

Addressing provider bias in contraceptive service delivery for youth and adolescents: an evaluation of the Beyond Bias project

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Abstract

We used a randomized controlled trial to evaluate an intervention designed to reduce family planning (FP) provider bias toward young and adolescent women in 233 clinics in Tanzania, Burkina Faso, and Pakistan. The intervention included 1) “Summit”: a one-day, story-driven, in-person event designed to facilitate dialogue and self-reflection on provider bias and providers’ own behaviors and create an action plan for shifting these biases; 2) “Connect”: an ongoing interactive peer-support forum for knowledge sharing and learning among providers and program implementers to apply unbiased practices in their daily work; and 3) Rewards: a non-financial performance-based incentive for clinics assessed through client feedback and conducted through quarterly awards ceremonies. After 12 months, results from provider surveys suggest that providers at intervention clinics had less-biased attitudes and beliefs in all three countries compared to control clinics. Client exit surveys and mystery client visits show that intervention providers in Tanzania and Pakistan also offered more comprehensive counseling, and their youth clients perceived better treatment from providers compared to the control group; effects on these outcomes are mostly small and insignificant in Burkina Faso, but the pooled effects across the three countries are statistically significant.

Despite improvements in counseling and perceived treatment, we find limited evidence of changes in FP method uptake, the types of FP methods received by clients, or the likelihood that clients receive their method of choice; only in Tanzania did we find improvements in uptake and receiving method of choice, and effect sizes were small. This lack of change in uptake and method of choice is partly explained by very high rates of these outcomes in the control group, leaving little room for improvement.

The intervention mostly did not change the effect of age, marital status, and parity on FP outcomes: improvements in counseling and perceived treatment were similar across age and marital status; we find suggestive evidence of differential improvements and reduced disparities in counseling for nulliparous clients, but this is inconsistent across data sources. This lack of reduction in disparities is partly because the effects of age, marital status, and parity were not as large as expected or absent in the control group for most outcomes.

In-depth interviews with providers, clients, and policy and program stakeholders indicate that there is broad enthusiasm and support for the Beyond Bias intervention and its activities, although there were specific implementation challenges in different countries; in Pakistan many providers struggled with effectively using Connect, and in Burkina Faso there were structural/systemic barriers to full intervention engagement. Providers in all countries felt that participation in Beyond Bias had changed their knowledge and attitudes toward FP service provision. Many cited examples of their changed behavior including more supportive counseling and fewer service refusals, and in some countries—especially Burkina Faso and to a lesser extent Tanzania—there were operational modifications to make services more youth-friendly.

Overall, our results suggest that the Beyond Bias intervention improved important aspects of FP care for all types of clients, not just the target group, but had minor effects on FP methods received by young clients.

Table of Contents

| | |
|----------------------------------------------------------------------------------------------------|-----------|
| Introduction | 8 |
| Background | 9 |
| Provider Bias | 9 |
| Setting | 10 |
| Description of intervention design process | 10 |
| Description of intervention | 10 |
| Summit..... | 11 |
| Connect..... | 11 |
| Rewards | 11 |
| Methods | 12 |
| Randomization | 12 |
| Recruitment and Attrition:..... | 13 |
| Quantitative Data | 13 |
| Client Exit Surveys..... | 13 |
| Mystery Client Visits..... | 14 |
| Provider Survey | 15 |
| Administrative Service Delivery Data..... | 16 |
| Cost Data | 16 |
| Qualitative Data | 16 |
| Client IDIs | 16 |
| Provider IDIs | 17 |
| Health facility manager IDIs | 17 |
| Stakeholder IDIs | 17 |
| Main Outcomes | 17 |
| Theory of change and outcomes | 17 |
| Provider attitudes and beliefs | 18 |
| Patient centered FP care | 19 |
| Method dispensing..... | 20 |
| Perceived treatment | 20 |
| Inclusion criteria for exit survey data | 21 |
| Statistical Analysis | 21 |
| Quantitative Results | 23 |
| Description of sample and balance between intervention and control | 23 |
| Clinics..... | 23 |
| Providers..... | 23 |
| Clients..... | 23 |
| How did the Beyond Bias intervention impact provider attitudes and beliefs? | 24 |
| How did the Beyond Bias intervention impact the primary client outcomes? | 25 |
| How did the Beyond Bias intervention impact patient centered FP care for women 15-24? | 26 |
| How did the Beyond Bias intervention impact method dispensing for women 15-24? | 27 |

| | |
|---------------------------------------------------------------------------------------------------------------|-----------|
| How did the Beyond Bias intervention impact perceived treatment by FP providers for women 15-24? | 30 |
| Additional ad hoc outcomes | 31 |
| Did the intervention reduce disparities in outcomes by age, marital status, and parity? | 31 |
| Disparities for young women | 32 |
| Disparities for unmarried women | 32 |
| Disparities for women without children | 33 |
| Intersectionality and disparities for specific profiles..... | 33 |
| Exploration of mechanisms | 34 |
| Robustness of results | 35 |
| Spillovers | 35 |
| Recruitment Challenges in Pakistan | 36 |
| Multiple hypothesis testing..... | 36 |
| Qualitative results | 36 |
| Burkina Faso | 36 |
| Factors that enable and inhibit successful implementation | 37 |
| Adaptations during implementation | 38 |
| Impressions about scale-up and anticipated factors associated with scalability | 38 |
| Implementation of multicomponent (3-pillar) model..... | 39 |
| Connecting to the underlying behavior change mechanisms | 39 |
| Perceived value of the intervention and desire to continue | 40 |
| Unintended consequences..... | 41 |
| Contextualizing implementation experiences through views from youth, providers, and stakeholders | 41 |
| Comparison with quantitative findings..... | 43 |
| Pakistan | 43 |
| Factors that enable and inhibit successful implementation | 44 |
| Impressions about scale-up and anticipated factors associated with scalability | 45 |
| Implementation of multicomponent (3-pillar) model..... | 46 |
| Translation across geographies..... | 46 |
| Connecting to the underlying behavior change mechanisms | 46 |
| Perceived value of the intervention and desire to continue | 48 |
| Unintended consequences..... | 49 |
| Contextualizing implementation experiences through views from youth, providers, and stakeholders | 49 |
| Comparison with quantitative findings..... | 52 |
| Tanzania | 53 |
| Factors that enable and inhibit successful implementation | 53 |
| Adaptations during implementation | 55 |
| Impressions about scale-up and anticipated factors associated with scalability | 56 |
| Implementation of multicomponent (3-pillar) model..... | 57 |
| Translation across geographies..... | 58 |
| Connecting to the underlying behavior change mechanisms | 58 |
| Perceived value of the intervention and desire to continue | 59 |
| Unintended consequences..... | 60 |
| Contextualizing implementation experiences through views from youth, providers, and stakeholders | 60 |

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Comparison with quantitative findings..... | 63 |
| Cost analysis..... | 64 |
| Discussion | 65 |
| Limitations | 69 |
| Conclusion | 70 |
| References..... | 71 |
| Appendix Tables..... | 73 |
| Table A1. Methods considered for counseled on range of methods outcome based on different client preferences in client exit data..... | 73 |
| Table A2. Baseline Balance Between Intervention and Control Clinics | 74 |
| Table A3. Balance Between Intervention and Control Providers..... | 75 |
| Table A4. Characteristics of Clients Seeking Family Planning Care | 76 |
| Table A5. Baseline Balance Between Intervention and Control Clients | 77 |
| Table A6. Provider Attitudes and Beliefs Related to Family Planning Care..... | 78 |
| Table A7. Adjusted Treatment Effects: Provider Attitudes and Beliefs Related to Family Planning Care | 80 |
| Table A8. Underlying Provider Attitudes and Beliefs that Could be Drivers of Bias..... | 82 |
| Table A9. Underlying Provider Attitudes and Beliefs that Could be Drivers of Bias (with Controls)..... | 83 |
| Table A10. Provider Attitudes and Beliefs Related to Professional Environment and Community Factors | 84 |
| Table A11. Underlying Attitudes and Beliefs not Expected to be Affected by the Intervention.... | 86 |
| Table A12. Patient Centered FP Care | 88 |
| Table A13. Patient Centered FP Care (with Controls)..... | 89 |
| Table A14. Method Dispensing..... | 90 |
| Table A15. Method Dispensing (with Controls) | 91 |
| Table A16. Perceived Treatment..... | 92 |
| Table A17. Perceived Treatment (with Controls)..... | 93 |
| Table A18. Client Volumes Between Intervention and Control Clinics..... | 94 |
| Table A19. Disparities by Age (Patient Centered FP Care) | 95 |
| Table A20. Disparities by Age (Method Dispensing)..... | 96 |
| Table A21. Disparities by Age (Perceived Patient Centeredness)..... | 97 |
| Table A22. Disparities by Marital Status (Patient Centered FP Care)..... | 98 |
| Table A23. Disparities by Marital Status (Method Dispensing) | 99 |
| Table A24. Disparities by Marital Status (Perceived Patient Centeredness)..... | 100 |
| Table A25. Disparities by Parity (Patient Centered FP Care) | 101 |

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Table A26. Disparities by parity (Method Dispensing) | 102 |
| Table A27. Disparities by Parity (Perceived Treatment) | 103 |
| Table A28. Perceived Treatment Index Components (Exit Survey) | 104 |
| Table A29. Perceived Treatment Index Components (Mystery Clients) | 106 |
| Table A30. Effect of Intervention on Additional Outcomes (Exit Survey) | 108 |
| Table A31. Effect of Intervention on Additional Outcomes (Mystery Clients) | 109 |
| Table A32. Exit Survey Results Restricting to New Users | 110 |
| Table A34. Rewards Scores by Quarter | 112 |
| Table A35. Primary outcome p-values after Bonferroni correction | 113 |
| Table A36: Average outcomes among control facilities by client profile in Tanzania | 114 |
| Table A37: Average outcomes among control facilities by client profile in Pakistan | 115 |
| Table A38: Average outcomes among control facilities by client profile in Burkina Faso in client exit data | 116 |
| Table A39: Average treatment effect by client profile in Tanzania | 117 |
| Table A40: Average treatment effect by client profile in Pakistan | 118 |
| Table 41: Average treatment effect by client profile in Burkina Faso | 119 |
| <i>Appendix Figures</i> | 120 |
| Figure A1. Client Outcomes over Time from Client Exit Survey (Tanzania) | 120 |
| Figure A2. Client Outcomes over Time from Exit Survey (Pakistan) | 121 |
| Figure A3. Client Outcomes over Time from Exit Survey (Burkina Faso) | 122 |
| Figure A4. Client Outcomes over Time from Exit Survey: Differences between the Intervention and Control Group (Tanzania) | 123 |
| Figure A5. Client Outcomes over Time from Exit Survey: Differences between the Intervention and Control Group (Pakistan) | 124 |
| Figure A6. Client Outcomes over Time from Exit Survey: Differences between the Intervention and Control Group (Burkina Faso) | 125 |
| Figure A7. Method Mix in Client Exit Survey by Age | 126 |
| Figure A8. Method Mix from Administrative Data (New Clients, Tanzania) | 127 |
| Figure A9. Method Mix from Administrative Data (Returning Clients, Tanzania) | 128 |
| Figure A10. Client Volume by Age from Administrative Data (New Clients, Tanzania) | 129 |
| Figure A11. Method Mix from Administrative Data (New Clients, Burkina Faso) | 130 |
| Figure A12. Method Mix from Administrative Data (Returning Clients, Burkina Faso) | 131 |
| Figure A13. Client Volume by Age from Administrative Data (New Clients, Burkina Faso) | 132 |
| Figure A14. Age Distribution from Administrative Data (Returning Clients, Burkina Faso) | 133 |
| Figure A15. Method Mix from Administrative Data (All Clients, Pakistan) | 134 |
| Figure A16. Client Volume by Age from Administrative Data (All Clients, Pakistan) | 135 |

| | |
|-----------------------------------------------------------------------------------------------------------------|------------|
| Figure A17. Age Disparities in the Control Group from Exit Survey (Under Age 20 vs. Age 25+) | 136 |
| Figure A18. Age Disparities in the Control Group from Mystery Clients (Age 16/17 vs. Age 24) | 137 |
| Figure A19. Age Disparities in the Control Group from DCE (Age 15 vs. 25) | 138 |
| Figure A20. Marital Status Disparities in the Control Group from Exit Survey (Unmarried vs. Married) | 139 |
| Figure A21. Marital Status Disparities in the Control Group from Mystery Clients (Unmarried vs. Married) | 140 |
| Figure A22. Marital Status Disparities in the Control Group from DCE (Unmarried vs. Married) | 141 |
| Figure A23. Parity Disparities in the Control Group from Exit Survey (Nulliparous vs. Parous) | 142 |
| Figure A24. Parity Disparities in the Control Group from Mystery Clients (Nulliparous vs. Parous) | 143 |
| Figure A25. Parity Disparities in the Control Group from DCE (Nulliparous vs. Parous) | 144 |
| Figure A26. Intervention Effects for Each Element of the Perceived Treatment Index | 145 |
| Figure A27. Primary Client Outcomes with Adjustments | 146 |
| Figure A28. Main Outcomes in PK, Excluding Control Group Who Would not Participate in Summit | 147 |
| Figure A29. Outcomes for Each Profile in Tanzania (Mystery Client) | 148 |
| Figure A30. Outcomes for Each Profile in Burkina Faso (Mystery Client) | 149 |
| Figure A31. Outcomes for Each Profile in Pakistan (Mystery client) | 150 |
| Figure A32. Outcomes for Each Profile in Tanzania (Client Exit) | 151 |
| Figure A33. Outcomes for Each Profile in Pakistan (Client Exit) | 152 |
| Figure A34. Outcomes for Each Profile in Burkina Faso (Client Exit) | 153 |
| Figure A35. Heterogeneity in Outcomes by Participation in BB Pillars (Tanzania) | 154 |
| Figure A36. Heterogeneity in Outcomes by Participation in BB Pillars (Pakistan) | 155 |
| Figure A37. Heterogeneity in Outcomes by Participation in BB Pillars (Burkina Faso) | 156 |

Introduction

Modern contraception plays a crucial role in allowing women to control the timing and number of their pregnancies. However, nearly a quarter of women around the world who want to avoid pregnancy do not have their contraception needs satisfied (Kantorová et al., 2021). This problem is particularly prevalent among young women who do not want a child; globally, over 40% of women aged 15-19 do not have their contraception needs satisfied (Kantorová et al., 2021). Contraception is particularly important for young women because they experience greater downstream consequences from unwanted pregnancy, such as stigma in the community and loss of education.

Some of this lack of contraception use among young women is driven by low utilization of family planning (FP) services due to poor access to clinics or fear of social disapproval. But young women who seek FP services at a clinic might still get poor care that leads them to not take their preferred method or to take no method at all. Qualitative evidence suggests that some young clients receive poor treatment and restrictive care that could dissuade them from returning, and others are denied services completely (e.g., see review by Solo and Festin, 2019). Provider surveys from India, Kenya, Senegal, and Nigeria reveal that providers do not offer certain methods if a client is “too young,” not married, or does not have children (Calhoun et al., 2013, Schwandt et al., 2017, Sidze et al., 2014, Tumlinson et al., 2015). A recent study from Nigeria used mystery clients to show that older, married women with children received far better services than younger, unmarried women without children (Sieverding et al., 2018). This body of evidence suggests that interventions to change the behavior of FP providers toward young women may help increase modern contraception use and reduce FP disparities along these attributes.

However, there is also evidence that young women do not receive worse FP care than older women. A recent study from Democratic Republic of Congo, Malawi, Senegal, and Tanzania shows that FP visits for adolescents were more comprehensive and included more WHO-recommended care and counseling activities than family planning visits for adult women (Moucheraud et al., 2019). A recent mystery client study from Malawi found that adult mystery clients wanting to switch their contraceptive method received worse counseling than adolescent mystery clients who were new users with no other differences found (Hazel et al., 2021). Analysis of exit surveys from India, Niger, Senegal, Nigeria, and Kenya found that age, marital status, and parity are not predictive of FP care (Speizer and Calhoun, 2020). Provider surveys in the same setting where this study takes place suggest that age on average was not a determinant of FP care quality, although providers reported providing more restrictive care to unmarried and/or nulliparous women of all ages (Dieci et al., 2021).

The *Beyond Bias* project set out to improve family planning care and reduce provider bias for young women (age 15-24). The intervention was implemented by Pathfinder International in targeted areas of Tanzania (75 public clinics in Dar es Salaam), Burkina Faso (78 public clinics in Ouagadougou, Bobo, and Banfora), and Pakistan (80 private clinics in Karachi)—three countries where over half of young women do not have their modern contraception needs satisfied (Kantorová et al., 2021). The main goals of the project were to increase access to a range of contraceptive methods offered through high-quality provider-client interactions (non-judgmental, empathetic, non-biased) during contraceptive counseling and service provision for young people aged 15-24, regardless of marital status or parity. The intervention, which was developed using an intensive human centered design (HCD) approach, had three components: 1) a one-day, story-drive, in-person event called “Summit” held at the beginning of the intervention designed to facilitate dialogue and self-reflection on provider bias and providers’ own behaviors and create an action plan for shifting these biases; 2) an ongoing interactive peer-support forum called “Connect” for knowledge sharing and learning among providers and program implementers to apply unbiased practices in their daily work; and 3) a non-financial performance-based incentive for clinics called “Rewards” assessed through client feedback and conducted through quarterly awards ceremonies.

Our team used a randomized controlled trial (RCT) with 233 clinics across the three countries to evaluate the impact of the intervention on four main outcome domains: 1) providers’ biased attitudes and beliefs

with respect to age, parity, and marital status; 2) patient centered FP care; 3) FP methods dispensed (method received and method uptake); and 4) client perceptions of how they were treated by the provider. To evaluate quantitative outcomes, we used client exit surveys (continuously collected), mystery client visits (collected at endline), provider surveys (collected at endline), and service provision statistics from a government database (reported monthly).¹ The intervention was first implemented in 2019 but was soon paused because of the COVID-19 pandemic. The intervention restarted in September 2020 and lasted for 12 months. In this report, we focus on findings for the 12 months after the restart.

Background

Provider Bias

For the purposes of this report, we consider *provider bias* as a psychosocial phenomenon that materializes within a provider's psyche. Provider bias starts with attitude and beliefs (implicit or explicit) that are different for certain clients (e.g., they might think that unmarried women should not be having sex). These biased attitudes and beliefs can affect the *quality of care* and treatment that some clients receive, leading to *disparities* in care quality, method received by client, and client perceptions of care quality. However, biased attitudes and beliefs do not necessarily have to lead to disparities. For example, a provider might believe a woman without children should not be using contraception (a biased belief), but still follow her training and offer all appropriate contraception methods as options. For provider bias to play an important role in lack of contraception use among young, unmarried, and nulliparous women, it must lead to disparities in care, method uptake, and/or types of methods received along these attributes.

Biased attitudes and beliefs of providers are well documented (Calhoun et al., 2013, Schwandt et al., 2017, Sidze et al., 2014, Solo and Festin, 2019, Tumlinson et al., 2015). Common biases reported by providers in prior research and through formative work for this project include:

1. Believing that young unmarried women should not be using contraception
2. Believing that young unmarried women should not be sexually active, especially adolescents
3. Believing that adolescents cannot make their own FP decisions
4. Believing that married women without children should start a family so should avoid contraception
5. Believing that nulliparous women should first prove their fertility before using contraception
6. Believing that certain contraceptive methods cause infertility and therefore should be avoided by nulliparous women
7. Believing that contraception increases promiscuity among young, unmarried women

However, it is less clear the extent to which these biases reported by providers lead to disparities in care received, receiving method of choice, and client treatment for young clients. This is partly because these disparities take place at the client level, but rich client-level data is rare. One recent paper from Nigeria used mystery clients to show that there are important disparities in care by age, marital status, and parity (Sieverding et al., 2018). There is also qualitative evidence of young clients receiving poor treatment from providers, such as very long wait times, judgment, and being yelled at and/or insulted (Tumlinson et al., 2013). However, other studies from different countries find that young women do not receive worse care and/or less comprehensive FP counseling than adult women (Dieci et al., 2021, Hazel et al., 2021, Moucheraud et al., 2019). Part of the objective of this report is to use rich client data to document the extent to which disparities in care exist based on age, marital status, and parity (and their intersection) in our setting in absence of the intervention (discussed more below).

¹ In Pakistan, the service delivery statistics were collection by Green Star, a non-profit social franchising organization that is described in more detail below.

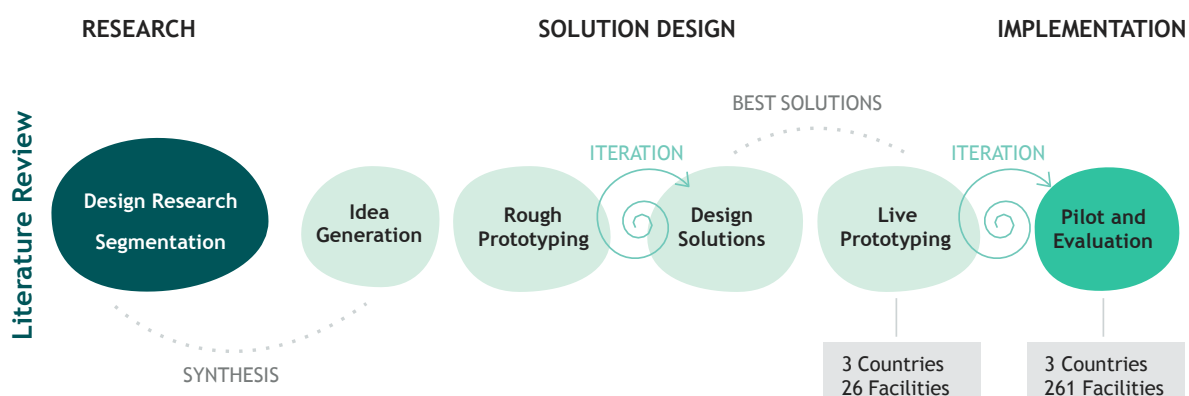
Setting

The study took place in 75 clinics in Tanzania (Dar es Salaam), 80 clinics in Pakistan (Karachi), and 78 clinics in Burkina Faso (Ouagadoogu, Banfora, and Bobo). Clinics in Banfora and Bobo were located in urban, peri-urban, and rural areas, whereas clinics in Ougadougou were in rural and urban areas. Clinics in Dar es Salaam were primarily in urban areas but also included peri-urban and semi-rural areas. Clinics in Tanzania and Burkina Faso were all public clinics that participated in Pathfinder “platform projects” that focused on training providers on youth friendly service (YFS) provision as well as general quality improvements.² The majority of clinics in Tanzania were dispensaries, the lowest-level facilities in the health system. In Burkina Faso, primary health facilities (Centre De Santé et de Promotion Social [CSPS]) comprised the vast majority of our sample. All clinics in Karachi were privately owned and operated in urban areas. The Pakistani clinics were socially franchised private providers associated with Green Star, a social marketing enterprise that is a member of the Population Services International network. These providers often run their own facility and offer a broad range of health services, often receiving support from Green Star to secure contraceptive commodities, manage their business, and stay up to date on technical skills. Pathfinder worked with Green Star to implement a project aimed at increasing post-pregnancy FP services in some of these facilities, where providers received training on post-pregnancy FP services.

Description of intervention design process

The intervention was designed using a human centered design (HCD) approach that involved in-depth qualitative work. This worked identified key drivers of bias through provider surveys, qualitative interviews, a literature review, and focus groups. The team used this process to develop an intervention that addressed the key drivers of bias identified that were amenable to intervention. The project team tested several potential interventions through rapid prototyping and pilot testing, and finalized a package of interventions that the team concluded had the best potential for reducing provider bias and improving outcomes for the target groups, and that had potential for scale-up. The design process is described visually below and documented in detail elsewhere (Y-Labs, 2019).

Figure 1. Design research process for Beyond Bias intervention



Description of intervention

The Beyond Bias intervention includes three components designed to address provider bias: Summit, Connect, and Rewards. The activities for all intervention components centered around six principles of

² These projects were in collaboration with the ministry and mostly focused on things like providing privacy and confidentiality rather than combatting provider bias.

unbiased care developed by Pathfinder including (1) safe, welcoming space; (2) sensitive communication; (3) simple, comprehensive counseling; (4) seek understanding and agreement; (5) say yes to a safe method, and (6) security of information.

