever encouraged anyone to abandon FGM	**1.52**	**1.01, 2.26**	**0.042**	**1.82**	**1.06, 3.06**	**0.027**	**3.68**	**2.25, 5.97**	**<0.001**
Intention to undergo FGM on daughters	0.74	0.50, 1.08	0.12	0.56	0.34, 0.91	0.02	**0.41**	**0.23, 0.72**	**0.003**
Agency to oppose FGM	1.1	0.84, 1.44	0.5	**9.57**	**6.13, 15.4**	**<0.001**	**5.9**	**3.95, 8.93**	**<0.001**
Overall social attitude to FGM	1.1	0.73, 1.66	0.6	**0.13**	**0.07, 0.23**	**<0.001**	**0.14**	**0.08, 0.24**	**<0.001**

Table A14. Pooled baseline-endline exposure to intervention and associated adjusted odds-ratio to social attitude against FGM practice in Kolda and Sédhiou, Senegal

Characteristic	Holding an overall social attitude opposed to FGM		
	OR	95% CI	p-value
Exposure			
Non-exposed all sites	—	—	
Exposed Control and baseline	**0.18**	**0.13, 0.25**	**<0.001**
Exposed Intervention site	**0.12**	**0.07, 0.19**	**<0.001**
Sex			
Men	—	—	
Women	1.24	0.90, 1.70	0.2
Age Group			
≥ 45yrs	—	—	
35-44	1.43	0.91, 2.25	0.12
25-34	0.88	0.56, 1.37	0.6
< 25yrs	0.9	0.56, 1.45	0.7
Ethnicity			
Pulaar	—	—	
Soninké	1.68	0.66, 4.41	0.3
Mandingue	0.69	0.44, 1.08	0.11
Wolof	1.31	0.64, 2.72	0.5
Others	0.7	0.41, 1.20	0.2
Religion			
Christian	—	—	
Muslim	2.23	0.83, 5.82	0.11
Education			
No formal education*	—	—	
Primary	1.28	0.83, 2.00	0.3
Secondary+	0.93	0.63, 1.37	0.7
Region			
Kolda	—	—	
Sédhiou	**2.83**	**1.87, 4.33**	**<0.001**
FGM-related knowledge			
Low	—	—	
High	**0.37**	**0.26, 0.52**	**<0.001**
Beliefs related to FGM			
In favour	—	—	
Opposed	**9.91**	**6.88, 14.6**	**<0.001**
Gender inequality beliefs			
Equal	—	—	
Unequal	**0.56**	**0.39, 0.82**	**0.002**

Appendix 4: Somaliland tables: Sool and Sanaag

Table 15. Attitudes towards girls who have undergone FGM and those who have not by exposure to TGG-ALM interventions in Somaliland

Categories	Female		Male		All participants	
	N	%	N	%	N	%
Views towards girls who HAVE undergone FGM						
Agree or strongly agree that a girl who has undergone FGM is healthy (Female N=1013, Male N=749, All N=1762)	138	13.6	235	31.4	373	21.2
Agree or strongly agree that a girl who has undergone FGM is clean (Female N=1035, Male N=938, All N=1973)	164	15.8	381	40.6	545	27.6
Agree or strongly agree that a girl who has undergone FGM is pure (Female N=1040, Male N=936, All N=1976)	168	16.2	382	40.8	550	27.8
Agree or strongly agree that a girl who has undergone FGM is equal (Female N=1052, Male N=957, All N=2009)	206	19.6	449	46.9	655	32.6
Agree or strongly agree that a girl who has undergone FGM is modern (Female N=1012, Male N=847, All N=1859)	152	15.0	238	28.1	390	21.0
Average scores across the 5 domains	N=1065		N=989		N=2,054	
0-10 (Disagree)	735	69.0	389	39.3	1124	54.7
11-15 (Neutral)	131	12.3	305	30.8	436	21.2
16-25 (Agree)	199	18.7	295	29.8	494	24.1
Views towards girls who have NOT undergone FGM						
Agree or strongly agree that a girl who has not undergone FGM is healthy (Female N=1041, Male N=951, All N=1992)	882	84.7	580	61.0	1,462	73.4
Agree or strongly agree that a girl who has not undergone FGM is clean (Female N=1041, Male N=942, All N=1983)	841	80.8	524	55.6	1,365	68.8
Agree or strongly agree that a girl who has not undergone FGM is pure (Female N=1046, Male N=932, All N=1978)	850	81.3	510	54.7	1360	68.8
Agree or strongly agree that a girl who has not undergone FGM is equal (Female N=1047, Male N=954, All N=2001)	858	81.9	582	61.0	1440	72.0
Agree or strongly agree that a girl who has not undergone FGM is modern (Female N=1019, Male N=899, All N=1918)	945	92.7	497	55.3	1,442	75.2
Average scores across the 5 domains	N=1065		N=989		N=2054	
0-10 (Disagree)	64	6.0	166	16.8	230	11.2
11-15 (Neutral)	98	9.2	153	15.5	251	12.2
16-25 (Agree)	901	84.6	666	67.3	1,567	76.3

Table 16. Intention to have FGM performed on daughters and marriageability of girls who have not undergone FGM in Somaliland

Categories	Female		Male		All participants	
	N=1065	%	N=989	%	N=2,054	%
Intend to have FGM performed on a daughter who has come of age						
Very unlikely	647	60.8	206	20.8**	853	41.5
Likelihood for a man to marry a girl who has not undergone FGM						
Very likely	315	29.6	89	9.0**	404	19.7

**p<0.01 (Statistical difference in proportion across gender)

Table 17. Opposition of FGM at various levels by exposure to TGG-ALM interventions in Somaliland

Category	Exposed		Not exposed	
	N	%	N	%
Individual	N=1491		N=563	
Completely oppose	1103	74.0	170	30.2
Immediate family members	N=1491		N=563	
Completely oppose	1043	70.0	149	26.5**
Extended family members	N=1491		N=563	
Completely oppose	794	53.3	115	20.4**
Friends and peers	N=1491		N=563	
Completely oppose	862	57.8	125	22.2**
Community members	N=1491		N=563	
Completely oppose	855	57.3	115	20.4**
Opinion influencers	N=1491		N=563	
Completely oppose	784	52.6	123	21.8**
General society	N=1491		N=563	
Completely oppose	671	45.0	92	16.3**
p<0.01 (Statistical difference between exposed and non-exposed respondents)				