Summit

The Summit is a one-day, story-driven, in-person event. The summit brings providers together to reflect and engage in dialogue on bias in family planning care, activate providers' empathy for young people's needs, and create an action plan for shifting their biases alongside their peers. Summit includes personal, emotional stories shared by youth and other providers, gives providers permission from respected authority figures to serve youth, offers guided reflection activities to support providers to own their biases, and facilitates providers making a public commitment to shift their biases.

Summits were implemented by Pathfinder country offices at the beginning of the intervention period (late September 2020/early October 2020). There was also a Summit in all three countries prior to the pandemic (September 2019 in Pakistan, November 2019 in Tanzania, and January 2020 in Burkina Faso). Participation in Summit during the restart period according to Pathfinder monitoring data was high. In Tanzania, 162 FP providers attended the Summit. In Pakistan, 37 providers participated in Summit; and in Burkina Faso, 436 providers attended the Summit.

Connect

Connect is an ongoing peer-support and learning forum in which providers and program implementers problem-solve together to apply unbiased practices in their daily work. Connect includes realistic case studies of youth clients, practical tips shared by trusted technical experts to dispel medical misinformation, a safe space for providers to share struggles and successes with peers, and regular review of unbiased service-delivery goals to support providers in maintaining motivation and group commitment. In Tanzania, Connect took place in person at participating health facilities and through ongoing WhatsApp conversations. In Burkina Faso, Connect sessions were held in person at facilities. In both Burkina Faso and Tanzania, these meetings within clinics were moderated by facility in-charges who were trained by Pathfinder. The WhatsApp group in Tanzania was moderated by Pathfinder for reinforcement of material covered in the in-person meetings. In Pakistan, Connect operated exclusively via a WhatsApp group for all intervention providers. The group was moderated by Beyond Bias Pathfinder staff and other stakeholders. Connect was implemented in two phases—an intensive phase lasting for the first 8-10 weeks of the 12-month intervention (Connect engagement once a week) followed by a continuous learning phase (Connect engagement once per month).

In Tanzania and Burkina Faso, 78% and 80% of intervention FP providers attended the connect sessions on average over the course of the intervention. In Pakistan, participation in Connect was varied. Thirty-nine percent of providers had low participation in Connect sessions, characterized as two or more quarters of passive activity on WhatsApp Connect. Thirty-two percent of intervention providers in Pakistan participated inconsistently (i.e., participating every other week or twice a month), and another 29% participated consistently for two or more quarters.

Rewards

Rewards is a non-financial performance-based incentive for clinics assessed through client feedback and conducted through quarterly awards ceremonies. At the ceremony, each facility received a report card with their performance on each principle and actionable suggestions for improvement. Facilities were separated into Rewards cohorts based on geographic delineations (four districts in Tanzania and Burkina Faso, and three neighborhoods in Pakistan). Rewards were given to the highest-performing facilities and most improved facilities within each Rewards cohort. The second and third Rewards ceremonies also included recognition to facilities that had the highest participation in Connect. Rewards aimed to motivate providers to participate in the Beyond Bias intervention, improve services and maintain high-quality unbiased services, shift professional norms, and create accountability for service quality.

Pathfinder country offices facilitate three Rewards ceremonies per country after the COVID-19 induced pause (see below for more details). Rewards were held in late January/Early February 2021, May 2021, and August 2021. In Tanzania, 100% of facilities sent at least one representative to all three ceremonies. In Pakistan, only 44% of providers attended all three Rewards ceremonies. In Burkina Faso, 92% had a representative at all three ceremonies.

COVID-19 and pause period

After implementing the intervention for 6 months in Pakistan, 4 months in Tanzania, and 1 month in Burkina Faso, the COVID-19 pandemic required a pause in all implementation activities. The intervention was paused starting in March 2020 and restarted in September 2020. The restart of the intervention in September 2020 included a “refresher summit” and continued all other intervention components. There was some provider turnover during this period so the pool of providers/clinics who participated in the study during the restart was slightly different from the pool of providers/clinics who were enrolled prior to the pandemic. In the evaluation, we focus on the restart phase (September 2020 to August 2021) because most of our data was collected 12 months after the restart. However, we analyze exit survey data and service delivery data for the pre-COVID period and show results in the appendix. Figure 2 shows the timeline of intervention implementation and data collection.

Figure 2. Evaluation timeline

| | 2019 | | | | 2020 | | | | 2021 | | | | | | | | | | | |
|-----------------|------|-----|-----|-----|------|-----|--------------------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | Sep | Oct | Nov | Dec | Jan | Feb | Mar to Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | |
| TZ Intervention | | | | | | | COVID PAUSE PERIOD | | | | | | | | | | | | | |
| PK Intervention | | | | | | | | | | | | | | | | | | | | |
| BF Intervention | | | | | | | | | | | | | | | | | | | | |
| Service Data | | | | | | | | | | | | | | | | | | | | |
| Exit Surveys | | | | | | | | | | | | | | | | | | | | |
| Mystery Clients | | | | | | | | | | | | | | | | | | | | |
| Provider Survey | | | | | | | | | | | | | | | | | | | | |
| Qualitative IDs | | | | | | | | | | | | | | | | | | | | |

For the purposes of the evaluation, we focus on the final 12 months after the COVID period.

Methods

We obtained ethics approval to conduct this study from RAND’s Human Subjects Protection Committee as well as local ethics approval in all three countries.

Randomization

Randomization was conducted using Stata’s RANDTREAT package. Random assignment was conducted at the clinic level in Tanzania (75 clinics) and Burkina Faso (78 clinics), and the provider level in Pakistan (80 providers) prior to the start of the intervention. Provider-level assignment was infeasible in Tanzania and Burkina Faso because the intervention was conducted at the clinic level. Clinics were not aware that they were being randomized for the intervention. In Pakistan, all clinics were operated by a single provider, so provider and clinic level are the same. We stratified randomization on different characteristics based on the different types of data available to us at baseline. In Tanzania, we stratified on district, urban/non-urban, volume of clients under age 20, and number of providers in the clinic (30 unique stratum). In Burkina Faso, we stratified randomization on district, share of under-20 FP users, number of providers at the clinic, and whether the facility was recently added to the Pathfinder network (30 unique stratum). In Pakistan, we stratified on number of clients of different age groups, whether the provider was a midwife, and whether the facility was newly a part of the Greenstar network (9 unique stratum).

Recruitment and Attrition:

Tanzania: An initial 75 clinics were enrolled in the study and randomized into the intervention arm (n=38) and control arm (n=37). Two facilities in the intervention group were never engaged in the study because it was not feasible to conduct this research at the location (one clinic was run by the army, making data collection challenging, and one stopped providing FP services indefinitely).

Pakistan: An initial 82 providers were invited to participate in the study. Twenty-nine providers were replaced because they were unable or unwilling to participate (7 providers would not allow exit surveys, 13 providers were not able or not willing to partake in the intervention activities, 4 providers had personal issues that prohibited participation, and 4 providers were no longer affiliated with Greenstar). Pathfinder worked with Greenstar to replace these providers with providers who could participate. This replacement process was less common in the control group because the commitment in the treatment group was more substantial (23 clinics in the intervention group were replaced compared to 5 in the control group).³ We addressed this by assessing the willingness of the control group to participate in the intervention through a follow-up survey right after recruitment and running sensitivity analyses that only include control facilities that were able to attend (discussed in “Robustness of results” section). In the end, 80 providers were recruited (40 intervention and 40 control). Nine providers dropped out of the study after the COVID-19 pause (8 in control group, 1 in intervention group), and 5 were replaced because they dropped out prior to the refresher summit after the pandemic. Each new clinic was randomized to the treatment or control arm. The final sample had 76 providers, 41 intervention providers, and 35 control providers.

Burkina Faso: 78 facilities were enrolled in the study and randomized into the intervention arm (n=39) and control arm (n=39). All facilities took part in the study with no facility attrition.

Quantitative Data

Client Exit Surveys

We used client exit surveys collected in all study clinics for the duration of the intervention (continuous data collection after the start of the intervention). In each country, the client exit surveys were administered by youth enumerators locally contracted by Pathfinder. The team decided on *youth* enumerators to help make younger clients more comfortable when describing their visit. Each youth enumerator was trained on the instrument and assigned to one or two clinics, where they were posted for the duration of the intervention. Client exit data collection started approximately five weeks before the initial launch of the intervention, as marked by the first summit event. This provides a baseline for the comparison of clinics. However, in Pakistan the enumerators were not able to collect data in all facilities prior to the first summit event due to security concerns and logistical issues. As such, baseline client exit data is missing from Pakistan.

Youth enumerators (18-24 years old) visited their assigned clinics for two to three days a week throughout the intervention. At the clinic’s premises, the enumerators approached female clients upon their exit, and asked them for verbal consent to conduct a survey about their visit to the clinic. If the client provided consent and reported that either family planning services was the reason for their visit or they received family planning counseling during the visit, the enumerator administered the survey. The survey collected information on basic demographics about the client (age, parity, and marital status), information on the questions the provider asked and the services offered, and the subjective experience of the client. We did not record any identifying information about the client.

³ We were initially under the impression that we only had 80 clinics that were eligible for the intervention in Pakistan, and we were not expecting this level of non-participation. Pathfinder convinced Greenstar to recruit additional providers to participate after providers started to drop out. There was miscommunication between the evaluation team and the implementation team, and the replacement providers were enrolled in the intervention prior to notifying the evaluation team.

The surveys were administered in the local languages (Kiswahili in Tanzania, Urdu in Pakistan, and the local languages of the different areas in Burkina Faso), offline, on a tablet, using the Kobo Toolbox survey software. At the end of each day, they were uploaded by the youth enumerator to a designated server. In treatment clinics, Pathfinder used these surveys to calculate scores for each clinic that were used for the rewards intervention. Pathfinder agreed to provide access to these non-identifiable data through a secure web portal.

Mystery Client Visits

Each clinic in Tanzania and Burkina Faso received 4 anonymous visits from members of the research team who pretended to be real family planning clients. Providers in Pakistan received only 2 visits because these were smaller clinics with only one provider, and we feared more visits would raise suspicion. The mystery client approach allowed us to record data on client-provider interactions without providers knowing they were being observed. We worked with local survey firms to train young female enumerators to act as family planning clients. The mystery client visits were unannounced and anonymous. This is a validated methodology to measure quality of family planning care (Chandra-Mouli et al., 2018, Fitzpatrick and Tumlinson, 2017, King et al., 2019, Sieverding et al., 2018, Tumlinson et al., 2013, Tumlinson et al., 2014).

We worked with Pathfinder country offices and local partners to develop profiles that were realistic in the country context to avoid mystery clients being “discovered.” We created eight profiles that included every combination of marital status (married/unmarried), parity (one child or no children), and age (16/17 or 24 years old) and conducted an equal number of visits for each profile with balance in profile visits between intervention and control.⁴ This also allows us to estimate the effects of each attribute on outcomes of interest without confounding (Hainmueller et al., 2014). We also assigned clients to have a preference for either injectables or a long-acting method (implant in Tanzania and Burkina Faso, and IUD in Pakistan). Clients only disclosed this preference to the provider if the provider asked if they had a method preference during the visit. In Pakistan, unmarried women rarely seek family planning services, so it was not feasible to have many unmarried profiles. The Pathfinder country office in Karachi also did not want more than 40 total unmarried visits. Given this, we only included 3 profiles; all mystery clients in Pakistan were 19 or 20 years old with some variation in marital status and parity.

Table 1. Sample sizes for each mystery client profile

| | TZ | | PK | | BF | | Total | |
|---------------------------------|-------|-----|-------|-----|-------|-----|-------|-----|
| | Cntrl | Int | Cntrl | Int | Cntrl | Int | Cntrl | Int |
| Younger, Unmarried, No Children | 19 | 18 | 19 | 21 | 19 | 18 | 57 | 57 |
| Younger, Unmarried, One Child | 18 | 18 | 0 | 0 | 20 | 22 | 38 | 40 |
| Younger, Married, No Children | 18 | 18 | 24 | 31 | 21 | 20 | 63 | 69 |
| Younger, Married, One Child | 19 | 18 | 25 | 30 | 19 | 19 | 63 | 67 |
| Older, Unmarried, No Children | 18 | 18 | 0 | 0 | 20 | 20 | 38 | 38 |
| Older, Unmarried, One Child | 19 | 18 | 0 | 0 | 19 | 18 | 38 | 36 |
| Older, Married, No Children | 19 | 18 | 0 | 0 | 19 | 19 | 38 | 37 |
| Older, Married, Parous | 18 | 18 | 0 | 0 | 21 | 20 | 39 | 38 |

Younger was age 16 in Tanzania, age 17 in Burkina Faso, and 19 in Pakistan. Older clients were 24 years old. Cntrl is Control Group and Int is Intervention Group.

In Burkina Faso and Tanzania, we randomly assigned profiles to clinics ensuring that each clinic received two younger and two older profiles, two unmarried and two married profiles, and two nulliparous and two

⁴ In Tanzania, young mystery clients reported “cohabiting and living as married” because this was more realistic according to local partners.

parous profiles. We also randomized such that intervention and control clinics were balanced on the proportion of profiles that had each attribute. This stratified randomized design helps control for bias and maximizes statistical power (Kernan et al., 1999).

Mystery clients received a seven-day training session to learn and practice the roles, and then several days of piloting with real visits. Mystery clients went through the standard process to see the provider (check in at register, wait in line, etc.). They did not actually receive a family planning method; instead, they informed the provider at the end of the visits that they wanted to think about the information and talk to their mother (if unmarried) or husband (if married) before they proceeded with getting a method. If the provider insisted they take methods, they took condoms, but this was very rare. There was little indication that mystery clients were discovered by the providers they interacted with.⁵ During piloting we followed up with providers to see if the provider suspected any of the mystery clients were not real clients, which none did.

Within an hour of leaving the facility, mystery clients completed a debriefing survey administered by their supervisor. The survey recorded information on the quality of services they received, including the methods the provider counseled on, whether they were made to feel comfortable, and whether the provider asked about their preferences. They also recorded whether they thought they could have received specific methods had they been a real client. All mystery clients were blinded to whether the facility was an intervention facility or a control facility.

Provider Survey

The study team collected data from providers using two instruments: a provider survey and a discrete choice experiment (DCE). The provider survey recorded information on 1) the providers' demographic characteristics and background information; 2) general attitudes and beliefs about young, unmarried, and nulliparous family planning clients; and 3) details on the clinic environment where they practice, especially as they relate to youth and family planning services.

The DCE elicited self-reported behavior around contraception service provision to women of different ages, marital statuses, and parities. It presented a hypothetical client, only telling the provider her age, marital status, and parity and then asked the provider to detail how they would provide services to this client (e.g., what methods they would counsel on). Each provider was asked about four unique profiles with a different combination of age (15, 20, or 25), marital status (married or unmarried), and parity (no children or one child). We randomly assigned profile combinations to providers in a similar way to how we assigned mystery client visits, ensuring treatment and control were balanced on attributes and that profile attributes were balanced with other profile attributes (e.g., unmarried and married profiles were equally paired with parity). This allows us to estimate the effect of each attribute on a provider's self-reported behavior.

We completed the survey with 642 providers across Burkina Faso (n=313), Tanzania (n=259), and Pakistan (n=70) from both intervention and control facilities. In Burkina Faso, the number of providers surveyed at each clinic was proportional to the total number of personnel at each clinic; however, all providers were invited to participate if the facility had fewer than 5 providers. In Tanzania and Pakistan, we attempted to survey all FP providers at enrolled clinics (average of 4 per clinic in Tanzania and 1 per clinic in Pakistan). We had a response rate of 95% in Burkina Faso, 82% in Tanzania, and 92% in Pakistan.

⁵ There was one instance in Pakistan where a provider called the Pathfinder office asking if they were sending fake clients. This was after the second visit and the client was presenting as unmarried. However, the provider did not reveal her suspicion to the client, still went through with the counseling session, and the data recorded appears to be valid (e.g., there were clear biases revealed during the visit). There was another instance in Pakistan where a clinic was in a Farsi-speaking neighborhood and the mystery client spoke Urdu. The provider thought this was strange but still went through with the visit.

Administrative Service Delivery Data

Service delivery statistics are routinely collected by clinics in Tanzania and Burkina Faso as part of the Ministry of Health monitoring system. Data are added to a national database each month to which Pathfinder has access. In Pakistan, these data are collected by Greenstar, a social marketing organization of which all enrolled clinics are a part. The service delivery data include the monthly number of new contraceptive users, returning contraceptive users, age categories of users, and method mix.

Cost Data

All costs incurred by Pathfinder were recorded and categorized for the entirety of the project. We include all costs that are related to intervention implementation in each country and exclude all costs related to research or international oversight (e.g., Pathfinder staff based in the US who would not be involved in a scaled-up version of the intervention).

Qualitative Data

For client and provider interviews, a subset of all enrolled facilities was selected for participation in the qualitative sampling. In Burkina Faso and Tanzania, 11 treatment and 4 control facilities were selected for qualitative data collection; in Pakistan, 22 treatment and 8 control providers were selected. Selection of facilities was based on facility characteristics, primarily stratified by region or district, and selected based on performance on the first and second Rewards ceremonies, to capture both facilities that responded more and less to the intervention. We categorized facilities as “high performing” if they were among the top-performing facilities based on rewards scores in Quarter 1 and Quarter 2 or had large increases in their score from Q1 to Q2. “Low performing” facilities were those with low scores either in Quarter 1 or that saw a large drop in rewards scores between Q1 and Q2. “Middle performing” were those with rewards scores near the average among the facilities in their district. We also aimed to vary the volume of youth clients served at selected facilities and the urbanicity where there was variation. Within region/districts, we picked comparison facilities for qualitative data collection that were similar to at least one of the selected treatment facilities using client exit survey data. We aimed to include at least one provider/facility in each region that received a reward during the first or second Rewards ceremonies. We piloted all qualitative interview guides prior to fielding. Interviews were conducted in Swahili in Tanzania, Urdu and English in Pakistan, and in French and other local languages in Burkina Faso. In Burkina Faso and Tanzania, interviews with clients, providers and managers were conducted at each selected facility. In Pakistan, slightly different samples were selected for interviews with providers and clients.

Client IDIs

In each country, we recruited approximately 70 youth clients (under 25) seeking family planning to participate in in-depth interviews. While we initially tried to recruit clients exclusively at the 15 facilities/30 providers selected, low client volumes in Tanzania and Pakistan required an expansion of the clinics and providers at which recruitment took place. In Tanzania, interviewers visited 30 facilities to recruit clients, with the additional facilities coming from backup facilities selected to be used as replacements should the need arise. In Pakistan, after a slow start to client recruitment, we shifted recruitment to 13 higher-volume facilities and enlisted support from youth mobilizers to schedule interviews with eligible clients who had scheduled appointments at study facilities in the past seven days. We primarily aimed to recruit new users of family planning; however, we expanded recruitment to any clients seeking family planning services in Pakistan and Burkina Faso. Within the target age group, we aimed to recruit a diverse sample by marital status and parity.

Clients provided consent before participating in the interview, and consented to have the interview audio-recorded. Clients were interviewed in a private location either within or near the facility. Clients received a small gift for participation in the interviews. The client interview guides were semi-structured and aimed to capture the client’s experience obtaining family planning care at the facility and the providers’ behavior with them during the visit. Interviews specifically probed on the counseling provided by the client; the

engagement of the client in the choice of family planning method (if one was received); and how the provider engaged with them about their age, marital status, and parity. We interviewed 65 clients in Tanzania, 73 in Pakistan, and 72 in Burkina Faso.

Provider IDIs

Two randomly selected providers from each selected facility in Tanzania and Burkina Faso were invited to participate in semi-structured in-depth interviews. All selected providers in Pakistan were invited to participate. Interviewers called providers to invite them to participate and scheduled a convenient time for the interview. Interviews took place in person in a private location in the facility. Providers were given refreshments to thank them for their participation in the interview. The objective of the interview with control providers was to understand their attitudes, behaviors, and perceptions related to providing family planning care, particularly for young women. The objective of the interview with intervention providers was to understand their impressions of the Beyond Bias program and if/how their service provision changed since participating in Beyond Bias. We replaced providers with another provider from the same facility or similar facility if the provider did not want to participate or they could not be contacted after 4 outreaches. We interviewed 31 providers in Tanzania (n=21 intervention and n=9 control providers), 27 providers in Pakistan (n=21 intervention and n=6 control providers), and 29 providers in Burkina Faso (n=21 intervention and n=8 control providers).

Health facility manager IDIs

In Tanzania and Burkina Faso, we also interviewed 5 administrators from 5 intervention facilities selected to participate in semi-structured in-depth interviews. Facilities were selected to represent multiple districts/regions and with both facilities that responded well and not as well to the intervention. In Burkina Faso, these staff represented the head providers within the facility (“Infirmier chef de poste”) and in Tanzania, providers were the heads of the reproductive and child health department. Procedures matched those described above for the provider in-depth interviews. The objective of the interviews was to understand managers’ perceptions of the Beyond Bias program and the value it added for the providers at their facility.

Stakeholder IDIs

In all three countries we interviewed members of the Beyond Bias Advisory Committees. The committees were made up of national and regional government officials, Beyond Bias staff, Pathfinder country technical directors, representatives from local non-governmental organizations and global organizations including United Nations agencies employees, local researchers, and local health care providers and administrators. In Pakistan, we also interviewed enumerators employed to collect client exit data from participating providers. Interviewers invited stakeholders to participate via email or phone and set up phone or in-person appointments depending on the availability of the stakeholder. We interviewed 9 stakeholders in Tanzania, 16 stakeholders in Pakistan, and 13 stakeholders in Burkina Faso. The in-depth interviews focused on understanding the implementation of Beyond Bias and the potential expansion and scale-up of the program.

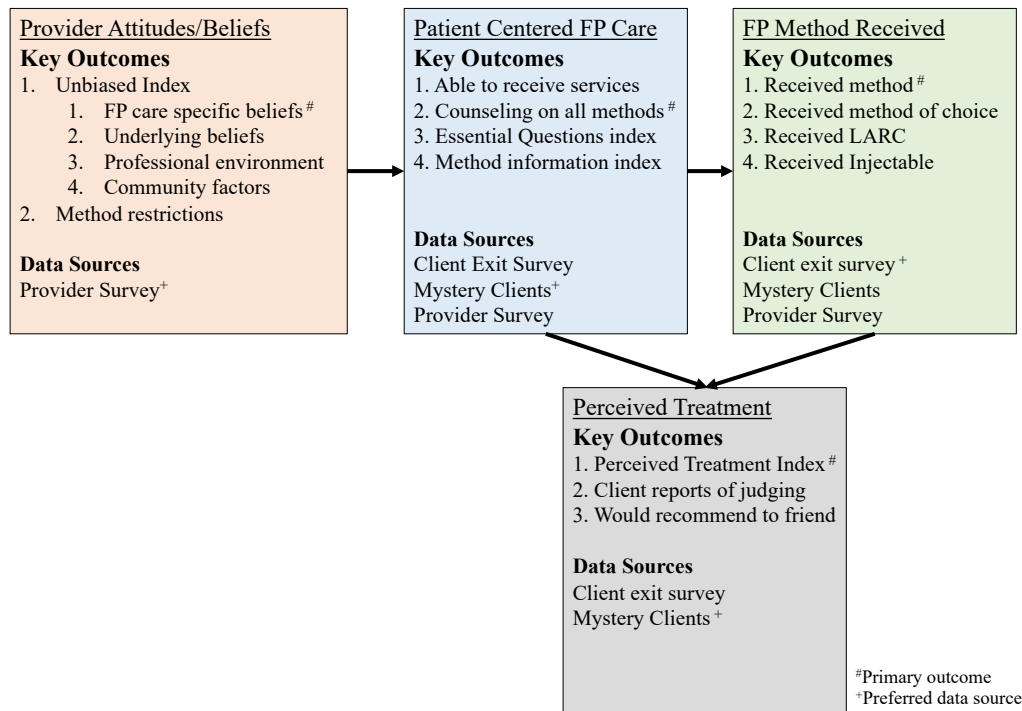
Main Outcomes

Theory of change and outcomes

The figure below describes our main outcomes of interest. We categorize outcomes into four distinct bins that follow our theory of change. The first bin, provider attitudes/beliefs, is the level at which Beyond Bias intervened. We expected that the intervention would reduce the extent to which providers have biased attitudes and beliefs toward the target groups (age 15-24, unmarried, or nulliparous, and the intersection of these attributes). We then expected that less biased attitudes and beliefs would lead to less biased and more patient centered FP care for the target groups (e.g., ask more questions, consider clients’ preferences, etc.). More patient centered FP care should then affect the methods received by the target population (modern

methods, more likely to get method of choice, etc.).⁶ Finally, both the care provided by the provider and the method dispensed affect the client’s perception of how they were treated by the provider. We analyze and present all outcome in accordance with this framework.

Figure 3. Theory of change and key quantitative outcomes



Provider attitudes and beliefs

We used the provider survey to measure attitudes, beliefs, and self-reported behaviors at endline. We used a series of statements about how age, marital status, and parity affect family planning service provisions with which providers could strongly agree, agree, disagree, or strongly disagree. These include statements such as “It is okay for young clients who are unmarried to use contraception” and “Married clients and unmarried clients should have the same FP options.” We constructed an unbiased index by combining responses to 47 of these statements. We selected the statements to include based on drivers of bias identified during the design stage of the project. In addition, we constructed four sub-indices for which we categorized each of the 47 statements into four bins 1) FP care specific attitudes and beliefs if the statement related to FP care (28 items; primary outcome for this domain), 2) underlying attitudes and beliefs if the statement was broader than just FP care (nine items), 3) beliefs about the professional environment that could affect bias (seven items), and 4) beliefs about the community that could affect bias (three items). We coded all items so that higher scores represented more supportive attitudes or environments. In order to construct the indices, we used the mean effects approach (Kling et al., 2007). This follows the following steps.

1. Standardize each 4-level variable relative to the control group in each country by taking the difference between the variable value and the control group mean and dividing by the control group standard deviation. Thus, each standardized outcome has a mean of zero and a standard deviation of one for the control group.
2. Take the mean of all the standardized variables that contribute to the index by country.

⁶ More patient centered care could benefit management of side effects and continued use, but we do not measure these.

3. Re-standardize the index relative to the control group in each country to have a mean of zero and a standard deviation of one in the control group.

The resulting indices are in units of the control group standard deviations.

Patient centered FP care

We used three data sources to measure patient centered FP care: client exit survey, mystery clients, and the DCE from the provider survey. We believe mystery clients are the most reliable source for these outcomes because they were trained to remember the different things that happened during the visit (e.g., the methods the provider counseled on and the questions the provider asked). We analyzed four outcomes related to patient centered FP care:

1. *Able to receive services (exit survey, mystery clients, and DCE)*: This variable was set to 1 if the client was able to see a provider and receive counseling (or the provider said they would provide counseling in the DCE).
2. *Essential questions index (exit survey and mystery clients)*: This index is based on a set of key questions that the provider should ask during a counseling session 1) asked about method preferences, 2) asked about birth spacing and limiting preferences, and 3) asked if they have any questions. We created binary variables for each of these three questions and took the mean to create the index.
3. *Counseling on full range of methods (exit survey, mystery clients, and DCE)*: This is a binary outcome set to 1 if the client was counseled on all methods that fit with the client's preferences. We included IUD, implant, injectable, and pill as the full range of methods, as these accounted for over 98% of all methods dispensed (see figure A7). We set this outcome to 1 if the provider discussed all four methods during the counseling session. In the exit survey, we removed some methods from the full range if clients reported specific preferences that made certain methods not applicable (e.g., do not want to take a pill) based on the WHO Decision-Making Tool for Family Planning Clients and Providers and recommendations made in the WHO Family Planning Global Handbook for providers (WHO, 2005, 2018).⁷ We also did not include the method the client was switching from as part of the full range if the client was switching methods. Clients who were seeking to continue use of a method were excluded for this outcome. See Appendix Table A1 for a list of methods that correspond to different preferences. Mystery clients and DCE profiles all should have been counseled on all four methods based on how we created the profiles.
4. *Method Information Index*: The method information index is a widely used measure of the key information provided to the client during a provider-client interaction (Chang et al., 2019). The measure is set to 1 if the client answered "yes" to all of the following questions (all binary variables):
 1. Were you informed about other methods of family planning aside from the one you received?
 2. Were you informed about possible side effects or problems with the method you took?
 3. Were you told what to do if you experienced side effects or problems?

In the client exit survey, only those who received a method were asked this set of questions. We adapted this measure for mystery clients so that those who were counseled on more than one method and were informed of possible side effects or problems with the methods they were offered were assigned a value of 1.

⁷ Due to a low number of clients reporting counseling on emergency contraception in all countries, we did not include this method in the construction of the method. Where no method satisfied the preferences, we required providers to counsel on all methods listed under "no preference." Finally, we excluded users who would like to switch but whose preferences and past method leave no methods that satisfy the preferences.

Method dispensing

We measure the methods that were dispensed to young clients mainly using the client exit survey, because this is the only data source where clients actually receive a method.⁸ However, we trained the mystery clients to assess whether they thought they could take a method if they were a real client. We learned later that mystery clients in Tanzania sometimes interpreted this as whether they thought they had enough information to choose a specific method. Also, in the DCE we asked providers if a modern method was appropriate for a given profile. So, while we analyze method dispensing outcomes with the mystery client and DCE data, we believe that client exit surveys are most appropriate for this domain. We analyze the following method dispensing outcomes.

1. *Received method (primary outcome)*: This measures whether the client received any modern method. We set this binary outcome to 1 if the client received an IUD, implant, injectable, pill, condoms, emergency contraception, and/or permanent methods.
2. *Received method of choice*: This measures whether the client received their method of choice. We set this to 1 if the client answered “no” to the question “After talking with the provider, is there a method that you would prefer more than the one that you received?”
3. *Received LARC*: We set this to 1 if the client received an IUD or implant. We chose to examine LARCs as a separate outcome because literature has documented that providers may have limited knowledge about the suitability of LARC methods for young people, potentially limiting their access to these methods.
4. *Received injectable*: We set this to 1 if the client received an injectable. We chose to examine injectables as a separate outcome because this was a method that providers reported biases during formative work, especially for nulliparous women and for which there were disparities at baseline.

If a client did not receive services, each of these outcomes was coded as zero. In addition to the outcomes listed above, we examine method mix (share of all methods that are each type) and total number of methods dispensed using the exit survey and service delivery data.

Although we pre-specified and registered “received (any) method” as the primary outcome for this domain, it is important to note that the project did not explicitly set out to increase method uptake (because there was no outreach component). Rather, it focused on increasing the share of clients that received their method of choice. However, method of choice is extremely challenging to measure (see Limitations section), whereas receiving any method is objectively and accurately measured in exit surveys. Thus, we chose to focus on any method as the primary outcome. In the end, most clients received a method, so this outcome had little room for improvement.

Perceived treatment

We use the client exit survey and the mystery clients to measure perceived treatment from the client’s perspective. We believe that the mystery clients are the best source of data for this for two reasons. First, we trained mystery clients extensively on what kinds of things to look for (e.g., overt judgment as well as subtle judgment through body language or facial expressions). Second, real clients often give the socially desirable response during exit surveys (Dunsch et al., 2018) whereas mystery clients have an incentive to give an honest response. We analyzed the following outcomes related to perceived treatment.

1. *Perceived treatment index*: We used the mean effects approach to construct an index based on 29 subjective questions from the client exit survey and 22 items in the mystery client debrief survey. This approach is identical to how we created the *unbiased index* from the provider survey.⁹

⁸ Mystery clients did not take a method.

⁹ In addition, we used this approach separately for each principle of unbiased care developed by Pathfinder (each outcome was categorized into the different principles).

2. *Client satisfaction:* We measured client satisfaction based on whether the client would recommend the clinic to a friend.
3. *Judgment by the provider:* We measure judgment based on whether the client felt judged or scolded by the provider. We also examined whether the client reported that the provider made them feel uncomfortable because of her sex life.

Inclusion criteria for exit survey data

We examined all data from the mystery clients and provider surveys. For the client exit surveys, we restricted our main analysis to women under age 25 who came to the clinic seeking family planning care. We only included women 25 or older when assessing age disparities. We also dropped 347 surveys collected between September 2020 and August 2021 based on quality control measures that we implemented.¹⁰

Statistical Analysis

We use a similar regression framework for all data sources. We estimate regressions where we pool all three countries in addition to separate regressions for each country. Because we measure the same outcomes with several different data sources, we estimate regressions separately for each data source and compare the effects across data sources. Consistent results across data sources adds validity to our results. For the exit survey, we combine all time periods after the restart in September 2020. For all outcomes, we conducted an unadjusted analysis and an analysis that adjusts for a set of facility, provider, and/or client level covariates. Our linear regression models take the following form.

- (1) Separate for each country: $Y_{if} = \beta_0 + \beta_1 T_f + X'_{if} \beta_3 + \epsilon_{if}$
- (2) All countries pooled: $Y_{ifc} = \beta_0 + \beta_1 T_f + X'_{ifc} \beta_3 + \alpha_c + \epsilon_{ifc}$

Where Y_{if} is one of our respective outcomes for individual i (either a provider in the provider survey, a real client in the exit survey, a mystery client visit, or a profile in the DCE) from facility f . T indicates the facility's treatment assignment and β_1 is the effect of the intervention. In equation (2) we pool all countries and include a set of country fixed effects, α_c . X is a vector of control variables that will be included in adjusted analyses. Control variables varied by country based on availability of data. In Tanzania and Burkina Faso specific analyses, we controlled for strata on which randomization was conducted regardless of the data source. For analyses of client exit survey data we controlled for client age (15-19 vs. 20-24), marital status (married or unmarried), parity (no child vs. at least one child), education level (secondary education or more vs. less than secondary), perceived social status, and an indicator of whether the client had ever used FP in the past. Where baseline data was available (Burkina and Tanzania),¹¹ we include the baseline value of the outcome prior to the first Summit (before COVID-19) averaged at the facility level.¹² For outcomes that included only those clients who had received services, we also controlled for whether the client had a method in mind prior to the visit. In both mystery client and client exit survey regressions in Tanzania and Burkina Faso, we controlled for the mean age of the surveyed providers at the facility, the proportion of the surveyed providers that were married, the proportion of providers that had ever used FP in the past, the proportion of providers with at least one child, the proportion of providers characterizing the majority of their clients as vulnerable or poor, the proportion of providers who reported working part time (1-2 days a week), and the proportion of providers with each of the following qualifications (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor) at the facility. In pooled models

¹⁰ Surveys from clients who received services but took less than 2 minutes to complete, were submitted to the server over 31 days after they had been administered, or reported multiple hormonal methods dispensed were excluded.

¹¹ We did not have baseline exit survey data from many clinics in Pakistan due to safety and other logistical issues in the weeks leading up to the start of the intervention.

¹² Controlling for baseline outcomes is conceptually similar to a difference-in-differences design but more efficient.

using the client exit survey, we included client characteristics only. In the mystery client models, we included an indicator of the profile the client was played (1-8 for all combinations of age (16/17 vs. 24), marital status (unmarried/married), and parity (nulliparous/parous). In the mystery client pooled models, we included only the mystery client profile. In Pakistan, the 19/20-year-olds were grouped with the 24-year-olds from Tanzania and Burkina Faso. In the DCE and provider survey country-specific and pooled models, we included the following provider characteristics: provider age, whether the provider was married, whether the provider had ever used FP in the past, whether the provider had at least one child, whether the provider characterized the majority of their clients as vulnerable or poor, whether the provider reported working part time (1-2 days a week), and provider qualification (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor). For DCE outcomes, we also controlled for the profile displayed to the provider (combination of age (15/20/25), marital status (married/unmarried), and parity (unmarried/married)).

The exit survey data is longitudinal and collected from the onset of the study. This allows us to estimate intervention impacts for each month of the study using the following regressions.

$$(3) \text{ Separate for each country: } Y_{if} = \beta_0 + \sum_{t=1}^{12} \gamma_t(\text{Month}_t) + \sum_{t=1}^{12} \beta_t(T_f \times \text{Month}_t) + \epsilon_{if}$$

$$(4) \text{ All countries pooled: } Y_{ifc} = \beta_0 + \sum_{t=1}^{12} \gamma_t(\text{Month}_t) + \sum_{t=1}^{12} \beta_t(T_f \times \text{Month}_t) + \alpha_c + \epsilon_{ifc}$$

Where the β_t represent the impact of the intervention in study month T and all other terms are the same as in equations 1 and 2. Our hypothesis was that outcomes would improve around the time of the rewards ceremony when the desired behavior is more salient, and thus intervention effects would be larger in the months immediately before and after the ceremony.

In addition to estimating intervention effects across the entire sample (under age 25) in equations 1-4, we also examine whether the intervention reduces disparities with respect to age (15-19 and 25+), marital status (married vs. unmarried) and parity (no children vs. at least one living child), which was a key goal of the intervention. To do this we include the full sample (not restricting to 15- to 24-year-olds in the exit survey) and include interaction terms between the target group identifiers (e.g., age, marital status, and parity) and the treatment indicator. For analyses of disparities on age in the client exit survey and DCE, we excluded clients between 20 and 24 and profiles that were assigned the age of 20 so the comparison was starker (ages 15-19 vs. ages 25 and up).

For the DCE, we structure our data at the profile level, so Y_{if} is the outcome for profile i from a provider at facility f. Each provider responded about how a hypothetical visit would go for 4 different randomly assigned profiles.

We cluster standard errors at the facility level in all analyses. We also adjust the p-values of primary outcomes for multiple hypothesis testing using the Bonferroni correction.

Qualitative Analysis

The study team transcribed all interviews' audio recordings, and translated the data from the local languages to English. We iteratively generated a codebook based on the interview guides, incorporating relevant theoretical frameworks, and following a review of the transcripts. Our team double-coded a set of interviews from each country within each interview type to reach consistency in code applications. We coded transcripts using qualitative software (Dedoose). Thematic analysis was conducted to understand experiences and implementation of the Beyond Bias intervention by country. Among clients, experiences of care was compared by site and intervention group. Among control providers, we focused on identifying areas of bias and poor quality care, and understanding potential spillover effects. Among intervention providers, we sought to understand experiences participating in Beyond Bias and ways in which the program was perceived to have affected providers' knowledge, attitudes, belief, and practices. Among stakeholders, the analysis focused on understanding the potential for scale-up of the Beyond Bias project.

Quantitative Results

Description of sample and balance between intervention and control

Our balance checks rely on data collected through administrative data and exit surveys. We did not collect baseline data through mystery clients or provider surveys.¹³

Clinics

Table A2 shows the characteristics of the clinics in all three countries. Clinics in Tanzania had about 4 providers per clinic that served about 150 new clients per month. About half of the new clients were 25 or older, and LARCs were by far the most common method type dispensed.¹⁴ Burkina Faso had an average of about 11 providers serving 20 new clients and 40 returning clients per month,¹⁵ and LARCs accounted for about 50% of all methods dispensed. All providers in Pakistan operated their own private clinic where they were usually the only provider. While baseline service statistics were not available in Pakistan, data from September 2020 indicate that providers in Pakistan provided services to an average of 25 clients per month.¹⁶ There appears to be good balance between intervention and control clinics on method mix and client age distribution.

Providers

Table A3 shows provider characteristics from the provider survey. Providers were around 40 years old in all three countries, and most were married with children. Intervention and control were well balanced on these demographic attributes. Almost all providers provided FP care full time at 3-5 days per week or 6-7 days per week. In Tanzania, most (>95% of) providers were nurses or midwives. In Burkina Faso over 90% were midwives and only a small subset were nurses or doctors. Balance on qualifications was good in Tanzania and Burkina Faso, but there was an important degree of imbalance in provider qualifications in Pakistan; intervention providers were more likely to be midwives or nurse midwives (about 87 percent had one of these qualifications) whereas control providers were more likely to be lady health visitors (LHVs) or doctors. Approximately 11% of providers in Pakistan were Lady Health Visitors compared to 28% of control providers. This imbalance is concerning, although it is not clear how to interpret the direction of the bias because the control group has more doctors, which have the most training, but also has the most LHVs, which have the least training. We examined the methods that providers were trained on and provided at their facility in Pakistan and found no substantive difference between the intervention and control providers.

Clients

Table A4 shows that only 7% of clients were 15-19 years old, and 58% were 25 years old or more in Tanzania. Client ages were similar in Burkina Faso (10% and 62%, respectively) and Pakistan (6% and 59%, respectively). 66% of clients were married in Tanzania, 78% in Burkina Faso, and 99.6% in Pakistan. It was rare for nulliparous women to come into the clinics in any of the three countries; 6% had no children in Tanzania, 8% in Burkina Faso, and 3% in Pakistan. One key takeaway from these numbers is that women under 20 and women without children—two target groups for Beyond Bias—rarely come into the clinic seeking FP care in any of the countries. And in Pakistan, it was almost unheard of for unmarried women to visit the clinics for FP.

¹³ Camber Collective conducted a provider survey in 2017 that was meant to be a baseline survey. However, many of the providers surveyed in 2017 did not end up participating in the intervention due to a change in the clinics Pathfinder was able to work with imposed by the Ministries of Health in Tanzania and Burkina Faso, and provider dropout in Pakistan.

¹⁴ This was mostly implants, as IUDs accounted for only about 3% of all methods dispensed in Tanzania.

¹⁵ These numbers do not include clients renewing a method of contraception.

¹⁶ Site descriptions and family planning counseling volumes obtained from implementing partner data.

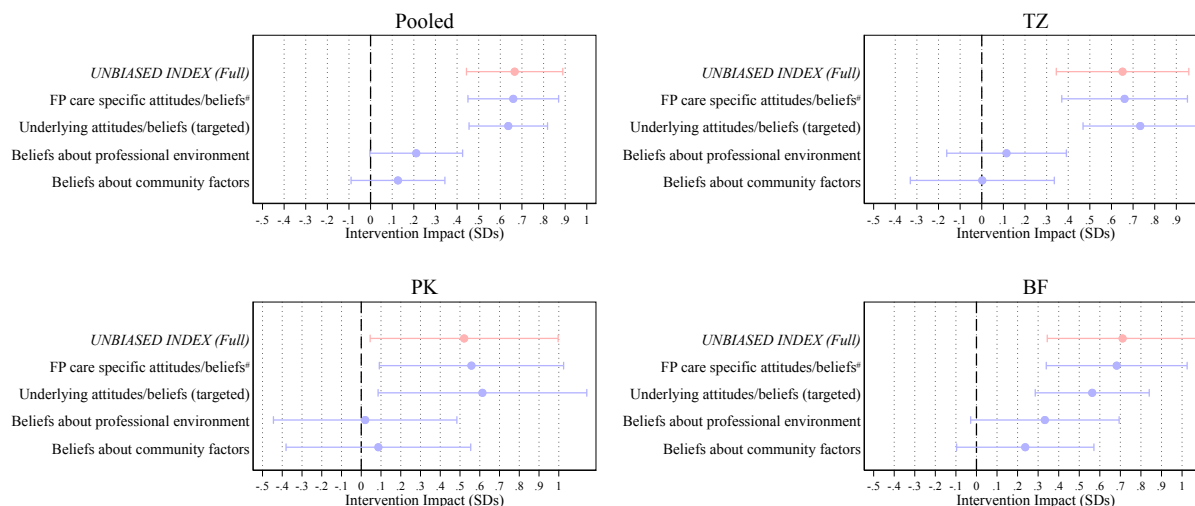
Appendix Table A5 assesses balance in client demographics and the main client outcomes at baseline in Tanzania and Burkina Faso (baseline data is not available for Pakistan due to logistical and safety challenges when rolling out the intervention). Overall, most characteristics and outcomes are balanced, but we find important differences in Tanzania; the intervention arm was 3.6 percentage points more likely to receive services at baseline, 9.3 percentage points more likely to receive a modern method, and 10.3 percentage points more likely to receive method of choice than the control arm at baseline. This highlights the importance of controlling for baseline outcomes in the adjusted models.

How did the Beyond Bias intervention impact provider attitudes and beliefs?

Key Takeaway: Providers at intervention clinics reported less biased attitudes and beliefs with respect to age, marital status, and parity in all three countries compared to providers at control clinics. Effects were most prominent for beliefs about how to provide FP care to these types of clients and underlying beliefs about the lives and intentions of these clients.

Figure 4 shows that the intervention reduced biased attitudes and beliefs with respect to age, marital status, and parity. Each point represents the (unadjusted) difference between intervention and control facilities in terms of standard deviations (positive means less biased) with 95% confidence intervals. The intervention improved the unbiased index by about 0.7 standard deviations in the pooled analysis, and this effect size was similar across all countries. Most of the effect was driven by the FP care specific attitudes and beliefs (the primary outcome for this domain) and the underlying attitudes and beliefs about the target population. Attitudes and beliefs about the professional environment and community factors that could be drivers of bias improved slightly in Burkina Faso but not in the other countries (these types of beliefs were not explicitly targeted by the intervention).

Figure 4. Bias indices from provider survey



Note: Positive means less bias

Bias indices were created using the endline provider survey. Indices were created by taking the average of a standardized set of variables by country (see tables A7 to A11 for complete list of questions for each sub-index). Items that were negatively phrased were recoded so that higher values represented more supportive family planning attitudes.

To make these effect sizes more concrete, Table A6 shows the specific questions that went into the FP care specific index and the share of providers that agreed with (or disagreed with for negatively framed questions) each of the statements at intervention and control clinics. This shows significant improvements

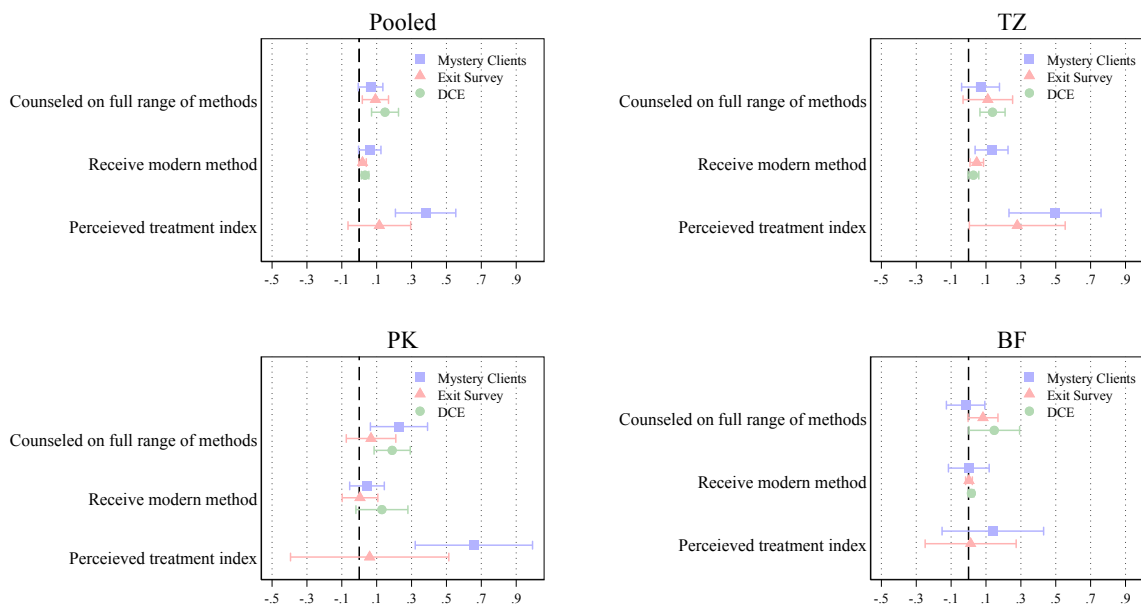
in 22 of 27 statements in the pooled analysis, and many of the differences were of an important magnitude. This table also shows that providers were significantly less likely to report imposing method restrictions because a client was “too young” (23 percentage point reduction), unmarried (7 percentage point reduction), or did not have children (15 percentage point reduction). Tables A8, A10, and A11 show these same results for the other 3 sub-indices.

In the adjusted models (Table A7 and A9), results were largely unchanged; however, the difference between the overall FP care index was no longer significantly different between the intervention and control providers in Pakistan, and the effect sizes decreased slightly in Tanzania and Burkina Faso.

How did the Beyond Bias intervention impact the primary client outcomes?

Key Takeaways: The intervention improved several of the primary client outcomes with the largest and most prominent improvements coming from the way clients were counseled and the way clients felt they were treated (particularly in Tanzania and Pakistan). Only in Tanzania were clients more likely to receive a method, and the effect size was small. Most clients in the control group received a method, so there was little room for improvement on this outcome. In Burkina Faso, there were no clear improvements for any of the primary client outcomes.

Figure 5. Impact of Beyond Bias intervention on primary client outcomes



The outcomes included in this figure were all pre-specified as primary outcomes. Control and intervention group means and confidence intervals estimated using linear regression with standard errors clustered by facility. The DCE is from the endline provider survey. Exit data was collected from September 2020 to August 2021 and includes clients 24 or younger. Each point represents the difference between the intervention and control arm for the respective outcome. Pooled results control for country fixed effects.

This section summarizes findings for the three primary client outcomes (one per domain). We present the full set of outcomes for each domain in the sections below, but we wanted to highlight the primary client outcomes separately. Figure 5 shows mixed results for the primary client outcomes. Some outcomes improved for some data sources in some countries. In pooled analyses, counseling on the full range of methods improved in all three data sources by varying magnitudes (a 6.5 percentage point improvement in the mystery client data, our preferred source, but this was only significant at the 10% level). The pooled analysis shows a 1.9 percentage point improvement in receiving a modern method in the client exit data

(our preferred source), which was significant at the 10% level (driven entirely by Tanzania). The other two data sources also show significant improvements in modern method dispensing but these should be interpreted with caution given that no method was actually dispensed to mystery clients or in the DCE (discussed more below). The perceived treatment index improved by about 0.4 standard deviations in the mystery client data (our preferred source) and about 0.1 standard deviations in the exit survey data, although the later was not statistically significant.

In Tanzania (upper right panel) we find modest improvements in counseling on a full range of methods (although only significant in the DCE), a 4.7 percentage point improvement in receiving a modern method in the exit survey data and improvements in the other two sources, and significant improvements in the perceived treatment index in both the mystery client data (our preferred source) and the exit survey data.

In Pakistan, we find significant improvements in counseling on a full range of methods and perceived treatment in the mystery client data (our preferred source for these outcomes) but not in the exit survey data. We find no significant effect on receiving a modern method in Pakistan in any of the sources.

In Burkina Faso, the intervention had little effect on any of the primary client outcomes. The only outcome for which we find a significant effect is counseling on a full range of methods, but this effect is close to zero in our preferred source (mystery clients).

Adjusted effects were largely similar to those reported above (Appendix Figure A27).

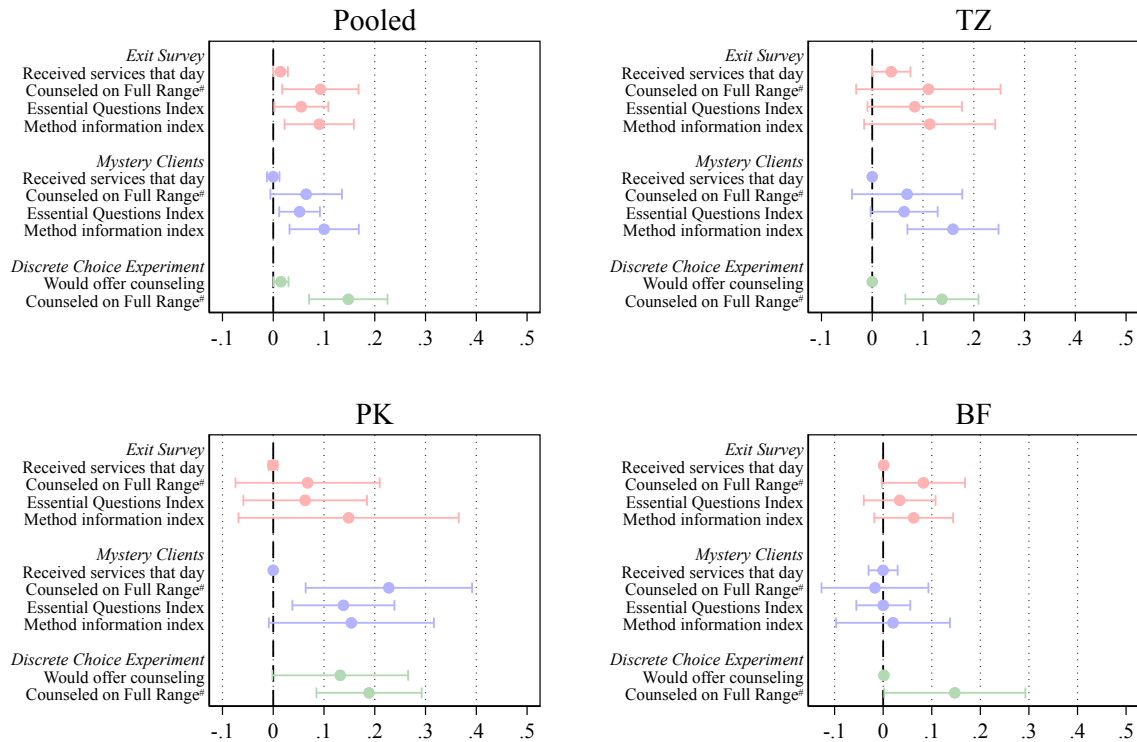
Figures A1-A3 plot the primary outcomes over time from the exit survey, and Figures A4-A6 plot the intervention effects over time from equations 3 and 4. This temporal analysis does not reveal a clear pattern in the timing of intervention effects (e.g., some effects seem to start in the early months and some later). The only exception is that the effect on counseling on the full range of methods increased over time in Tanzania (Figure A4) and Pakistan (Figure A5).

*How did the Beyond Bias intervention impact **patient centered FP care** for women 15-24?*

Key Takeaways: The intervention significantly improved all patient centered FP care outcomes in all three data sources in pooled analyses. Improvements in Tanzania and Pakistan were consistent across data sources although not always statistically significant. In Burkina Faso, effects were not consistent across data sources and were close to zero in the mystery client data, our preferred source for this domain. Overall, this suggests that the intervention led to more comprehensive patient centered counseling in Tanzania and Pakistan, but it is unclear if it did so in Burkina Faso.

In this section, we examine all the patient centered FP care outcomes. Table A12 shows the mean of all the patient centered FP care outcomes for intervention and control clinics as well as the difference (i.e., the effect of the intervention). Figure 6 below plots the intervention effect for each outcome. In pooled analyses, we see significant improvements in all outcomes across all data sources, aside from receiving services in the mystery client data (almost all mystery clients received services so there was no scope for improvement). In our preferred data source for this domain (mystery clients), clients at intervention clinics were not only counseled on more methods than control clinics, as described in the previous section, but were also more likely be asked essential questions (EQI improved by 0.05) and were given more information about the methods (MII improved by 0.1). These positive effects in pooled analysis with the mystery client data were completely driven by Tanzania and Pakistan—effects were all close to zero in Burkina Faso in the mystery client data. In the exit survey data, all three countries had similar effects sizes for the four outcomes, and all pooled effects were significant. In the DCE, intervention providers were more likely to report counseling on the full range of methods and were more likely to counsel on LARCs and injectables compared to providers in the control group. Adjusted intervention effects (Table A13) were largely similar.

Figure 6. Impact of Beyond Bias intervention on patient centered FP care outcomes



Each point represents the difference between the intervention and control arm for the respective outcome. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic. Pooled results control for country fixed effects.
 #Primary outcome

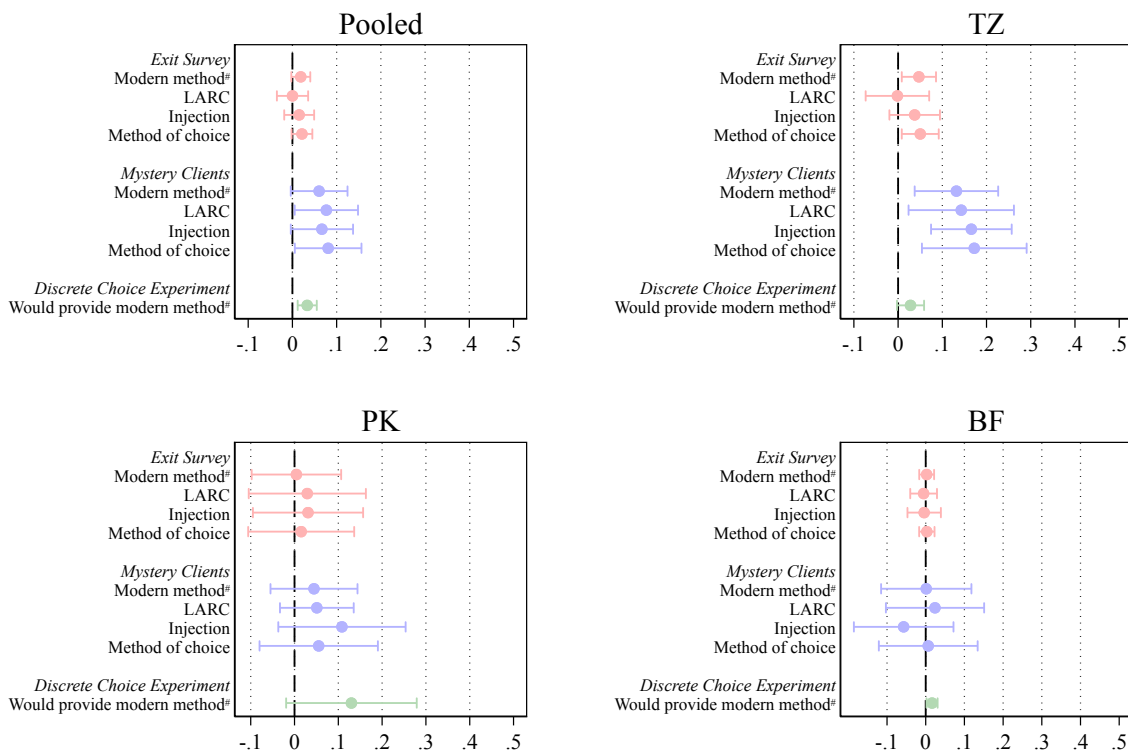
*How did the Beyond Bias intervention impact **method dispensing** for women 15-24?*

Key Takeaways: Most clients in the control group reported receiving a method and their method of choice in the exit survey, particularly in Tanzania and Burkina Faso. Thus, there was little room for improvement on these outcomes. The intervention improved the likelihood of receiving a method and receiving method of choice in Tanzania, but effect sizes were small. There was no effect on receiving a method or method of choice in Pakistan or Burkina Faso in the exit survey. There was also no effect on method mix in any of the countries, suggesting that providers did not change the types of methods they dispensed. Mystery clients were more likely to think they could take their method of choice at intervention clinics in Tanzania, and intervention providers in all three countries were more likely to report a modern method as appropriate in the DCE, which is promising, but no methods were actually dispensed in either of these data sources.

Table A14 shows method dispensing outcomes for all three data sources, and Figure 7 below plots the intervention effects. We focus mostly on the exit survey when interpreting outcomes for this domain because this is the only source where a method was actually dispensed. Over 91% of clients in the control group in Tanzania and Burkina Faso received a modern method, leaving very little room for improvement. In Pakistan, 82% of clients in the control group received a modern method. Reaching 100% modern method dispensing is an unrealistic target because some clients only want information or delay getting a method

until they discuss it with family. In Pakistan, qualitative interviews with clients revealed that it was common for women to consult with their husbands before choosing a method, and method dispensing was often delayed until soon after a client finished menstruating. Overall, clinics in our study setting appear to be poor locations for an intervention designed to improve modern method uptake because most women at the clinic are already using a modern method (this is partly why this was not an explicit goal of the project).

Figure 7. Impact of Beyond Bias intervention on method dispensing outcomes



Each point represents the difference between the intervention and control arm for the respective outcome. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic. Pooled results control for country fixed effects.
 #Primary outcome

Tanzania is the only country for which modern method dispensing improved in the exit survey data. We find that the intervention increased the share of clients that received a method by 4.7 percentage points ($p < 0.05$). About 9% of clients in the control arm did not receive a method in Tanzania, so this effect size represents nearly a 50% reduction in the share of women not receiving a method. We also find a 5 percentage point increase in the share of women receiving their method choice, but this was driven by more women receiving any method at all (there was no change in method of choice among women receiving a method). These results are almost entirely driven by fewer women being denied services. If a woman was not able to receive services, we coded this as not receiving a modern method and not receiving method of choice. We find a 3.7 percentage point increase in receiving any services in the intervention group in Tanzania. When we restrict to clients who received services, we do not observe a significant improvement in these outcomes. This suggests that the intervention in Tanzania did not improve modern method uptake or method of choice among clients who saw a provider, but rather influenced the likelihood clients were able to see a provider. The intervention had no effect on method dispensing or on receiving method of choice in Pakistan and Burkina Faso. We also find no evidence that clients were more likely to receive

LARCs or injectables in any of the three countries, two methods for which we found biased attitudes and beliefs in the formative work.

For method dispensing outcomes, mystery clients reported whether they “thought they could take” each method “if they were a real client” (purple points in Figure 7 and panel 2 of Table A14). All pooled effects for method dispensing outcomes in the mystery client data were significant and, similar to the exit survey data, these pooled effects were mostly driven by improvements in Tanzania. Mystery clients visiting intervention clinics in Tanzania were far more likely to think they could take any method (13 percentage points) and their method of choice (17 percentage points).¹⁷ In Pakistan, the intervention demonstrated positive effects on method dispensing according to mystery client perceptions, but none of these effects were statistically significant. In Burkina Faso, the intervention had no effect on mystery client perceptions of which methods they could take.

It is certainly promising that the intervention significantly improved mystery clients’ perceptions about the likelihood of method dispensing in Tanzania and when pooling countries, but it is unclear whether this actually translates to better method dispensing. Mystery clients were far less likely to think they could take a method than we observe from the client exit surveys in Tanzania and Burkina Faso (Table A14). This could partly be explained by a larger share of visits having profiles to which providers do not want to dispense FP methods (e.g., visits from nulliparous clients were very rare in the exit data but half of mystery client visits were from nulliparous clients).¹⁸

Providers at intervention clinics were more likely to report in the DCE that a modern method was appropriate for the client profiles they were presented, although effect sizes are relatively small in Tanzania and Burkina Faso.

Table A18 shows that the average number of clients per month over the 12 months of intervention did not appear to increase at intervention sites for any age group in Burkina Faso or Tanzania. In Pakistan, there appears to have been a modest but statistically significant increase in client flow, which was mostly driven by clients under 20 years old (about 2 additional youth clients per month per clinic). Figures A10, A13, and A16 plot client volumes over time by age, which shows that youth client volumes were not increasing over time at intervention facilities (even in Pakistan), which is what we would expect if word was getting out about improvements in care and treatment of young clients. It is possible word got out during the pre-COVID implementation period (Pakistan implemented for six months before the COVID pause period). Taken together, this provides little evidence that the intervention increased client volume in Burkina Faso and Tanzania, but may have increase youth client volume in Pakistan).

We find very little evidence that the intervention impacted method mix in any county. Figure A7 plots the share of clients that receive each method from the exit survey by age. Method shares were comparable between the intervention and control sites for all age groups with no statistical differences. Figures A8/9 (Tanzania), A11/12 (Burkina Faso), and A15 (Pakistan) use service delivery data to show that method mix did not change over time between intervention and control clinics in any of the countries. Table A18 shows similar results when aggregating the data over the full 12 months. These results show that intervention clinics dispensed roughly the same share of each method in all study months relative to the control sites.¹⁹

¹⁷ Recall that each mystery client visit was randomly assigned a preference for either a LARC or an injectable.

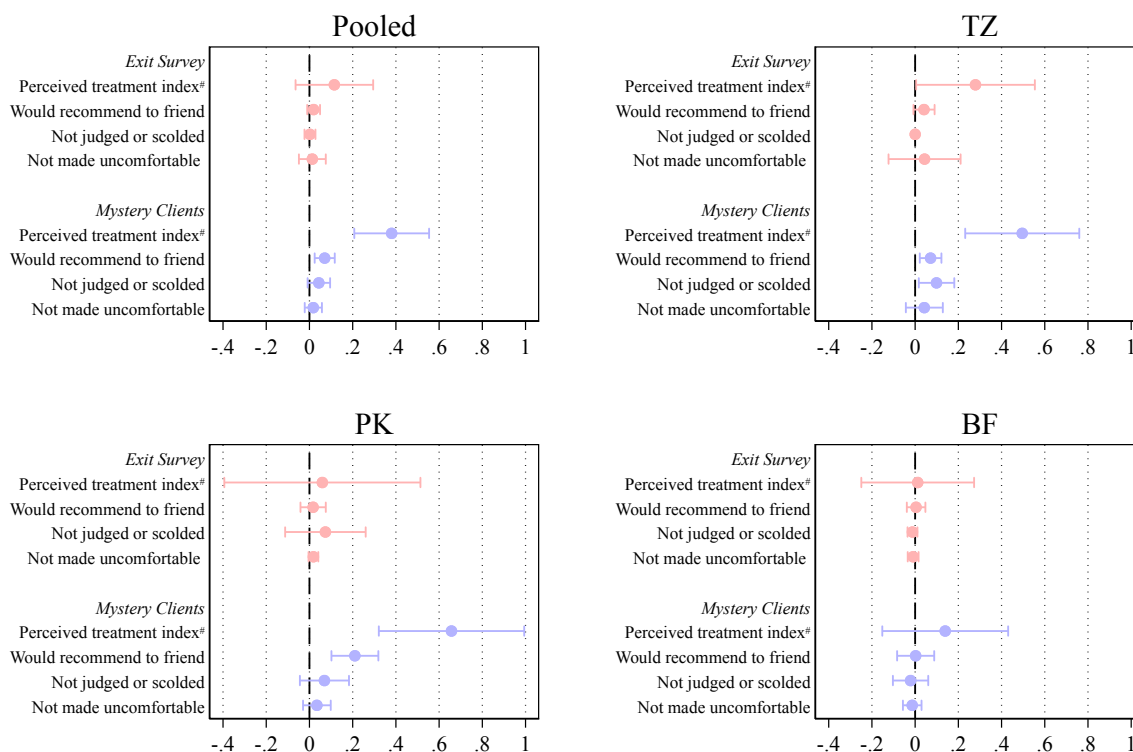
¹⁸ We learned later that some mystery clients interpreted this question as having *enough information* to choose each method, a slightly different interpretation than we intended. However, this was anecdotal, and it is unclear the extent to which this interpretation was used.

¹⁹ We separate out new and repeat users in Tanzania and Burkina Faso, but these fields are not available for Pakistan.

How did the Beyond Bias intervention impact perceived treatment by FP providers for women 15-24?

Key Takeaways: The intervention improved mystery client perceptions of how they were treated by providers. Significant effects with countries pooled were mostly driven by improvements in Tanzania and Pakistan, with small and insignificant effects in Burkina Faso. Only in Tanzania did real clients perceive better treatment from the provider.

Figure 8. Impact of Beyond Bias intervention on perceived treatment outcomes



Each point represents the difference between the intervention and control arm for the respective outcome. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic. Pooled results control for country fixed effects.

*Primary outcome

Mystery clients are our preferred data source for perceived treatment outcomes because they received training on what to look for during interactions with providers. They also do not have the incentive to provide a socially desirable response that real clients have (Dunsch et al., 2018). Table A16 and Figure 8 below show that mystery clients reported better treatment on the perceived treatment index, the perceived communication scale, and were more likely to recommend the clinic to a friend. Positive and significant pooled effects were driven by improvement in Tanzania and Pakistan, with little change in Burkina Faso on these outcomes. In Tanzania, mystery clients who visited intervention facilities were 7 percentage points more likely to recommend the clinics to a friend and 9 percentage points more likely to report *not* being judged or scolded by the provider (a 50% reduction in the likelihood of being judged or scolded). In Pakistan, mystery clients who visited intervention providers were 21 percentage points more likely to recommend intervention providers to a friend and 7 percentage points more likely to not be judged or

scolded compared to control providers (although the latter was not statistically significant). Mystery clients in Tanzania and Pakistan were also less likely to report being treated worse based on marital status or parity (Table A31; outcomes not prespecified).

In exit survey data, intervention effects were mostly positive, but smaller in magnitude than in the mystery client data and not statistically significant (aside from the perceived treatment index in Tanzania).

Appendix tables A28 and A29 show the effects individually for each question that went into the perceived treatment index. The pooled effect was significant for nearly every question in the mystery client data but no questions in the exit survey data (although most effects were positive). Appendix Figure A26 shows perceived treatment outcomes for each principle of unbiased care as defined by Pathfinder.²⁰ Effect sizes were similar for each principle, but smallest for questions relating to “Seek Understanding and Agreement.”

Adding controls in adjusted models does not substantively impact the findings on the perceived treatment index (Appendix Table A17).

Additional ad hoc outcomes

Tables A31 and A32 show the effect of the intervention on several additional outcomes that we did not pre-specify *a priori*. Exit survey results show little to no effect on discouraging or encouraging specific methods, providing privacy, requiring permission from family or husband, or attracting new clients. The mystery client data reveals that intervention providers were slightly less likely to encourage injectables (which we interpret as giving the client more autonomy), and more likely to provide privacy. As mentioned in the section above, mystery clients at intervention sites in Tanzania and Pakistan were also less likely to report being treated poorly because of marital status or parity. Mystery clients at intervention sites in Tanzania were less likely to report that the provider expressed judgment because of contraception use or parity decisions compared to control. Mystery clients in Tanzania also show evidence that the intervention reduced the likelihood that providers asked clients if they had permission from family or a husband.

Did the intervention reduce disparities in outcomes by age, marital status, and parity?

Key Takeaways: The intervention mostly did not change the effect of age, marital status, and parity on the main outcomes of interest. This is partly because our measures show only limited effects of age, marital status, and parity in absence of the intervention. This suggests that outcomes that improved as a result of the intervention did so for all clients, not just the clients who were targeted by the intervention. It also suggests that clinics in our study are not the best setting for targeting disparities experienced by youth clients, unmarried clients, and nulliparous clients.

Age disparities: Most differences between older and younger women were relatively small, and the intervention did not significantly change the extent to which age affected any outcomes. In the control group, 16/17-year-old mystery clients scored lower on the MII, were less likely to think they could take any modern method, and less likely to think they could take an injectable relative to 24-year-old mystery clients. Among real clients in the control group, 15-19-years-olds received more comprehensive counseling and more LARCs, but fewer injectables than women over age 24.

Marital status disparities: Differences between unmarried and married women were smaller than expected or non-existent for most outcomes in the control group, and the intervention did not significantly change the extent to which marital status impacts any of our outcomes. In control clinics in Tanzania and Burkina Faso, unmarried women perceived significantly worse treatment than married women in both the mystery client and the exit survey data; unmarried mystery clients were slightly more likely to be judged or scolded in Burkina Faso and Pakistan, more likely to be made to feel uncomfortable

²⁰ Our team categorized each question into the different principles. We omitted the “Simple, Comprehensive Counseling” category from this exercise because these questions were represented in the patient centered FP care domain.

because of their sex life in Tanzania, and less likely be asked essential questions in Tanzania and Pakistan.

Parity disparities: Nulliparous mystery clients were less likely than parous mystery clients to be counseled on the full range of methods (all three countries), real nulliparous clients were less likely to receive a LARC (Tanzania only), and the intervention significantly reduced both of these disparities. However, this result was not consistent across the other data sources. Differences between nulliparous and parous clients in most other outcomes were relatively minor, leaving little room for improvement, and the intervention did not significantly reduce the effect of parity on any other outcomes.

Intersectionality: We had limited statistical power to assess the intersection of age, marital status, and parity due to small sample sizes for some specific combinations. In Tanzania and Pakistan, women who are married and do not have children received the worst care on average regardless of their age, and intervention impacts were particularly large for these profiles. In Burkina Faso, there are not any clear patterns of disparities or intervention impacts for specific client attribute combinations.

Disparities for young women

Tables A19 through A21 show disparities in our main outcome domains between younger women and older women in the control group and the intervention group, as well as the effect of the intervention on this disparity (<20 vs. >24 in the exit data, 16/17 vs. 24 in the mystery client data, and 15 vs. 25 in the DCE). For the intervention to have reduced the disparity, we must observe that 1) a disparity existed in the control group, which would be represented by a negative and significant coefficient in the “Control” column (i.e., young women did significantly worse); AND 2) a significantly smaller disparity in the intervention group, which would be represented by a positive and significant coefficient in the “Effect” column. To facilitate examination of the age disparities in the control group, we plot the differences in Appendix Figures A17-A19. These figures show that younger women do not do significantly worse on any outcomes in the exit survey aside from receiving injectables (Figure A17). Mystery clients playing the 16/17-year-old role were less likely than 24-year-old mystery clients to think they could receive a modern method or an injectable (both countries), scored lower on the method information index (both countries), and may have experienced worse treatment in Burkina Faso (Figure A18).²¹ There was no significant difference on any other outcomes in the mystery client data. In the DCE, providers were slightly less likely to report counseling 15-year-olds on injectables and slightly less likely to state that a modern method was appropriate for 15-year-olds compared to 25-year-olds (Figure A19). Overall, these figures show that there was not a clear pattern of young clients doing worse on key outcomes than older clients. For outcomes for which we do find disparities, differences were relatively small, and there was not much room for the intervention to reduce these disparities. As such, Tables A19 through A21 do not show any outcomes for which there is a positive and significant coefficient in the “Effect” column. In other words, the intervention did not reduce age-based disparities because these disparities were small or non-existent in absence of the intervention.

Disparities for unmarried women

Tables A22-A24 show the disparities for unmarried women in the intervention and control arm for all of our domains in the same way as the proceeding tables showed disparities for young women. Again, we are looking for negative and significant numbers in the “Control” column, which implies there is a disparity for unmarried women compared to married women, AND a positive and significant number in the “Effect” column, which implies the intervention reduced the disparity. In Pakistan, unmarried women rarely visited the clinic, so the exit survey sample of unmarried women is very small (33 total; 7 control and 26 intervention); exit survey results for Pakistan should not be interpreted on their own. There are very few outcomes across domains and data sources for which there was a disparity for unmarried women in the

²¹ We did not vary age in the mystery client profiles in Pakistan.

control group (also shown in Figures A20-A22). In the exit survey (Figure A20), we only find a significant disparity for the perceived treatment index. The intervention reduced this disparity in all countries, but effects were not statistically significant. In the mystery client data (Figure A21), we find a disparity both in the perceived treatment index and the essential questions index, but the intervention did not significantly reduce these disparities. In Pakistan, unmarried mystery clients were less likely to think they could take most methods, but this disparity is only significant for method of choice. The intervention reduced method dispensing disparities in Pakistan, but results were not statistically significant. Effect sizes from the DCE (Figure A22) are also small and mostly insignificant aside from Pakistan, where providers reported restricting services and not counseling on injectables for unmarried women; the intervention did not significantly reduce the disparity in restricting services to unmarried women in the DCE in Pakistan, although the 9 percentage point effect size was an important magnitude, and it did significantly reduce that disparity in counseling on injectables.

Overall, this does not suggest a clear pattern of large disparities for unmarried women in absence of the intervention in Tanzania and Burkina Faso. Unmarried women were treated worse in Tanzania and Burkina Faso, but these differences are not large. There is evidence of discrimination against unmarried women in Pakistan, and the intervention seems to have modestly improved the services providers give to unmarried women, although effects were not statistically significant. Unmarried women almost never come into the clinic for services in Pakistan, so even if the intervention improved services for unmarried women, it is unlikely to change disparities for unmarried women without outreach efforts to get them to come into the clinic.

Disparities for women without children

Tables A25-A27 mimic the previous tables for women without children. Similar to the other disparities, nulliparous women did not seem to receive substantially worse outcomes compared to women with children in absence of the intervention. In the exit survey, they were less likely to receive LARCs in Tanzania and injectables in Pakistan (Figure A23). Nulliparous mystery clients were counselled on fewer methods (all countries), asked fewer questions (Burkina Faso only), and were less likely to think they could take injectables (all three countries). They perceived slightly worse treatment in Burkina Faso (Figure A24). In the DCE, control providers reported counseling nulliparous clients on fewer methods in all three countries (Figure A25). While nulliparous clients receive worse outcomes on some domains, differences are not large and there is not much scope for improvement. The only outcomes for which there may have been a significant reduction in an existing disparity was counseling on the full range of methods (all three countries) and receiving a LARC (Tanzania only).²²

Intersectionality and disparities for specific profiles

The analyses above isolate the effect of age, marital status, and parity from one another. In other words, they estimate the average effect of each client characteristic while holding the other characteristics constant. It may be that we are not finding substantial disparities for young, unmarried, or nulliparous women (and thus limited reductions in disparities) because these effects are intersectional. For example, whether or not a client is married could be more important for younger women, and whether or not a client has children might be more important for married women. The project team recognized this intersectionality from the start of the project; and the intervention focused on specific combinations of age, marital status, and parity when creating content for Connect and Summit, and when designing the evaluation. To analyze this intersectionality, we examine outcomes for each specific profile in the mystery client and exit survey data. Unfortunately, full examination of intersectionality requires many observations for each profile to have enough statistical power for profile-specific estimates, and this was not feasible in our design. In the mystery client data, it was not feasible to conduct more than four visits per facility due to resource constraints and fear of mystery clients being “found out.” Thus, we only have a limited number of visits for each profile

²² This is based on our preferred data sources for each domain.

(around 38 per country, 19 in each arm), and this study was not powered to detect intervention impacts for specific profiles. Additionally, in the exit data, several profiles of interest were very rare (e.g., we only had a small number of married but nulliparous profiles in each country), and several profiles were missing completely in Pakistan. Thus, these analyses should be considered exploratory, interpreted with caution, and readers should avoid using these data to draw conclusions about specific profiles.

Figures A29 to A31 plot key outcomes for each mystery client profile, separated by whether the visit was at an intervention or control facility. Figures 32 to 34 plot the same outcomes for the client exit survey. In all these figures, comparison of the control group bars (red bars) across profiles assesses profile-specific disparities, and comparing the difference between control and treatment (red bars to blue bars) across profiles assesses heterogeneity in the intervention impact based on the intersection of client characteristics. Tables A36 through A38 report key outcomes for each profile as well as an index that combines all four outcomes (based on standardized values of the outcome). Tables A39 through A41 plot the intervention effect for each profile.

In Tanzania and Pakistan, women who were married and did not have children had the worst outcomes in both the exit surveys and the mystery client data (lowest rank on the combined outcome index), although differences were not statistically significant from the other profiles.²³ Holding age constant, married and nulliparous women were the least likely to receive counseling on the full range of methods in both data sources. Intervention impacts in Tanzania and Pakistan were also strongest among women who were married and nulliparous, which suggests that the intervention was well targeted to this group in these countries. No other clear patterns emerge. In particular, parity and marital status do not seem to have stronger effects for younger women compared to older women.

Overall, this exploratory analysis suggests the clearest pattern of discrimination occurs for women who are married but do not yet have children, and the intervention helped reduce this disparity (only in Pakistan and Tanzania). However, these profiles were rare in the exit survey data and limited in the mystery client data, so differences compared to other profiles were not statistically significant, and we are hesitant to draw any conclusions. We do not find evidence of systematic discrimination against any other specific profiles.

Exploration of mechanisms

We conducted several additional analyses to explore the mechanisms that are driving the intervention impacts we document above. The goal of these analyses is to understand whether more engagement with the intervention led to larger impacts and to better understand the effect of each specific pillar (Summit, Connect, and Rewards). This study was not designed to isolate the effect of each pillar because all three pillars were implemented simultaneously. Thus, the analyses that follow are exploratory.

We use variation in engagement with the different Beyond Bias pillars to explore the importance of higher intervention doses and the importance of each pillar for our primary outcomes. Table A33 shows engagement with the intervention by country and pillar. In Tanzania, engagement with the intervention was strong; 98% of providers on average attended the Summit, and 94% of facilities had full attendance; in-person connect attendance was 78% on average; 100% of clinics had a representative attend all three Rewards ceremonies. Figure A35 shows outcomes by intervention engagement in Tanzania (intervention clinics only). More participation with Summit and Connect seems to have led to slightly better counseling (top right), method dispensing (bottom left), and client treatment (bottom right). However, clinics with less than 100% participation had better scores on the FP care specific attitudes and beliefs sub-index than those with 100% participation (top right). Participation in all pillars (far right bars) did not seem to improve outcomes beyond the effect of participating in one pillar.

²³ This is based on a regression of each outcome on a dummy variable indicating whether a profile is both married and nulliparous, with the reference group being all profiles that are not married and nulliparous. Regression results available upon request.

In Pakistan, 90% of providers attended the summit, 39% of providers were classified by Pathfinder staff as having low participation with the WhatsApp Connect forum (2+ quarters of passive activity), and 29% had high participation (2+ quarters of weekly participation). The Rewards ceremonies were not very well attended, with only 44% of providers attending all three, and 15% attending only one or less. Providers who engaged more with the intervention had better attitudes and beliefs than providers who engaged less (top left panel of figure A36), but this did not seem to translate to better counseling (top right panel), method dispensing (bottom left panel), or client treatment (bottom right panel). There was also no clear pattern showing that participating in all three pillars improved outcomes more so than participating in fewer pillars.

In Burkina Faso, 98% of providers on average attended Summit, and 80% of clinics had full attendance; in-person Connect attendance was 80% on average; 92% of clinics had a representative attend all three Rewards ceremonies, and all clinics attended two or more. Clinics who engaged more with the intervention had less biased attitudes and beliefs (Figure A37, top right), but again, there was no indication that this translated into less biased care. Participating in all three pillars also did not seem to show additional benefit compared to less participation.

Taken together, this analysis shows that more engagement could have led to slightly less biased care in Tanzania (but not necessarily for attitudes and beliefs), and better attitudes and beliefs in Pakistan and Burkina Faso. Importantly, there is no one pillar that stands out as being more important than the others in terms of improving these outcomes.

Robustness of results

Spillovers

Providers switch between clinics quite frequently in Tanzania and Burkina Faso. This could lead to spillover of the intervention if providers who participated in Beyond Bias switched to a control clinic during the study period.²⁴ This would lead us to underestimate the effect of the intervention. To assess the extent to which this could bias our results, we use several questions from the provider survey that ask about changing clinics and exposure to the intervention. Ten percent of providers in Tanzania and 9 percent in Burkina Faso reported providing FP services at another clinic besides their current clinic in the previous 12 months. About 7.1 percent of control providers in Tanzania reported participating in some part of the intervention; 5 percent participated in Summit, Connect, or Rewards; and 1.4% reported participating in all three. Participation in any part of the intervention, Summit, and Connect were all close to 90% in the intervention arm. In Burkina Faso, 3.9% of control providers reported participating in some part of the intervention, about 3% participating in one of the pillars, and 0% participated in all three.

| Table 2. Providers reporting participation in intervention (%) | | | | |
|----------------------------------------------------------------|----------|--------------|--------------|--------------|
| | Tanzania | | Burkina Faso | |
| Participation | Control | Intervention | Control | Intervention |
| Any Participation | 7.1 | 94.1 | 3.9 | 90.6 |
| Attended Summit | 5.0 | 89.8 | 2.6 | 65.4 |
| Participated in Connect | 5.0 | 88.1 | 3.2 | 86.2 |
| Attended Rewards Ceremony | 3.5 | 49.2 | 0.0 | 25.2 |
| Participated in All Three | 1.4 | 46.6 | 0.0 | 21.4 |

Notes: Data from provider surveys

²⁴ This is not a problem in Pakistan because clinics are all single providers that do not switch between locations.

This shows that a relatively small portion of the providers in the control group participated in the intervention in any capacity. If the 5% of providers in Tanzania who were exposed to the intervention had the same effect size for counseling on the full range of methods as we report in Table A12, 0.111, then the real effect size would be 0.117.²⁵ This shows that while our effect sizes might be slightly underestimated because of spillover, it is unlikely that the extent of the bias impacts our conclusions.

Recruitment Challenges in Pakistan

In Pakistan, many providers in the intervention group dropped out of the study because they could not attend the first summit. Although Pathfinder was able to find replacements for the providers that dropped out, this created a situation similar to differential attrition; providers in the control group might no longer be exchangeable for providers in the treatment group if availability/willingness to participate was correlated with our outcomes of interest. To test for this, we asked providers in the control group if they would be willing to participate in a summit event²⁶ and restricted our analysis to providers that said they would participate in the summit (26 providers in the control group). Results from this analysis were largely unchanged from our main analyses (Appendix Figure A28).

Multiple hypothesis testing

When a large number of hypotheses are tested in one study, there is a higher risk of finding false positives (e.g., an improvement in an outcome of interest) simply due to random chance. To address this, we use the Bonferroni correction for our four primary outcomes, using our preferred data source to measure each outcome (Table A35).²⁷ This essentially multiplies our p-values by the number of primary outcomes analyzed (four).

This correction shows that counseling on a full range of methods and receiving a method both go from being borderline significant ($p < 0.1$) to insignificant ($p \geq 0.1$) in the pooled column when we implement the Bonferroni correction. This creates some doubt as to whether these were real effects or a statistical artifact of multiple hypothesis testing. Counseling on a full range of methods was the primary outcome for our client centered FP care domain, and we found several other outcomes that were significant in this domain (both in the mystery client and exit survey data). Therefore, we still feel like there is strong evidence that the intervention improved patient centered FP care. However, given that effect sizes were small and mostly insignificant for method dispensing outcomes in the exit survey (including for receiving a method), the evidence for an improvement in method dispensing is much weaker.

Qualitative results

Burkina Faso

Key Takeaways: Providers in Burkina Faso enjoyed participating in the intervention and found implementation smooth, although they faced some structural challenges (space constraints, commodity stockouts). Summit was viewed as informational and awareness-raising, Connect allowed focused time to discuss improving FP service provision for youth, Rewards was (mostly) motivational—and many providers discussed how their knowledge and attitudes were changed by the intervention. Providers at higher-performing intervention facilities more commonly discussed specific ways that their counseling behavior has changed (e.g., offering a wider range of methods, stopping service refusals), and new structural/operational changes like a youth-only space, and expanded operating hours to better meet

²⁵ Calculations available upon request.

²⁶ The Pathfinder team reached out to all the providers in the control group asking if they would attend the Summit event the following week and recorded their response.

²⁷ The Bonferroni method is more conservative than other methods, such as that account for dependence between outcomes such as Anderson (2008) or List et al. (2019).

young people’s needs, compared to providers at lower-performing intervention facilities. Policy and program stakeholders reflected positively to the idea of scaling up the initiative and felt that integration/institutionalization would be the best and most sustainable strategy. Concerns about scaling up included resistance from communities and uncertainty about whether this is a high-priority area and whether there is sufficient “political will.” Lastly, there were some reports from providers and clients—at both intervention and control facilities—about biased and/or coercive services, but these were relatively infrequent.

Factors that enable and inhibit successful implementation

Providers and Managers in Burkina highlighted the goal of Beyond Bias to reduce prejudices and discrimination against young people and increase access to family planning for youth. Some providers linked this to keeping clients in school and reducing clandestine abortions. Some providers expressed the goal in terms of all clients and did not highlight youth in particular when answering the question. Notably, two providers in lower-performing facilities highlighted the right of youth to enjoy their sexuality: *“The objective of the BB project for me is to give young girls, especially teenagers, the chance to benefit from family planning, that is to say, to erase all bias so that they can live their sexuality to the fullest, without really having any major problems afterwards”* (Provider, Bobo, lower-performing intervention facility).

Providers at intervention facilities in Burkina Faso overwhelmingly had **positive experiences** with the Beyond Bias program. They spoke enthusiastically about all activities; a few providers (particularly at lower-performing sites) expressed frustrations with Rewards, but most enjoyed all three pillars. Respondents were asked their favorite activity; some said they could not choose a favorite, but among those who gave a specific answer, six said they liked Summit the best, six most enjoyed Connect, and one most enjoyed Rewards.

The factors that providers and managers (Infirmier chefs de poste, ICPs) perceived to facilitate implementation included: the diversity of topics/themes addressed in Connect; the specificity and relevance to young people’s family planning needs; how clear and well organized Summit was; and the dialogue between peers and sense of collective action [*“when we do these sessions, the actions we take are collective. Together we decide what to do and everyone follows what the group decides”* (Provider, Banfora, middle-performing intervention facility)].

Some challenges and barriers to implementation of and participation in Beyond Bias were noted. Several respondents discussed how a **lack of space** at the facility hindered their ability to provide high-quality family planning services [*“Our family planning room is not suitable... It’s the same room that we do everything: deliveries, family planning, curative consultation all in the same room.”* (Provider, Bobo, lower-performing intervention facility)], and to fully implement the six principles (especially #1: creating a safe, welcoming space) which was mentioned even by one high-performing facility).

Human resource constraints were also mentioned: both the lack of refresher/catch-up **training for new staff** who joined the facility during the project (this was mentioned more often at higher-performing facilities and by facility managers), and how **staff shortages** limited their capacity to provide high-quality family planning care. Additionally, a few providers mentioned that their demanding **job duties limited their full participation** in Beyond Bias project activities: *“During the Connect sessions, if you are the only one providing the service, you want to follow the Connect but ... you cannot follow because you are busy doing something else in the delivery room”* (Provider, Bobo, higher-performing intervention facility).

At three different facilities, providers spoke about supply chain challenges and **stockouts** of family planning products (IUD and Jadelle, namely).

COVID was rarely mentioned as a specific implementation challenge.

Policy- and program-level stakeholders were also asked their impressions of challenges during implementation. The most common issues raised included: concerns about **data collection for Rewards** (the number of exit survey questions, the complexity of deploying enumerators to each facility), the **frequency of events** (one respondent suggested less-frequent Connect sessions, one respondent suggested adding more trainings as new staff are hired at facilities); and external factors (insecurity, COVID-19).

Stakeholders saw Beyond Bias as **non-duplicative** with other activities, which were mostly seen as technical skills-building for providers and demand-generation for clients; value-added and **complementary** to national policies and goals.

Adaptations during implementation

Very few respondents spoke about making changes to Beyond Bias activities during implementation. Three mentioned changing the timing of Connect sessions: one shifted it to an earlier morning time so that providers were less fatigued, one made the time more flexible to accommodate providers' work schedules, and one changed the frequency from biweekly to monthly to counteract loss of motivation.

Some respondents, primarily at higher-performing sites, mentioned making facility- or structural-level changes after participating in Beyond Bias. This most commonly included: **changing operating hours** to meet young clients' needs (at one facility, they began offering 24-hour family planning services, and **creating a new waiting and/or service space** for youth family planning clients. *"Before Summit... at the set time, we would stop and say we can't take see more people for family planning. But since the Summit, we better understood the importance of providing planning methods to young people. So my colleagues and myself, we are always available [round the clock] for young people"* (Provider, Banfora, higher-performing intervention facility). *"We have a teen room, just to receive teenagers without stigmatization... Before, it was not like that, they were mixed with their other clients, teenagers were sometimes waiting with their mothers, and it bothered them a lot. But now with the arrival of BB, we are able to put them apart"* (Provider, Bobo, higher-performing intervention facility).

Impressions about scale-up and anticipated factors associated with scalability

Although only a few provider respondents spoke about potential **scale-up** of Beyond Bias, all were positive about the idea: *"It should not be only those who are in the areas where the project exists who can benefit from it, because it is a real need, and I think that it should be extended throughout the country"* (Manager, Bobo, higher-performing intervention facility).

Stakeholders were **very positive about the idea of scaling up** Beyond Bias. A few said that they had already heard from providers that they wanted to see the activities available nationally. Some felt that they already knew that Beyond Bias had been successful and that based on this evidence, it should be introduced at scale.

Several commented **that flexibility to adapt to local context** would be important during scale-up: *"It can be an adapted integrated package that is implemented in each health facility following the principles of Beyond Bias"* (implementing partner intervention facility). Relevant contextual factors perceived to be relevant for scaled-up implementation included: the local security situation, and cultural/religious differences.

Some stakeholders mentioned concerns about taking the project to scale. This included increasing **opposition or resistance** from providers and in communities: *"The more we extend, the more we'll have to deal with obstacles, either from a religious or cultural point of view"* (government official). The most commonly mentioned potential challenge to scale-up was the need to engage the government, especially the Ministry of Health. Specific areas of concern were: whether there is **sufficient "political will"** for institutionalizing this program; whether family planning for young people is truly a **priority area**; and whether the activities **"fit"** with existing programs and structures. There was also a linkage between affordability and Ministry buy-in; a few respondents wondered if the program were too expensive for scale-up by the government. A few stakeholders also spoke about client- and community-level challenges that

might affect scale-up, primarily whether there was population-level support for this topic (and if not, how this might detrimentally impact implementation).

Additionally, stakeholders were asked who is most important to get on board for scale-up. The most common response was the Ministry of Health; specific units within this were sometimes cited (the Directorate of Family Health, the Directorate of Quality of Service Provision), and one respondent also mentioned the Ministry of Education. The health system—from the regional to district levels, and facilities and providers themselves—was seen as another key player, as they are decision-makers and also responsible for implementation and monitoring of activities.

Providers also offered a few suggestions for strengthening or improving Beyond Bias in the future. A few respondents—all at higher-performing facilities—suggested **adding financial remuneration** to Rewards, and/or adding **more specifics to the certificates**, e.g., the names of which staff participated (and “won”). Echoing the challenges cited, there were recommendations to assist with space constraints and supply chain problems, and to ensure that new staff joining the facility were fully trained and incorporated into the project.

Implementation of multicomponent (3-pillar) model

Most providers (n=18) saw the pillars as **synergistic** and **complementary**. It was common for providers who participated in the intervention to speak about how each activity built upon and leveraged the others: *“During the Summit we are told what we have to do, and Harvest [Connect] is like an exercise where we put into practice what we learned during the Summit”* (Provider, Banfora, higher-performing intervention facility). *“We learn at the Summit, at the Connect we implement, and Reward is a survey with clients to see how we worked”* (Provider, Bobo, higher-performing intervention facility).

Connecting to the underlying behavior change mechanisms

All respondents at intervention facilities were asked whether and how they felt changed by the Beyond Bias program. Every provider and ICP respondent mentioned **changes to their personal knowledge and attitudes** toward family planning and bias, particularly attributed to both Summit and Connect.

In addition, many respondents—primarily from higher-performing sites—spoke about specific changes they had made to family planning services. This included **changes in the methods offered** to young people, **lessened service refusal**, and changes in their **approach to counseling**, such as allowing more time for questions, respecting client choice, and presenting a full range of methods. *“Before a young girl, if she opts for implants, we weren't up for it, if she opts for the DIU, we weren't up for it. We did not even take the care to measure the uterine cavity to see if it is eligible or not. So automatically, we refused. But today, it is no longer a problem for any agent to insert an implant or an DIU”* (Manager, Banfora, middle-performing intervention facility). *“Now, we have agreed on a way to take the client from the beginning to the end, the approach is the reception, the presentation of the different methods, the advantages and the limits of the different methods, and to bring the client herself to choose the method. Sometimes, this was not the case before”* (Manager, Bobo, higher-performing intervention facility).

In addition to these specific areas of improvement, it was common for respondents across site types to speak broadly or generally about how counseling is now more thoughtful and inclusive for young people.

It was common for respondents to say that **Summit raised their awareness** of the issue of bias and the importance of providing unbiased family planning services to young women (challenges faced by young people who face barriers in accessing family planning services): *“The Summit made us aware of the prejudices towards young girls who come for the different methods”* (Provider, Banfora, higher-performing intervention facility). This included self-awareness: *“The judgment I had before, for example a child of 12 years old, 13 years old, 14 years old, who came for a method, I said to myself she is not an adult, she's a student, she's a teenager so she shouldn't have the method, she might have to wait. But with the Summit*

and the different Connects, we realized that we were wrong...the method should be given to you without even judging you” (Provider, Banfora, medium-performing intervention facility).

The **unique advantages of Connect** were its specific focus on family planning: “We used to hold monthly meetings, but these meetings did not even allow us to talk specifically about family planning” [Provider, Bobo, lower-performing intervention facility]; the team-building and collective problem-solving that resulted from in-person dialogue (“When we give the ideas, you feel that people are excited; it gives us a lot of ideas and motivates us to look for ways to help young girls” [Provider, Banfora, medium-performing intervention facility]); and its repeated/continuous format. The collective brainstorming and problem-solving was mentioned more often at higher-performing sites.

Rewards was seen as motivating to some respondents—more commonly at facilities that received a Reward: “It motivated us to do more because when you are well-ranked, you do everything possible not to fall again, to maintain the position” (Provider, Bobo, lower-performing intervention facility). At one lower-performing facility, several respondents spoke about **not understanding the Rewards evaluation criteria**: “It’s their way of evaluating health facilities that people cannot understand, it’s like evaluations but people cannot understand how they evaluate” (Manager, Centre, lower-performing intervention facility).

Perceived value of the intervention and desire to continue

When asked a hypothetical scenario about whether they would recommend participating in Beyond Bias to a new facility manager (if they changed facilities), 17 providers said that they would. One provider said that they would recommend participating in the bare minimum or else it becomes demotivating. Four providers (at lower- and higher-performing facilities alike) volunteered that they hoped Beyond Bias would continue because they felt it had been useful.

ICPs were also asked about whether they **planned to continue** Beyond Bias activities. A few said that they hoped the activities would continue, but that the decision was not up to them particularly for Summit and Rewards as this requires a commitment beyond their own facility. Two said they would continue holding meetings (modeled on the Connect sessions) at the facility; some also said that there would be enduring effects since the project had changed providers’ knowledge and attitudes so service improvements would continue.

In addition, ICPs were asked if there were **remaining needs unmet** by the project; two mentioned infrastructural constraints (space and equipment) and one mentioned wanting demand-generation activities.

Stakeholders were asked their impressions about whether Beyond Bias should be continued. Most supported this idea; a few advocated for **institutionalizing** the approach (rather than thinking of this as a continuation of a project): “For me there are no BB activities, there is an approach, and we have to integrate it. We can’t continue as a country to rely only on projects. I don’t think that anyone else should work on a project. We have to work to make it a programme. And for it to be a programme, it has to be integrated into what we are doing” (Implementing partner). “We [should] integrate it into the system of the Ministry of Health. Institutionalize the activities that improve the indicators” (Implementing partner).

Most stakeholders said they were not aware of specific plans to continue or institutionalize, or that such plans were in progress but not yet finalized. However most stakeholders felt as though the activities **should or would be sustainable**. The intervention was seen as relatively inexpensive and several stakeholders perceived this as key for sustainability; additionally, because Beyond Bias aimed to change provider norms and knowledge, stakeholders thought there would be enduring effects even if the project were technically stopped [“We are currently suggesting to providers that they continue to implement the Harvest in order not to give up, and continue internally, because it doesn’t take much. It’s just their motivation” (Implementing partner)]. The design of Beyond Bias—as an evidence-generation process to identify the most effective solutions—was seen by some as an asset for sustainability, while others felt that sustainability was not really a goal of the program.

Unintended consequences

Providers were asked whether Beyond Bias had any impact on their other job duties. Most said there was no problem at all—many commented that Beyond Bias “influenced” and “complemented” their existing work. A few remarked that participation in intervention activities (Connect, Summit) was time-consuming or conflicted with their work responsibilities. One provider at a higher-performing site remarked that the additional time spent on family planning counseling was reducing their availability to perform other tasks: *“The fact that we have to spend a lot of time with family planning clients affects the ANC activity. It does... I make sure we try to respect the steps that BB gave us, so we take a lot of time with the clients, and since it's in the same room, it affects the other activities, that's it. That's our problem”* (Provider, Bobo, higher-performing intervention facility).

Some providers—mostly at higher-performing facilities—felt as though the volume of youth clients increased due to Beyond Bias (although, this did not show up in the quantitative data): *“With the information we received and the work we do, it increases attendance and it opens our door to young people, so young people come to us”* (Provider, Banfora, higher-performing intervention facility).

Contextualizing implementation experiences through views from youth, providers, and stakeholders

Providers at both intervention and control facilities spoke about providing family planning services to young women, unmarried women, and nulliparous women. A few noteworthy themes emerged. First, it was very common for providers in both intervention and control sites to **speak about “young” women as students**, and to mention that family planning was important so that girls could stay in school and complete their educational attainment. Second, when they spoke about specific ages of young clients, these were **usually below age 15** (often ages 10-13). In terms of underlying drivers of bias, a provider at a high-performing treatment facility highlighted perceiving clients to be incapable of making decisions for themselves, saying: *“We have to help them [young clients] because they are people who are not yet mature, they can't really decide for themselves”* (Provider, Bobo, higher-performing intervention facility).

The majority of providers at control facilities said that young people could use all methods, and that they presented all clients with a full choice of methods regardless of the client's attributes or background. However, during the interview, several examples of differential treatment—which may result in biased care—became apparent.

- In general, providers at the control facilities spoke about needing to be more conscientious while counseling **young people because they are more vulnerable**, and because their level of understanding about HIV/AIDS, pregnancy, sexual activity, and family planning is lower than older women. They also expressed concerns about a delayed return to fertility for younger women, which may be problematic if they get married soon.
- One provider discussed clients' intersectional identifies—i.e., the difference between **young women in school and those not in school**—in detail, and how this might affect counseling: *“Well, for young ladies, there are two kinds: the girl with no child who is in school and wants to continue with her studies; and the girl who is not at school. The way we advise them is not the same because the one who is in school, in order to continue with her studies, she must not get pregnant. The one at home, maybe in two or three days, she will get married. So in the counseling, it's a little bit different”* (Provider, Bobo, middle-performing).

Most clients across both treatment and control facilities reported positive experiences with the provider, saying they felt comfortable, at ease, and that they could trust the provider. Many clients at both treatment and control facilities shared that they **feared that they would be scolded or yelled at, but these fears subsided after talking with the provider** when they found that this was not the case. Although almost all clients reported positive experiences, some clients highlighted **areas for improvement across both treatment and control facilities**, including wanting more information from providers and feeling rushed or describing long wait times. Primarily in control facilities, a few clients reported feeling questioned about

whether they were pregnant. Notably in a control clinic, one client described being asked to leave as she was crying (presumably because she was scared of the injection) and taking too much time to get the injection.

Many clients across both intervention and control sites described the *type of information providers shared* in their visits. This included that family planning was beneficial for their health, the length of use of different methods, how to use pills and injections, side effects (particularly around menstrual cycle changes), and information on stopping use of methods (primarily to come back if they had issues). Some clients across both intervention and control sites however, wanted more information. In describing the amount of information received at the visit in comparison to what information she received at school, one client said: “...when you come in, he asked you, he must explain and then give the consequences aussi. But he doesn’t do that. He must improve that. As we have been explained things in school so I understand, otherwise there are women if you don’t explain well, it’s not good” (19 years old, unmarried, has a child, at a middle-performing treatment facility in Banfora).

Clients in both treatment and control sites *felt like they were involved in the decision* about what method to get with few exceptions. However, in describing the counseling and how methods were encouraged or discouraged, a few clients (more often in control sites) were *given pills because the provider wanted them to come back when they were menstruating*. These clients in particular described that there was little interaction between themselves and the provider. *More often in intervention facilities*, a few *unmarried clients also mentioned providers encouraged the implant* over other methods during their counseling—sometimes discouraging use of pills or IUDs in this recommendation.

Almost all clients across both treatment and control sites said the provider asked them their age during the visit; however, most *did not perceive they were treated differently based on their age*. Some clients did suggest ways in which age influenced their own visit or recounted comments the provider made that suggested different treatment of specific age groups. For instance, some providers in both the treatment and control group made positive comments explicitly saying that *young clients were welcome* while other clients, more often in the control group, felt *teased because of their age*, or felt older clients would get counseling that was more thorough. However, at intervention sites, examples of ways age factored into the visit were also present in a few interviews. One 20-year-old client at an intervention site said that a provider told her that “*it’s the people she wants at my age to help do the planning*” (20 years old, unmarried, no child, at a lower-performing treatment facility in Bobo), which the client interpreted as the provider not wanting to help those younger than her. Another client at an intervention site explained that she had been turned away in the evening before returning to the facility, where she observed a large group of younger clients who were turned away and hypothesized they may have felt ashamed: “*There were young girls, they were less old than me, they were a little bit upset, because it’s not sure that they will come here today, with shame....Maybe yesterday they had taken their courage to come and do this, and they are told to come back again tomorrow, it can influence their decision*” (23 years old, unmarried, no child, at a higher-performing treatment facility in Bobo). Notably, one client at an intervention facility shared a change related to who was offered services at the facility: “[*Before*] if you were young and you came, he wouldn’t accept, but now they welcome everyone” (17 years old, unmarried, no child, at a higher-performing treatment site in Bobo). However, two clients at the same facility in the treatment group said the provider explicitly told them they should not use the IUD because of their age.

Most clients across both treatment and control sites felt like the provider *did not treat them differently based on marital status or parity*. When asked if they thought treatment would be different, many clients seemed to think counseling or treatment would be different for clients who had different marital statuses or parity, but this seemed more hypothetical and based in social norms than based on their own experiences at the facility. A small subset of clients at treatment facilities expressed that the provider explicitly tried to reassure them that services for unmarried women were not wrong. However, there were a few instances of bias shared in clients’ experiences across both treatment and control facilities. One client at a control facility said that the provider denied methods to clients who were married and nulliparous: “*He asked me, and I*

said that I was not married. And he told me that if I was married, I couldn't adopt this method [method not specified]. That women who have a child of 1 to 2 years' old and married are afraid of getting pregnant again quickly, so they come to use this method. But if you are married and do not have children yet, you cannot use this method. Young girls can use this method" (20 years old, unmarried, no child, at a control site in Centre). One client served at a lower-performing treatment facility in Bobo said that a provider told her she could not use any method because she had not had a child. Another provider in a higher-performing treatment facility in Banfora told one client that a specific method (not named) was only for clients who had given birth.

Clients in both treatment and control sites who mentioned they were students said that the provider encouraged them to *finish their studies* before becoming pregnant. A few clients at treatment facilities said the provider told them an implant was a perfect method for students so they could, in one client's words "*finish their studies quietly*" (15 years old, unmarried, no child, at a middle-performing treatment site in Banfora). Students in particular across both treatment and control sites felt relieved that providers did not turn them away at the facility. Other clients reported that the provider gave them advice such as ensuring they only had one partner (20 years old, unmarried, no child, at an intervention site in Centre), using a method so they did not "destroy [their] life" (16 years old, unmarried, no child, at a control site in Bobo).

Comparison with quantitative findings

The qualitative findings in Burkina Faso mostly support the quantitative results. Providers reported changes in their attitudes and beliefs in response to the intervention, providers at both intervention and control facilities mostly did not report giving biased care, and it was rare for clients to perceive receiving biased care. Some providers and clients reported differential treatment based on age, although most did not, which is consistent with quantitative findings (differential treatment was reported in the mystery client data but was rare). There were also some reports of different types of methods encouraged for different types of clients and specific types of service refusal (e.g., based on menstrual cycle), although, consistent with the quantitative data, these were relatively uncommon. There were also two areas of note from the qualitative findings that did not emerge in the quantitative findings. First, providers reported changing the way they counseled to include more methods, but we do not observe an improvement in counseling on the full range in the mystery client data (we do observe a small improvement in counseling on the full range in the client exit and DCE data). Second, the qualitative interviews add nuance about potential intersectionality in bias: student status and age or being married but nulliparous, for example.

Pakistan

Key Takeaways: Beyond Bias activities were well received by providers in Pakistan, although many faced challenges in participating with Connect. Providers cited ways in which their knowledge increased due to participating in the intervention (including appropriate use of IUDs), and how they have modified their approach to FP counseling, including ensuring privacy and focusing on informed choice as well as fewer service refusals. Some higher-performing providers also mentioned that participating in Beyond Bias has given them courage to resist social norms about FP use. Respondents appreciated how participating in Beyond Bias connected them to a community of like-minded FP providers. Both providers and program and policy stakeholders were positive about the idea of scaling up the intervention (some said that their enthusiasm depends on the evaluation results); concerns included resource needs and whether there would be the necessary level of buy-in and engagement of different stakeholders. Some providers shared how participating in Beyond Bias increased their responsibilities or added new challenges, although most found the activities well integrated into their existing duties. Lastly, some providers at both intervention and control facilities shared persisting biased attitudes and behavior, including refusing services to certain women for religious or other social reasons. However, clients expressed a high degree of satisfaction with their FP care, although several felt that women of different attributes (young, nulliparous, unmarried) would (hypothetically) be treated worse.

Factors that enable and inhibit successful implementation

Most providers at intervention facilities *spoke positively about Beyond Bias* and its activities. When asked about the goal of the program, the most common response was about ensuring that young people would have access to family planning in order to *have a brighter future*, for example, through higher education and beginning a professional life: *“They want to do something and want to become something ... We provide safety to them and also provide privacy and ... educate them about safe family planning methods”* (Central, higher-performing intervention facility). A few providers also thought that the goal of Beyond Bias was to achieve *population control*; this was generally phrased in supportive terms—for example, with an economic justification [*“Nowadays people cannot afford to have so many kids and our country’s population is increasing”* (East, lower-performing intervention facility)], although one provider spoke about foreign influence and how this is in opposition to their own beliefs: *“It is an American NGO, and its main goal is to minimize the population so they can control the population. But Allah said, I will provide food to everyone. But, they have their own thinking”* (Central, higher-performing intervention facility). Lastly, other perceived goals were to save lives and improve health of women and their babies, and to minimize abortions both for health and moral reasons.

When asked to name their *favorite activity*, seven respondents liked Summit the best, eight liked Connect the best, one liked Rewards the best, three said they could not choose a favorite because they liked all three, and one did not like any. Seven respondents also mentioned appreciating *event logistics*, including the pick-up and drop-off services and clear, advance notification of scheduling. Several respondents *lauded Beyond Bias staff by name*, most commonly Sonia (perceived as encouraging and motivating) and Sharjeel (complimented for his helpful advice and his videos), as well as Madiha.

Many (16 of the 22 treatment providers interviewed) cited *challenges participating* in Connect; the most common challenge was not having sufficient time due to work and household obligations [*“I can’t check Connect regularly as I am busy with household chores”* (East, lower-performing intervention facility)], and some providers also mentioned technological barriers including not owning a smartphone and internet outages. Some providers were also occupied with religious activities (holidays and prayers), and others had personal challenges like illness and death in the family. Only a couple of providers mentioned that Connect itself was not appealing; one felt that the content was repetitious, and another was annoyed by the alerts, particularly when group members shared unrelated content: *“Sometimes the continuous sharing of the content and ringing of the phone cause disturbance. Like some girls shared unnecessary information like memes or pictures, so because of that we sometimes do not read the important messages because we think they are not important too”* (East, higher-performing intervention facility).

In contrast, several providers really appreciated the *frequency of contact* [*“In Connect we learn different things every 2 to 3 days, as compared to other programs. We learn more”* (East, lower-performing intervention facility)] and speedy follow-ups [*“Whenever we ask a question, we get a reply hurriedly. We don’t know if these people even sleep”* (Central, higher-performing intervention facility)] on Connect, and this was seen as a clear advantage of Connect versus other trainings and programs they had participated in.

A small number of respondents spoke about challenges attending Summit; two respondents could not attend due to personal emergencies, and one could not attend due to a work conflict.

Several providers, mostly at lower-performing sites, said they *did not understand the criteria* for Rewards: *“Obviously, I get jealous. I am also working hard, why I haven’t gotten good marks? I don’t understand”* (West, lower-performing intervention facility). *“I was disappointed because I attended the program [Connect] and answered questions in the chat as soon as they asked the questions. But when the [Rewards] result came, I had made very little progress. I thought I would be first. I cried when I didn’t get it. So, when I got home, I deleted the WhatsApp group due to the disappointment”* (Central, higher-performing intervention facility). (The second provider quoted here then received a Reward at the next ceremony and wondered during the interview how much better she might have performed if she had not stopped participating in Connect.) Some respondents also *did not attend Rewards* events. Two respondents—both

lower-performing sites—mentioned feeling badly about not winning Rewards so therefore skipped the ceremonies [*“After seeing my report card, I haven’t attended again. Because of mark sheet the heart was a little bad”* (West, lower-performing intervention facility)]; one respondent cited conflicts with a religious holiday and prayer, one had a death in the family, and one mentioned interference due to bad weather. Many providers also explicitly linked the receipt of Rewards to the number of youth clients served, rather than other criteria.

Several providers spoke about how contextual factors challenged their capacity to fully implement the Six Principles in their practice. This was mentioned by both better- and worse-performing facilities, and included both **clients’ low FP knowledge and awareness** [*“Sometimes it is difficult to give counseling to the patients... it is difficult to make them understand as they are illiterate. Some understand but some do not”* (West, lower-performing intervention facility)]; and **social norms** that pose barriers for some women [*“It is very difficult to change the mindset of people in the area where we are located”* (West, higher-performing intervention facility)]. A few providers also mentioned how lack of space at their facility limited their ability to provide privacy during family planning visits.

COVID was mentioned by some respondents, usually in relation to having delayed the Beyond Bias program (e.g., rescheduled Summit and Rewards ceremony, delayed activities).

Impressions about scale-up and anticipated factors associated with scalability

Among stakeholders, there was **no consensus about whether there are plans to continue or scale up** the program. Some stakeholders were unaware of such a plan, or thought there *was* no such plan; while others mentioned that certain activities were already being implemented via Naya Qadam—a Pathfinder program in Pakistan that works with public sector providers—and there were discussions with GreenStar about whether and how to continue throughout their network.

Stakeholders were largely **positive about the idea of continuing and/or scaling up** the program. Several noted that they hoped it would continue because it was having an impact already, and that sustained attitudinal change would not be sufficient without more program supports: *“This project had a great impact on the people. People have been helped a lot. We want this project to continue”* (Implementing partner). *“Apart from the good habits of our health care providers, they should have reliable availability of contraceptive methods... Right now, they have everything available, but if the program ends, then they won’t have the methods and tools, and this will be a challenge”* (Advisory Board member).

Several stakeholders specifically mentioned that they were **waiting to see the impact evaluation data** before recommending scale-up or continuation: *“We are waiting for the impact data. Until those results, we can’t say to Pathfinder that it is ready for implementation. So, we are waiting until the results will come”* (Implementing partner).

The most common scale-up challenge mentioned by stakeholders was **financial resources**: *“We want to, but we don’t have the resources to scale it up. We have the infrastructure, but the not necessary funds to do it”* (Implementing partner). Another factor mentioned as important for scale-up was the **engagement and buy-in** of key stakeholders. This included policy-level buy-in (“political will”), meaningful involvement of civil society, and a continued role for GreenStar. The government and health system at all levels was also seen as a key party for scale-up and for institutionalizing activities, thereby contributing to scale-up and sustainability.

An activity seen as important for scale-up is **advocacy and communications**. Stakeholders discussed wanting clear dissemination strategies that were well targeted to appropriate audiences—from the government to individual women—and that “pitched” the benefits of Beyond Bias in terms that were meaningful to different constituencies.

Very few provider respondents offered **suggestions for strengthening** the program. Two said that they would appreciate training on additional topics (one specified ultrasound, one broadly suggested that the

program should train on the newest topics and methods), two providers wanted acknowledgment for their participation in the program, one suggested adding financial support, and one recommended adding demand-generation activities.

Stakeholders had suggestions for strengthening the program at scale—most commonly, **adding sensitization and/or demand-generation activities**. Additional recommendations included designing a robust monitoring and evaluation plan that could be implemented at scale while capturing the necessary range, nuance, and frequency of data. This was seen as essential for responsible scale-up: identifying indicators and measuring progress.

Implementation of multicomponent (3-pillar) model

Every intervention provider who reflected on inter-connectedness between the pillars said that the activities were complementary. Some gave examples of **content that echoed across activities** [*“These are interrelated; we also discuss Naseema’s story in the WhatsApp group”* (East, higher-performing intervention facility)], while others spoke about how the **activities were distinct but related** [*“These are different from each other. In my opinion, work is done on our minds in Summit, only then we are able to answer in Connect, and we are rewarded in the Reward ceremony after improvement. All these things are related to each other but not the same”* (East, higher-performing intervention facility)].

Stakeholders were also asked whether, if project activities were scaled up, they would recommend implementing in stages or the whole package. Approximately equal numbers of respondents agreed with each approach. Those in favor of scaling up incrementally said that this was because it would allow providers to fully focus on each stage, would ease the management process during implementation, and would enable evaluation of whether each activity “worked” before introducing the next one. Those who advocated seeing the whole intervention package implemented at scale said it was because the synergistic pillars were the crux of the project and the basis for evaluation: *“I would really like to replicate the model with three pillars rather than dissecting it into pieces because than I will not be confident about the impact”* (Implementing partner).

Translation across geographies

Stakeholders mostly felt as though, **in principle, the Beyond Bias approach was relevant in other countries**. Many recommended **contextualizing the approach** locally, based on demographic and other indicators as well as formative research. They felt it was important to understand and reflect local values in the exact intervention approach, since the topic might be sensitive. Local factors that might be important included religion (including the role and opinions of local religious leaders), and existing networks of health services or community workers/health workers.

In addition, they felt that **existing structures—strength and arrangement—might shape how the intervention could be implemented**. GreenStar was seen as a particular asset and unique arrangement, and some stakeholders felt this might limit how much lessons from Pakistan would translate elsewhere. One felt as though weak communication between partners had affected the intervention’s implementation in Pakistan, so encouraged other countries to ensure they had open communication between policymakers and project implementers (Advisory Board member).

One felt that this approach should not necessarily be implemented elsewhere, that training and awareness programs would have more impact (Implementing partner).

Connecting to the underlying behavior change mechanisms

It was extremely common for providers to say that participation in Beyond Bias had improved their **knowledge of different family planning methods**. Some respondents spoke about generally feeling more knowledgeable about how methods work, side effects, and safe use. A few (at both higher- and lower-performing sites) specifically mentioned learning about appropriate use of methods—for example, based on parity [*“If a nulliparous wants a method of FP, they can have”* (East, higher-performing intervention

facility)]; and marital status [*“We knew about the injections but we did not know that we can give the IUCD to the unmarried girls as well”* (East, higher-performing intervention facility)].

Some providers also spoke about specific changes to their counseling behaviors. The more common themes were: **ensuring privacy** (mentioned mostly among higher-performing providers), and offering **counseling that focuses on the woman’s choice** (mentioned both by lower- and higher-performing providers): *“In the past we did not give them privacy, but now we talk to them alone and give them privacy”* (West, higher-performing intervention facility). *“In the past, we are like, ‘you want to have injection, this should be your date, if it’s not your date, come back next time.’ Now we talk with them and discuss in detail, and make sure about her privacy. We guide them about the methods and side effects and benefits. Then we ask her to choose the method according to her choice”* (Central, higher-performing intervention facility).

There were also several higher-performing providers who mentioned how participating in Beyond Bias has given them skills and knowledge to **resist social forces/norms**: *“I used to be a bit timid before. Now I fear no one. Before everyone looked at me like I was a sinner but now I have proof that this thing is also good from a medical point of view”* (East, higher-performing intervention facility). *“In the past if their mothers said not to give them the services, we don’t give them. But now we have made our minds that we have to deal such patients. We give the services according to the client choice”* (West, higher-performing intervention facility).

Additionally, numerous lower- and higher-performing providers spoke about how they **no longer refuse or limit services** for certain types of clients—most commonly, young women, unmarried women, and nulliparous women: *“We had the myths that we shouldn’t give family planning services to newly married couples and young-age people... But now we give family planning services to 17 years and under age people. Those who are young need family planning services too”* (East, higher-performing intervention facility). *“We used to neglect them—like if a newlywed girl came here and she said, ‘two months have passed since my marriage and I don’t want to conceive,’ we scolded her. But now we don’t do this. We have to meet the needs of patients”* (West, lower-performing intervention facility). *“I have been working for 20 years and in my whole career, I had given FP to only 2 to 3 nulliparous women. But Pathfinder gives us confidence”* (West, higher-performing intervention facility). (However several providers also spoke about continuing to deny or limit services; see below section on “Contextualizing the implementation experience.”)

A few providers mentioned that they now **better understood appropriate use of IUDs**. Very few said they had made structural or operational changes to family planning service provisions: two mentioned differences in how they handle patient flow, and two mentioned making new spaces/private areas for counseling.

Summit was seen as particularly helpful as a learning activity (sometimes referred to as a “lecture”) that **raised awareness** of the issue of bias and the importance of providing young people with family planning. Naseema’s story resonated with several providers.

The unique value of Connect was that providers **learned from one another** and shared experiences. Many providers spoke about this—mostly high-performers and those who were doing well at baseline: *“All the providers, we are all talking like a family. I think the act of learning and teaching is never completed. No one can say that I am hundred percent perfect. We are continuously learning things. When we hear the experience of others, we come to know that there are still most of things we haven’t know”* (East, higher-performing intervention facility).

Several providers—even those who did not score well—said that **Rewards was motivating** for them: *“This motivates us, we feel like we need to make more progress in our work. Like when someone comes in second, then she wants to do better, to come in first next time”* (East, lower-performing intervention facility).

Many providers said that Beyond Bias made them **feel like they were part of a community**. For some, this was built during the Connect activities [*“I like it very much because you all talk, and it seems that this is a*

*group of your family. Everyone shares their experiences” (West, higher-performing intervention facility)]; and for some, it was reinforced during Rewards [“*We laughed together, and we were excited to see who comes in first... and I will clap for her*” (Central, higher-performing intervention facility)]. One respondent spoke eloquently about how this was particularly valuable given the sensitivity of this topic: “*It’s a safe place there we can share our opinion. As this topic is taboo... even our families don’t allow us to talk about it. This is a good platform where we can share our concerns and are provided with solutions. Even my husband is not ok talking about this, so you are a life saver*” (West, higher-performing intervention facility).*

Lastly, a few stakeholders expressed confidence that the intervention would sustain even if activities themselves stopped, due to the attitudinal and behavior changes that had occurred: “*Its success is that, even if this project is over, service providers will continue working in the same way*” (Implementing partner); “*We have empowered our providers and the clinics they have made so much that even if Beyond Bias goes from there, that work will continue as it is*” (Advisory Board member).

Perceived value of the intervention and desire to continue

Most intervention providers thought that their participation in Beyond Bias had changed the volume and type of clients visiting their facility. They attributed **increased client volume to word of mouth that their services were better**, especially for groups that typically experience bias—for example, young and unmarried women. This change was noted by providers at both higher- and lower-performing facilities: “*When we deal with one client, she recommends others to come here. Previously I didn't give them the services but now we do. I have 5 to 6 young clients here every week*” (East, higher-performing intervention facility). “*In the past we didn’t know about how to offer family planning services. If someone came to get injections, then we gave it otherwise we don't know much about it. Now we know about it so we have more patients due to the Nai Umang activities. It also increased my business too*” (East, lower-performing intervention facility).

A couple of providers felt as though there had been no change in their client volume. One said that she did not care about the change (and its associated impact on her business earnings) because she values her religious principles more.

All intervention providers were asked, if they were hired at a different facility, whether they would **encourage adoption** of Beyond Bias and its activities. All except one respondent were positive about this idea. Some expressed that they would naturally carry the teachings and ethos of Beyond Bias with them even if the project were not formally adopted: “*Yes, of course. If I work anywhere, I will have six principles in my mind*” (West, higher-performing intervention facility). The one provider who was not enthusiastic about continuing said:

Q: What else do we need to know about the Nai Umang program activities that have not been covered in this interview?

A: This program is going to finish. After the 3rd [Rewards ceremony] it will be finished, and then we will have a new project with a new name.

Q: Do you think that they should continue this program?

A: No, the new project might be much better than this (Central, higher-performing intervention facility).

Some providers also spoke about the importance of continuing this work because of societal and other pressures: “*Yes, it will be of great benefit. People have blind trust in us. They even tell us, ‘above is Allah and below is you.’ Because of this, too much responsibility falls on us*” (East, higher-performing intervention facility).

Unintended consequences

Intervention providers were asked whether participating in Beyond Bias affected their routine work. Most said that there were **no conflicts**, and they were able to manage their workload and participation in the intervention [*“I manage the routine work along with these activities”* (West, higher-performing intervention facility)].

Several providers mentioned ways in which they **modified their workload** to accommodate the intervention. A few said that they moved clients’ visits: *“Whenever there is a program, we tell our patients in advance that we have to go to this program on that day, so we schedule some other time for them”* (West, higher-performing intervention facility); others said that they shifted their own schedule, or called in backup help. Only one respondent said that her clients were annoyed because visits were taking longer [*“When FP patients take more time, other patients get irritated”* (West, lower-performing intervention facility)], and only one said that she had to miss work entirely due to participation in Beyond Bias activities.

There were some **spillover and unintended consequences** cited by respondents. One provider (higher-performing intervention facility) was worried about promoting risky behavior, and another spoke about changes in her own household due to her participation in Beyond Bias: *“It will increase the indecency a little bit. If we tell this information to children, they will move to the wrong path. They will know that there are safety measures so we can avoid diseases”* (East, higher-performing intervention facility). *“I also got family planning after attending the program because I was not happy in my home. Now, I am divorced. I did not have a baby because of this. When I learned it would not have bad effects, then I used it—otherwise today, I would have kids”* (East, higher-performing intervention facility).

Contextualizing implementation experiences through views from youth, providers, and stakeholders

Despite the widespread enthusiasm for Beyond Bias and the many anecdotes of reduced service refusal or biased counseling, several providers shared **examples of poor-quality and biased care**.

Some intervention providers spoke about strongly promoting IUD use sometimes attributing this to their participation in Beyond Bias: *“As my knowledge increased, my counseling became stronger. Now I thank Allah that I am in such a place where I can tell a client ‘this method is ok for you’ then she will leave the whole world and follow my words. I have a client who ... has three daughters and just gave birth to a son. I told her, we will do your postpartum IUCD [IUD] now, because according to today’s era, 4 children are enough for one family... Her whole family was against her but still she obeyed me and got it done”* (East, higher-performing intervention facility). There were also a couple of examples of **coercive behavior**: *“A girl came, she was unmarried and going to university, so I did the DNC [abortion]. She was very worried, so I asked her to do the injection or IUCD method. She said it might affect her having kids after marriage. I told her, you should have IUCD then when you want to have kids after marriage, you can take it out and have the kids. I did the DNC and she did not come back for IUCD. Then she came back when she was pregnant again, and I said, ‘I will not do the DNC again as it will affect your body,’ but she said she would take the IUCD. I did the DNC and IUCD as well... If they have DNC again and again, it will affect her, so I placed IUCD in her”* (East, higher-performing intervention facility).

Some intervention providers also spoke about **service refusal for moral and religious** reasons: *“If we make them understand with love and care, and we bring them on the right path, then it is much better... If an unmarried visits us and we have aborted her once and she wants FP, it should not be happen. I think it’s not a good thing. We can’t give a free hand, in this way she spends the life of sinner... I have to deal with them in way that Summit taught us, and thanks to Allah, those patients have repentance and don’t take FP after abortion”* (West, higher-performing intervention facility). *“They told us that if an unmarried girl comes, then you have to deal with her case without asking for a reason. But this is not relevant to because it is not in our religion. For me, religion is my first priority”* (Central, higher-performing intervention facility).

A couple of providers spoke about **particularly emphasizing family planning for young women** that could easily “tip” into biased behavior toward young clients if it is coercive, or toward older clients if they are neglected: “*Our focus now is on young patients... we can give them the counselling and make them aware. It will be more beneficial as compared to providing services to those who already have 5 or 6 kids*” (West, higher-performing intervention facility). “*A girl came to my clinic. She was about 17 or 18 years old and wanted to become pregnant. I taught her that first she should think about herself. Wait one year for pregnancy. She would face anemia, her bones would become weak... I told her to enjoy her life for one year*” (East, lower-performing intervention facility).

Several control providers said that they do not receive any young and/or unmarried clients due to the communities they are in and who visits their facility. However, all but one control provider expressed biased views about appropriate FP methods. Examples include:

- **Biologic limitations on *who can have an IUD***: “*Multi load, copper T and safe load are done in the uterus so we can’t give these to the unmarried*” (East, higher-performing control facility).
- **Misunderstandings about *how long methods can be used safely***: “*We can’t give the same method for so long, like injection, pills etc. We do this method mostly for 2 years. After 2 years we change this method*” (East, lower-performing control facility).
- **Insisting that *young women are accompanied*** by elders: “*I also tell everyone that you should bring an elder. Once a girl of 16 years came for FP. She is a good girl, but I asked her to bring your elders with you. She didn’t come again*” (Central, higher-performing control facility).
- **Refusing service to nulliparous women**: “*If a nulliparous comes, I advise her to beget at least one child then take FP.*” (Central, higher-performing control facility)
- **Refusing service to unmarried women**: “*If she is unmarried and said that she needs FP, firstly I scold her... In our society if she is unmarried and wants FP, it is not considered good*” (West, lower-performing control facility).

One control-site provider gave a very detailed story about **refusing service** to an unmarried woman and feeling that this had not been biased care: “*Once I had a patient... who told me, ‘Doctor I have been married for one and a half years,’ I asked her ‘How many children do you have,’ and she said, ‘I don’t have any kids.’ I said, ‘Why do you want to take FP?’ She said, ‘My mother-in-law does not like children. I have been married for one and half years and I want to take family planning from you’... I told her, ‘How do I give you family planning since you don’t have any children, you have been married for one and a half years, and in these one and half years you didn’t even get pregnant. I will give you family planning when you are conceiving again.’ I told her, ‘If you are lying to me... Tell me the truth, why are you going to take family planning? Are you not married? Who is the man standing outside?’ She said, ‘He’s my brother-in-law’ but he wasn’t her brother-in-law, I don’t know who he was, maybe her boyfriend... I took off that girl’s veil, I looked at her and asked, ‘Who are you and where do you come from? Are you unmarried? You want to do such a wrong thing and want to not even get pregnant, and get enjoyment.’ She said, ‘No, doctor, I am married, tomorrow I will bring my husband’... I didn’t behave strictly with her, but I had to ask her, right?*” (East, lower-performing control facility).

Many clients in both treatment and control sites described **feeling comfortable, relaxed, and cared for** in their visits with providers. Clients in both treatment and control sites particularly commented on the good explanation of the providers and their friendly and polite demeanors. Some clients across both treatment and control sites described providers like a friend, sister, or mother. Clients at both treatment and control sites contrasted their visit with poor treatment they had at other clinics by other providers, and many, particularly at treatment sites, shared that because the provider talked “lovingly” they felt they could trust the advice of the provider. Many clients across both treatment and control clinics shared that they already trusted the provider prior to the visit because they had been visiting the provider for some time. **No client felt judged or scolded** in either treatment or control facilities. The very few areas where more negative

aspects of the visit came up were related to how busy the facility was, the lack of privacy, and the time they spent with the provider, which was reflected in both interviews with clients served at treatment and control sites.

Most clients at both treatment and control sites described being told about pills, injections, and IUDs. Some clients emphasized the provider gave them complete information and let them make the decision that was best for them. Some clients at both treatment and control sites shared that the providers encouraged them to take up specific methods; however, all clients felt like even if that was the case, the provider ***did not force them*** to take up the method that was suggested. The most encouraged methods were the injection and the IUD. Methods were discouraged in few cases in both intervention and control sites. Many of the clients mentioned that the provider mentioned side effects, the duration of use, or ease of use to justify their recommendation.

Most often the client mentioned that something the provider said swayed them to take up a specific method; however, being scared of the method (IUD and injections most common) or hearing about the method (or methods they did not want) from friends or family was also common. ***Many clients cited that the provider told them they could relax for three months with the injection, and many said the pill would be difficult given they would have to take it every day.*** Cost was influential in some clients' decisions, but came up but less often. ***Husbands' preferences*** also featured into how clients decided on a method to use, as did duration of use. Provider suggestion was more commonly highlighted as influential in the client's decision-making in the control group and more often centered around suggesting injections.

Most clients reported that they were ***told of the side effects*** of at least some methods in both the treatment and control group. The most common side effect the client said the provider counseled on was misbalanced menses/periods, particularly related to injections. Some clients said the provider did not provide any information on side effects or said the provider said there were no side effects. There were also cases across both control and treatment sites where the provider highlighted the minimal side effects of some methods, while emphasizing side effects of other methods. Many clients across treatment and control sites reported that providers described how the methods worked (duration, frequency of pills taking, stopping use, etc.) and that they should come back in the case of any issues.

When asked what could be improved about the clinic or visit, many clients shared that ***their visit was good and nothing could be improved.*** Across both treatment and control sites, when asked most often, clients talked about the clinic being too small and feeling crowded, needing to be cleaner, more hygienic or look nicer, or feel the need for additional privacy. Issues with the provider were mentioned less often but almost exclusively raised by clients who visited control providers—a number of clients mentioned that they did not get enough information or did not understand the information provided by the provider.

Most clients in both intervention and control sites were ***asked their age*** or had been asked in previous visits. Some clients said that they did not perceive that the provider treated them differently because of their age and that they did not think the provider would treat clients of different ages differently. However, ***many clients in both treatment and control sites seemed to think that a provider would hypothetically treat a client differently who was younger or older based on how their age intersected with marital status or parity.*** One client at a control facility said that she had observed the provider tell younger clients to come back when they were older and had children. A client at a control site described that she thought the provider would ask for proof that the client was married if they were young and came alone. Another client at a control site said they thought a provider might open a case against a client under 18 since getting married before 18 was illegal. A client at a treatment facility thought that a provider might tell a younger client they should not take FP.

Most clients at both intervention and control sites shared that the provider asked about whether they had children and how old their children were. Most clients thought parity would affect their visit with the provider in some way; however, there were some exceptions. A few clients in the treatment facilities thought the provider would treat all clients well regardless of parity, and one even shared the provider

encouraged them to spread the word about her services to newly married women. Many clients at both treatment and intervention facilities shared *they thought the provider would tell a nulliparous client that she had to have children first before getting FP*, unless the reason was compelling, but this was hypothetical and mostly based on what the client thought would be appropriate. There were some clients that shared ways in which their parity came up during the visit.

Most commonly, providers across both treatment and control sites *encouraged young clients to take up contraception if they had young children or many children*, sharing they needed a gap between children to protect their health. One client in describing this advice from the provider said: *“She guided me with strictness to take care of my health”* (22 years old, married, has a child, at a higher-performing treatment facility in West). There were also some examples of providers encouraging clients to have children instead of using family planning. While these examples were both in treatment and control sites, they emerged more frequently in control sites. One client at a control facility shared: *“When I came here the first time, I did not have a baby after 8 months of marriage. So my husband told me to come here for FP as my age is small and my family is quite big too. The doctor told me to first have a baby and then you can have a gap”* (23 years old, married, has a child, at a control facility in Central). Two other clients at control facilities reported the provider encouraged them to either stop using family planning in order to have a child, or to delay use of family planning until they had a child.

A few clients across both intervention and control sites also mentioned being encouraged to take different methods based on their parity. A client at a treatment facility shared that the provider *would not give the IUD to clients without children*. Another client at a control facility said that the provider changed their recommendation based on her parity: *“Yes, she has forbidden me, she said you have one child of 2 years and other is of 6 months, it’s necessary for you to take FP. Yes, she made changes in suggestions because of my children. She said you should take injection”* (24 years old, married, has a child, at a control facility in East).

Clients across both intervention and control sites generally reported that providers asked them about their marital status and how long they had been married. Some reported the provider asked *about their husband’s job* and for more information on their family, including where they lived. A handful of clients in both the treatment and control group also reported the provider asked if they had their *husbands’ permission*. Most clients seemed to reflect on the social norms around unmarried women’s use of contraception in how they answered the question of whether the provider would have treated unmarried clients differently. Some at both treatment and control sites thought the provider could scold the client and ask them to leave without a method, while others at both intervention and control sites thought that the provider would treat them nicely, in some cases providing information on the methods especially if they provided reasons or permission from elders in their lives. Clients in both the control and intervention group remarked on how they believed the provider would treat any client well, but also thought the provider would be justified in asking clients many questions about their status.

Client’s class and education level, the health status, and where the client’s home was located were also mentioned as factors the provider asked about by a small subset of clients.

Comparison with quantitative findings

Qualitative results support the quantitative evidence of attitudinal changes among providers in Pakistan following participation in Beyond Bias. Intervention providers reported being more open to serving unmarried women and nulliparous married women and influencing their understanding of IUDs; and, an expansion in patient-centered counseling among treatment providers. We also find in the quantitative data that unmarried women were more likely to be scolded than married women in both intervention and control clinics (Table A24), which providers reported doing explicitly in the interviews. The qualitative findings also contrast with the quantitative findings in several ways. First, some providers reported changing behaviors as a result of the intervention so as to not limit or refuse services to certain types of clients, particularly unmarried clients. This does not show up in the quantitative data partly because we have very

few unmarried clients in the exit surveys, and the mystery client unmarried profile was designed to be as socially acceptable as possible. As with the client exit data, these qualitative data cannot speak directly to bias experienced by unmarried women, and to a lesser extent nulliparous women, because very few interviews were conducted among women with these characteristics. Second, there were several anecdotes of bias (or expectations of bias) for young women, unmarried women, and nulliparous women that do not show up very prominently in the quantitative data. This result is not necessarily inconsistent with the quantitative findings; the qualitative findings demonstrate that these biases occur, and the quantitative findings show that they are not as common as expected (but still present). Qualitative findings also suggest that intervention providers perceived an increase in the number of clients seeking family planning services, which is consistent with the service delivery statistics.

Tanzania

Key Takeaways: Providers in Tanzania were very positive about Beyond Bias. Summit was lauded as a unique, impactful and enjoyable experience; providers liked learning from their peers at other facilities via Connect (WhatsApp); and Rewards was motivating both to those who did and did not receive an award. Many providers spoke about changes to their knowledge and attitudes about FP for young people—and several shared poignant anecdotes to illustrate these changes. Some facilities also made workflow changes—for example, prioritizing young clients for faster services, and new youth-friendly operating hours. Providers mentioned systemic implementation challenges, including space constraints (more common at lower-performing intervention sites) and staff shortages (more common at higher-performing intervention sites). At a higher level, program and policy stakeholders mentioned some implementation challenges including the mix and engagement of partners. There was widespread enthusiasm among providers, managers, and stakeholders about taking Beyond Bias to scale; but several recommended that this should be done by the government as an institutionalized/integrated service and following engagement of diverse stakeholders from youth, civil societies, several Ministries, and community groups. Providers at control sites, and clients at both intervention and control sites, shared numerous examples of biased FP services, particularly for young people (encouraging particular methods that would cause a quicker return to fertility), married women (needing partner permission), and nulliparous women (expectation that those who are married should begin childbearing).

Factors that enable and inhibit successful implementation

Almost all providers talked about how Beyond Bias’s goal was to ensure that youth could achieve their goals and dreams by preventing pregnancies and the associated risks of childbirth and unsafe abortion. Providers particularly highlighted how providing family planning could prevent youth from dropping out of school. Many providers perceived the stakes to be high—one provider said: “...if you do not educate those young people, tomorrow’s nation will burn up and the youth won’t get to their goals” (Provider, Ilala, lower-performing intervention facility). Providers also said that family planning should be provided to all clients without discrimination or stigma. A few also highlighted the need to counsel and provide education on HIV and STIs.

Both providers and managers expressed how much they *enjoyed participating in Beyond Bias*. General attributes of the Beyond Bias program were cited as important for successful implementation, including the ongoing structure of activities (not just a one-off training), the engagement of program staff, the clarity of the Six Principles, and the clear goals; each of these was mentioned by one respondent.

Summit was perceived as *different from other trainings*. The incorporation of *music and games* was mentioned by several participants: “Others, when you go you hold a notebook and pen, but at Summit you will play, you will sing” (Provider, Temeke, lower-performing intervention facility). Additionally, the *participatory and engaging structure* was frequently mentioned: “It was not a meeting that made you a listener, but it made you a participant” (Provider, Kinondoni, higher-performing intervention facility). The

overall **welcoming and open climate** of Summit was viewed as unique and helpful: *“It was very exciting, there was freedom for us to speak amongst ourselves... to talk about things that concern young people especially. There was no fear of talking. You know us Tanzanians are afraid of speaking about these things when an older person is present. But we were free to talk about anything as long as we understood each other. There was that kind of freedom”* (Provider, Kigamboni, higher-performing intervention facility).

Attributes of Connect were perceived to facilitate its implementation, primarily related to the WhatsApp activities. Providers and managers at both lower- and higher-performing sites liked the **connection to providers at other facilities**: *“It becomes difficult to do it alone, but when you are in a group like this, you help one another in doing this, by sharing ideas”* (Provider, Ilala, lower-performing intervention facility). *“You find yourself sharing ideas with different people that you do not know. Maybe someone from Kigamboni has encountered some challenges there, he comes and shares in the group...this person suggests this, another one suggests this, and maybe if you have thoughts you give some ideas. So you find yourself gaining from different places, so even if you didn’t know something before, you get to know it”* (Provider, Temeke, lower-performing intervention facility). Two managers also mentioned enjoying the community-building at their facility through the in-person sessions: *“Meetings at the health facility are very important because you discuss the challenges that arise while providing services... and you come up with solutions. The sessions were very good, and they helped us see what to do to improve where there was a challenge”* (RCH, Ilala, lower-performing intervention facility).

Only three respondents mentioned specific attributes of the implementation of Rewards. At a lower-performing site, a provider and a manager spoke about being motivated by Rewards; and a manager at a higher-performing site said they were excited about attending Rewards ceremonies to see who performed well.

The most common implementation challenge, mentioned by several providers, mostly at lower-performing sites, was how **space and infrastructure constraints** limited their ability to provide privacy per the Six Principles: *“In the service delivery room, there are several interactions. There should be a room for providing [FP] services so that when you serve a patient, someone cannot hear what you are talking about”* (Provider, Ilala, lower-performing intervention facility). (Only one respondent mentioned supply stock-outs as a challenge.)

Respondents—primarily from higher-performing sites—felt that they had **insufficient staff** to effectively deliver FP services or implement the intervention well: *“We should permanently allocate someone daily to serve all the clients... You may get many clients but there’s no nurse in the room to serve them. I’ve advised the matron to do that every day in the morning, make sure there is someone assigned.”* (Provider, Kinondoni, higher-performing intervention facility). *“You go to the Summit with seven people but later you find yourself left with three people, so you cannot achieve the goals”* (RCH, Kinondoni, higher-performing intervention facility). One respondent also mentioned that the site **no longer had a champion** for Beyond Bias: *“The attendant that we had in the beginning for Beyond Bias was transferred from our facility... Our energy decreased because a big percentage didn’t know about Summit”* (Provider, Temeke, lower-performing intervention facility). A few providers also perceived a **lack of buy-in** to the intervention among providers at their facility: *“[At Rewards ceremonies] you can see that some of our colleagues bring ten people, but at our health facility we only have two. [When I ask people to come they say] ‘I’m busy, I’m busy’—but why have our colleagues been able to cooperate?”* (Provider, Kinondoni, higher-performing intervention facility).

At a few sites in Kinondoni and Kigamboni, several providers mentioned challenges in communicating and counseling young people effectively due to **norms and social constraints**, most commonly around involving parents in FP services: *“The challenge is in our communities where we live... their understanding is limited. A daughter comes [to get FP] and later the parent comes, ‘why did you do 1, 2, 3’... This service does not require consent from a parent or partner, especially in the groups that we have targeted”* (RCH, Kigamboni, lower-performing intervention facility).

A few respondents at lower-performing sites said that they were **unhappy about Rewards**: “*We are struggling to get a prize, because we go and see our peers get a prize but we are empty-handed. It hurts so much*” (Provider, Kigamboni, lower-performing intervention facility). At each of two facilities, respondents (mostly providers and one manager) said they did not fully understand the calculation of Rewards scores or felt they had been mis-scored.

Three managers and one provider—all from lower-performing facilities—mentioned that **technological connectivity** limited their ability to engage in Connect, including not having a smartphone and not having access to a data bundle.

Only a few respondents, mostly managers, mentioned that **COVID-19** had disrupted Beyond Bias program activities like Summit. Several policy and program stakeholders mentioned COVID-19-related delays in project implementation—both the pause in activities and having project meetings virtually rather than in-person—and fewer people seeking FP services at facilities.

Stakeholders identified partner engagement as a factor that affected implementation but had a variety of perspectives on this. A few suggested that the mix of partners was not quite right, e.g. that **health workers were not engaged in a meaningful way** [“*I can’t speak the language the providers speak... We already see them as being biased and they see us as activists. So when you start speaking, there becomes a misunderstanding. But [it would be better] if we use their colleagues that supervise them*” (Global partner)] and another wished to see **deeper involvement of the Ministry of Health**.

Several stakeholders spoke about monitoring and disseminating information about the project. A few mentioned the importance of collecting data, and making decisions about scale-up based on this. One mentioned the importance of considering how language is used to communicate about the project, both terminology and choice of language: “*Beyond Bias has a certain language that is strange, prototyping, segmentation... When you speak that language, people can’t relate and then someone sees that it’s things to do with white people. So, if they can trickle it down a little bit and take it to the level of our providers, so that they can understand. Use the people’s language. I am using English, maybe I should have used a little bit of Kiswahili*” (Global partner).

Staff turnover was also cited by stakeholders as a challenge at both the health worker level and at the district/regional level if those who have been trained and engaged in the project are lost.

A few stakeholders also mentioned how policies may have both challenged, and facilitated, implementation. There were reportedly some **limitations on language and terminology** imposed by policies [“*You cannot talk about things and so we were forced to change from ‘family planning’ to ‘life skills’*” (Global partner)]. One stakeholder mentioned **policies that helped motivate and retain health workers**.

Lastly, **very few clients had heard of Beyond Bias**. The only client who had heard of it was interviewed at a control facility, and she had heard of Tunda when visiting a different facility: “*Tunda is a family planning health education project, is a good project that helps a lot of mothers and girls*” (20 years old, unmarried, has children, at a control facility in Kigamboni). Eight clients, which included some at control facilities, had seen Tunda posters but had very little context for what they meant: “*Truthfully, I have not understood that Tunda project but when I entered into the service provision room, I saw some posters that have been posted there...So I think maybe they are involved with health issues, because they have put it in a health facility and so it must be about health issues*” (24 years old, married, no children, at a lower-performing treatment facility in Ilala).

Adaptations during implementation

Very few providers who participated in the intervention spoke about making changes during implementation. Two mentioned that **Connect reduced in frequency** over time; at one of these facilities (a lower-performing site), a key intervention champion was transferred elsewhere so they began meeting less often, but the respondent said that someone from the Beyond Bias project staff came to re-motivate them.

Several providers at intervention sites spoke about going to speak with young people at schools about FP, as an activity they undertook alongside or complementary to Beyond Bias.

Some providers and managers also mentioned changes to workflow and structure after participating in Beyond Bias. The most common was to **serve young clients with priority**; this was mentioned by many respondents at lower- and higher-performing sites: “*When young people come to get these services, we have to give them a priority because they have a responsibility to get these services*” (RCH, Ilala, lower-performing intervention facility). “*When a young person arrives at our health center, we serve him or her quickly so that he or she can leave quickly*” (Provider, Kigamboni, lower-performing). “*Now when a young person comes, they are given priority because we know they are afraid so they don’t need to stay there for long time and risk being seen*” (RCH, Temeke, higher-performing intervention facility). It is worth noting that clients at intervention facilities did not always perceive this: some said that the provider tended to pregnant women and children first and, as a result, these clients and others who did not specify why spent multiple hours at the facility.

Respondents from three sites (two lower-performing and one higher-performing) mentioned making **changes to operating hours** in order to accommodate young clients: “*We decided to implement services for the youth, and we added time until six o’clock at the clinic, so it can be easy for them when they get out school to get to us*” (Provider, Ilala, lower-performing intervention facility). “*We decided to start Youth Day every Saturday. It is a day for young people on their own. It is a day for young people to be free to learn about contraceptive health and family planning methods*” (Provider, Temeke, higher-performing intervention facility).

Impressions about scale-up and anticipated factors associated with scalability

Among the few intervention providers who spoke about scale-up, and the managers (RCHs) who were asked about this, **all wanted to see the project taken to scale**. The main reasons for endorsing this were the importance of making youth-friendly services more available and achieving better health outcomes at a national level: “*I also believe that other health facilities outside Dar have not received this education and they are still doing these discriminatory services*” (Provider, Ilala, lower-performing intervention facility). “*Because of the advantages we have seen in Beyond Bias, if it was in the whole country I believe even teenage pregnancy, sexual violence, sexual transmitted diseases could be reduced a lot, because all providers at all facilities will have the same goal to help youth*” (RCH, Temeke, higher-performing intervention facility).

Stakeholders were very positive about the prospect of scaling up Beyond Bias. Most felt that it **should be brought to other parts of Tanzania** so that young people across the country could have access to better FP services. A couple mentioned that the Board is already planning for scale-up, and seeking partners and funding for this. On the other hand, a couple of stakeholders said that they were not yet sure whether this should be scaled up since the evaluation was not yet complete: “*Everything will depend on this research*” (Government/government adjacent).

When asked who would be important to involve in scaling up Beyond Bias, several stakeholders specifically mentioned the importance of **diversifying voices**: “*I think the main thing is to engage the stakeholders on all levels. The community too should be engaged, everyone should play their part*” (Global partner). One suggested undertaking a stakeholder mapping exercise: “*I think key influencers, technical people, project partners, and of course the government are the key people that can move the stick. It’s all about doing mapping, explaining to them and then getting their commitment*” (Civil society organization).

Many said that the **government** should be involved—the Ministry of Health was mentioned often, but other entities were also suggested [“*Don’t stop at the health ministry... Young people are everywhere, reproductive health is more than just the health ministry*” (Government/government adjacent)] including Planning and Economy, Sport, Youth, and Regional Administration. When stakeholders discussed how and why to engage these Ministries, this was discussed in terms of institutionalization, integration, and

sustainability: “For something to be sustainable you have to get a commitment from the government. When you say that you are running a project, you fail to be sustainable” (Civil society organization). One stakeholder did mention concerns about how the Ministry should be included: “The Ministry already has its strategies and its plans, so [Beyond Bias] should make sure that it goes with the Government’s and the Ministry’s plans. Not to immerse it totally over there because it becomes a mess when everyone comes with their project. But to make sure that anything that they do, is in line with the Ministry and they are the ones that will support the Ministry in implementing that approach” (Civil society organization).

In addition, **civil society and community groups** were mentioned by several stakeholders as very important to include in scale-up, including youth groups, disability rights groups, religious groups, faith-based organizations, and also **young people themselves**: “A youth should be put on the Board, and he can bring ideas that he gets from his fellow youths” (Civil society organization)

Stakeholders’ anticipated challenges to scale up focused on budgetary needs and social/community norms. The budget issue was mentioned often among stakeholders; moving from pilot to national-level implementation would **require more funds**, although a few hoped that there would be some **cost savings if activities were better integrated** with the Ministry and existing work: “If we want to integrate it into government programs, I think it will become easier and the costs will not be so great because you have support from the government” (Global partner). “If we consider integrating the intervention, it will be easier. For example, the Summit can be integrated into family planning training” (Implementing partner). Community engagement, and existing norms and attitudes, were seen as a potential scale-up challenge, particularly across different geographies and types of communities.

When asked for their recommendations to successfully scale up, stakeholders commonly mentioned the importance of **encouraging and learning from adaptations**: “We continue learning from adaptations... It is like eating chips—one will add chilli and one will not add chilli, but the base is that two people have eaten chips. So, there can be an adaptation, it is allowed to happen” (Implementing partner).

Advocacy and strategic dissemination was mentioned by a few stakeholders as a way to garner support and gain buy-in (and increase the fiscal space): “Involve various implementation agencies, various private organizations that are doing implementation, the government, donors, various stakeholders who can adapt what we are doing and then do it so that it can spread in the whole of Tanzania. So, I think that what I can do is to do dissemination strategically” (Implementing partner).

Most clients interviewed provided at least one suggestion for improving FP services. Clients across both treatment and control facilities recommended **structural changes**: a bigger building, an increased number of staff dedicated to family planning, and increased privacy by separating clients coming for different services. Clients in both intervention and control facilities also suggested that facilities **increase their family planning outreach to communities** including to schools, broader community sites, male partners, and parents. Clients emphasized the benefit that family planning could have in these comments and highlighted the fear and lack of knowledge that they felt were persistent in their communities related to family planning. Intervention providers highlighted in their interviews that outreach to schools was a large component of their strategy to increase outreach to youth.

Implementation of multicomponent (3-pillar) model

All providers and managers said the pillars had synergies and were all valuable, non-contradictory, and synergistic: “They helped each other because they are three parallel, complementary things” (Provider, Kinondoni, higher-performing intervention facility).

Stakeholders were asked, if Beyond Bias were to be scaled up, whether they would recommend introducing the project in phases or all at once. Nearly all suggested doing it in phases in order to learn after each phase, and because it might be confusing to introduce everything simultaneously across the whole country. Only one stakeholder said they would recommend taking the full package as implemented to scale, contingent on budget availability.

Translation across geographies

Managers were **enthusiastic about bringing Beyond Bias to other countries** as well: “*Young people are everywhere*” (RCH, Ilala, lower-performing intervention facility). Most did not offer specific suggestions about this translation process; the exception was one respondent (from a higher-performing site) who recommended that Beyond Bias should train all providers, not only those who focus on family planning: “*Beyond Bias should not be only for family planning providers, it must be even to the doctors because they are meeting youth... If the doctor has education about family planning it will be helpful... We are trying to change mindsets, so they need to participate. Even guards, so that when they see youth they will direct them to family planning*” (RCH, Temeke, higher-performing intervention facility).

When stakeholders were asked to reflect about translating Beyond Bias to other countries, they most commonly discussed the importance of **tailoring to the local context** due to differences in customs and culture, as well as systems and structures. A few stakeholders mentioned that the human centered design approach of Beyond Bias specifically meant that such local adaptations, and a connection to a locally relevant theory of change, were necessary. It was sometimes mentioned that, because this was a three-country pilot, there may already be learnings that could be meaningful in different geographies. Local differences that were mentioned as potentially affecting introduction of Beyond Bias to new subnational geographies within Tanzania were cultural and religious beliefs, urban versus rural differences, and local patterns and norms around health service use.

Additionally, stakeholders recommended **ensuring commitment from the government**: “*For another country I can advise them that what they should concentrate on first is the involvement of the Government. Ensure there is great buy-in from the Government before they start doing that thing... [to ensure that] they will get great support—and when they get great support, it means that that is a success*” (Implementing partner).

Connecting to the underlying behavior change mechanisms

The most common benefits of Summit mentioned by respondents were increasing motivation and providing information. Several providers, from both lower- and higher-performing sites, felt that Summit was helpful for **reminding or motivating them** to focus on the needs of young people: “[Summit] made me think about how a young client is important to the community and me. Therefore, I need to give her the best service at the right time. It also reminded me that I need to prioritize young people to help them achieve their goals” (Provider, Kigamboni, lower-performing intervention facility). “Summit has brought value because my brain had slept in serving young people” (Provider, Temeke, lower-performing intervention facility). For several providers and managers, more commonly at lower-performing sites, they **learned new information** at Summit including the Six Principles and how to effectively counsel young people. A few providers—mostly from higher-performing sites—also spoke about how participating in Summit helped them **recognize and overcome their own biases**. One provider from a lower-performing site in Temeke shared this impression of how they were changed after participating in Summit, which weaves together all three of these themes:

“I learned that when a young person comes to me, she will tell me the truth, ‘Nurse, personally I need to continue with my education, but I have started having sex, I can’t avoid it, how can you help me?’ So, we sit down and teach about reproductive health, but we advise them that you are still a young person and you will have to use family planning. She chooses a method and we serve her and she leaves. There are many things that we learn [at Summit]... I see that this young person has future goals, she is expecting to be a doctor, to be an attendant like me. But without me serving her well, I will lose her. So that I don’t lose her, I have to help her by advising her so that she can continue using family planning so that she can achieve her goals.”

By far, the most common outcome reportedly resulting from Connect was **exposure to new ideas**: “*I felt good getting different ideas from the WhatsApp. There are things I learned through my colleagues...I*

enjoyed it because it was an opportunity to share different ideas” (Provider, Kinondoni, lower-performing intervention facility). This was mentioned by all but one of the providers at intervention sites, and most of the managers, who discussed this topic. Several providers, both at lower- and higher-performing sites, also felt a sense of unity and connection from participating in Connect, mentioned particularly about the WhatsApp group: *“In that WhatsApp group, if I have a challenge in my facility, I send and share with my colleagues; or if anyone encounters a challenge, she brings it to the WhatsApp group. We discuss it as one, and we come up with a solution that can help us in providing services”* (Provider, Kinondoni, higher-performing intervention facility).

In discussing the new knowledge gained from Summit and Connect, **very few providers mentioned specific information about methods or approaches to counseling**. Exceptions included one provider at a lower-performing site who said they sought advice from Connect about counseling a client experiencing side effects from an implant; and a provider at a higher-performing site who said: *“For a young person of 15 years, I advise them to stop [having sex] and if they can’t, I tell them to use condoms. And if you feel like you can’t stop, you can use implants, injectables, or insert an IUD”* (Provider, Kigamboni, higher-performing intervention facility).

Nearly all respondents—18 of the 21 providers who discussed this and four of the five managers—said that they felt **motivated by Rewards**. This was therefore expressed both by those who had, and had not, received a Reward. Those who had received awards wanted to continue doing so: *“Getting an award inspired us to say that it is possible... If we are positive, all things are possible. So it has made us to be brave in providing services to young people and everyone in general”* (Provider, Kinondoni, higher-performing intervention facility); and those who had not received an award wanted to achieve this: *“It motivated me a lot because when your colleague from another facility has received an award and you haven’t received, it motivates you. When you go to your facility, you work well so that you also receive that award”* (Provider, Ilala, lower-performing intervention facility). *“You see your colleagues take the award, you look at what you did wrong and this enables us to do better and better”* (Provider, Kigamboni, lower-performing). A few providers, mostly at lower-performing sites, also said that they learned from their colleagues at the Rewards ceremonies: *“We ask our colleagues, ‘what did you do in order to receive an award’ and they share with us those secrets so that we can reach those goals”* (Provider, Ilala, lower-performing intervention facility).

Perceived value of the intervention and desire to continue

Providers at intervention sites were **positive about the prospect of continuing** the project. This was expressed both by providers at higher- and lower-performing sites: *“This project has really helped us, we were in darkness but now we are going towards the light”* (Provider, Ilala, lower-performing intervention facility). Specifically, respondents spoke about wanting to continue Rewards and Connect in order to continue being motivated and informed to make changes that will help young people: *“Awards should continue. They are good, they improve, they are invigorating, they motivate”* (Provider, Temeke, higher-performing intervention facility). Several spoke about how **they would continue to follow the principles even if the intervention stopped**: *“The goal is not for us to work for a gift, but for us to provide service is our responsibility. They have strengthened us and given us the courage to provide services every day. It is my responsibility. The award will be gone, but I will stand where they made me”* (Provider, Kinondoni, higher-performing intervention facility).

Respondents were universally positive about **wanting to see Beyond Bias implemented** in a hypothetical scenario about transferring facilities.

Some providers and managers reflected broadly on how Beyond Bias had influenced them. Most commonly, respondents—at both lower- and higher-performing sites—said that they felt more motivated to help young people now: *“In the beginning, when I was serving these young people, it felt like I was guiding them to continue having sex because when they receive family planning, they will not think of what will come next because they have already avoided getting pregnant. So, at the beginning, I was thinking, if I give family planning to this young person, I would be encouraging this young person to have sex. But it*

is not like so. When I give this young person family planning and I sit down with her and I educate her, she understands—but also she gets to reach her goals, she avoids teenage pregnancies. If I wouldn't have given her a method she would have gotten pregnant and that pregnancy can take her somewhere bad, maybe she can get preeclampsia and die. So I have learnt a lot” (Provider, Temeke, lower-performing intervention facility). *“In the beginning, I myself was seeing young people and thinking ‘why should they come to look for family planning, they are young, they are in school, why do they start to do these things.’ But after the Summit, it has educated me and I have been able to find out, aha, this young person has emotions and when she has come to your facility, she is need of a service and why should I not give it to her? And so it has motivated me. Now when I see a young person, she cannot go without me leading her the right way, I will listen to her”* (Provider, Kinondoni, higher-performing intervention facility). *“For students, the challenge they were facing was when they came in uniform... We changed it to be a friendly service for young people... Students can come here in uniform, and it will not be a problem”* (Provider, Ilala, lower-performing intervention facility).

Some also recounted specific anecdotes about how they had behaved before participating in Beyond Bias, with regret: *“The first time I met with a girl, I asked her ‘how old are you?’ and she told me she was 17 years old and she was in form two. I asked her what she wanted and she told me she wanted injectable. ‘You want injectable! Are you unable to control yourself?’ ... Immediately I told her I could not serve you, wait for someone else to come and serve you. I did not serve her. My friend, to this day my heart aches for that girl”* (Provider, Temeke, lower-performing intervention facility).

Also, some providers said that they felt stronger and more confident in their capacity to counsel young people: *“They have really given me the strength to improve my services, They have made me see that young people are unique. They have made me love family planning more. It has given more strength in providing services”* (Provider, Kinondoni, higher-performing intervention facility).

Unintended consequences

Most providers said that they faced ***no problems integrating Beyond Bias*** participation into their duties. This was most commonly attributed to the overlap between Beyond Bias and their work, both logistically (many activities occurring at their place of work) and in function: *“Many of the responsibilities, I get to do them here at work. And they are done in parallel with my work, because even when I give advice to the young people, everything goes hand in hand”* (Provider, Kigamboni, higher-performing intervention facility).

The few providers who said that participation in Beyond Bias interfered with their work mostly said that they were ***able to manage these conflicts***, such as planning their schedule to allow for engaging in activities. A few also said that the timing of project activities worked out well—for example, using Connect after work.

Only one provider interviewed at a control facility had previously heard of Beyond Bias.

Contextualizing implementation experiences through views from youth, providers, and stakeholders

Most clients across both treatment and control sites ***had a positive experience with providers***. They reported that providers were generous, cheerful, and welcoming. They thought providers explained family planning methods well, acted like a friend or relative, gave them a chance to ask questions and express themselves, and made them feel at peace. Some in both treatment and control sites framed the positive behavior in opposition to what they had experienced at other facilities, where they felt judged, not able to ask questions, or were simply told by the provider what to do.

Of the few clients across both treatment and control facilities that reported any negative aspects of the visit, they reported they were not given the chance to talk or ask questions; were not given enough information; felt like the provider needed to provide care more “lovingly” or with more attention; had to wait a long time (>3 hours); shared they did not feel comfortable because there were two providers in the room; felt like

they could not get the method they wanted because of stockouts; and felt judged by the provider because they were students, were married without children, or held a specific job. In describing the need for more privacy, one client said: *“I got two nurses, and when you get two nurses you cannot explain yourself very well... When you find that they are two, you get that you are not free and so you can stammer/stutter or you may not be able to speak and end up not listening to her very well, you end up feeling shy”* (19 years old, unmarried, no child, lower-performing treatment facility in Ilala).

While many clients in both the treatment and control facilities felt like the provider allowed them to make the decision that was best for them after getting information on different family planning methods, some clients said the provider either clearly encouraged or discouraged certain methods. This was more common among clients who visited intervention facilities. Most commonly, clients reported being encouraged to take up implants and sometimes IUDs and were discouraged from using injections and pills. Clients described this was because the provider thought that the injection had side effects like long-term delays in fertility or because the provider described they thought that the client would be unable to keep the three-month or daily regimen required for injections or pills.

Although providers at intervention sites very commonly said that participation in Beyond Bias had changed their perspectives on, and approach to, FP for youth (as described above), some still shared examples of biased care, although these were relatively uncommon. The most often-mentioned persisting manifestation of bias was the ***need for youth seeking FP to have parental permission***.

The majority of clients said that their age did not impact their visit with the provider; however, some clients did highlight ways in which their age impacted the visit. Most commonly, clients at treatment facilities reported that providers ***linked their recommendations of methods to the client’s age and often whether they were students***. Most often in the treatment facilities, the client reported that the provider told them implants would be better for them given their age; however, some clients also reported the provider discouraged use of IUD and implants. One client served in a higher-performing treatment facility perceived that the provider was at first hesitant to provide services because she appeared young. Another client felt like the provider judged her while simultaneously saying she could use family planning: *“He didn’t judge me in such a way but gave the impression that young people use family planning methods, because not everyone uses family planning methods, but others see it as a way of committing prostitution”* (20 years old, unmarried, no children, at a higher-performing treatment facility in Temeke). One client at a higher-performing treatment facility said that she saw a paper that listed a minimum age of 15 for family planning. At a different treatment facility, two clients reported in very clear terms that they felt judged, shamed, and scolded by the provider, given that they were young students:

“From the way he was telling me how to use the family planning method, he told me to use the long-term method because I have no family. That’s exactly what he said, ‘because you are a young girl, you have to stay without having a child until you achieve your goals.’ He spoke many words that were also not good.... As I recall, telling me ‘you are a 20-year-old who has started having sex and is a student. Why not concentrate on your studies? Why do you get involved in sex? Because you started prostitution early? If you’re younger, if you’re doing family planning, what are you going to look for?... How many people do you share this act with?’... He was persuading me to use something I probably didn’t want” (20 years old, unmarried, no children, at a higher-performing facility in Ilala).

“... He would refer me as ‘very young one’ and directed me that the younger one should use this method [the implant] to avoid unprotected sex and teenage pregnancy. He became more and more aggressive, he was becoming more and more frustrated with me, and I was overwhelmed with anger and resentment” (19 years old, unmarried, no children, at a higher-performing facility in Ilala).

On the other hand, a handful of clients mostly concentrated in treatment facilities felt they were ***served well even though they were young***. In one example, the provider commended them for seeking family planning and “not sitting there and getting pregnant” (22 years old, unmarried, has children, at a control facility in

Temeke). One client reflected back BB's language, saying: *"We are tomorrow's nation and so, my age hasn't affected anything, that is even what has made the service provider serve me well"* (21 years old, unmarried, no children, at a higher-performing treatment facility in Kigamboni).

A few clients at treatment facilities said that the provider reminded them about STIs since they were young; providers at control sites also expressed that young and unmarried women were at **higher risk for STIs and HIV**, particularly as some may be sex workers: *"The questions we ask of an unmarried mother, we ask her about the activities she is involved in for example there are some unmarried women may be in the business of prostitution"* (Provider, Kigamboni, middle-performer, control facility).

Similarly, providers at both intervention and control facilities spoke about spending time to ensure that young people made well-informed choices. Simultaneously they also discussed recommending certain methods for young people. One provider at a treatment facility encouraged certain methods for young clients particularly students: *"They [young people] choose for themselves... If you tell them about the implant, if you put implant you remove it after three or five years, but injectable you will come after three months or pills you have to be swallowing every day—so I prefer to put the implant, so many students prefer the implant"* (Provider, Temeke, lower-performing intervention facility). At control facilities, this was commonly reported. Many said that they **encouraged LARCs for younger women—particularly students**—as they are less reliable or available for repeat FP visits, and because long-term methods would help them achieve their goals: *"Because some are still students, they do not like having to come to the health facility regularly to follow family planning"* (Provider, Kigamboni, medium-performing control facility). On the other hand, there was one provider at a control facility who said that they specifically do not counsel young people on LARCs because they often want to give birth soon: *"When we advise young people to use family planning, depending on their age, we don't advise them to use long-term methods... This is because they will need to give birth, from 15-24 years"* (Provider, Ilala, lower-performing control facility).

Many clients across both treatment and control sites reported that the provider asked if they had children, but **relatively few felt that their treatment was related to their marital status or parity**. The few who did report being treated differently because of marital status were primarily concentrated in the treatment group; one client at a higher-performing treatment facility in Ilala who was unmarried and had a child felt judged by the provider because she was not married. A parous client in a higher-performing treatment facility reported the provider said, *"...for someone who has not given birth, it's not very good for one to use family planning"* (22 years old, unmarried, child, at a higher-performing treatment facility in Temeke). There were a few examples of differential treatment by parity and marital in the control group of as well. A client at a control facility shared that they felt like the provider was "astonished" that she wanted to use family planning before having a baby, given that she was married; however, she later went on to describe that she had good service: *"Her expectations were maybe that I should have a child... [but] she has given me a good service, she has received me well and at the end of the day, she has given me the freedom to choose my method that I wanted"* (22 years old, unmarried, no children, at a control facility in Ilala).

A few providers at control facilities also shared an expectation that **nulliparous women should not use FP**: *"A woman who does not have a child cannot come for family planning if she is married and has not given birth yet. That is, she must seek birth first because she is married"* (Provider, Temeke, lower-performing). *"The person who is in a state of depression needs a child, so it is difficult to advise her... she needs to have a baby to make her laugh"* (Provider, Kinondoni, medium-performer control facility).

Some clients reported the provider asked if they had their husband's permission or had discussed family planning with their partners. This was often in the context of considering this piece of context in the counseling process. Providers at control sites also spoke of how married women feel that they **need permission from their partner**: *"Unmarried women are free, they come on their own. Married women face objections, they come secretly because usually they don't have the freedom, they must involve their partner... The one who is not married is free and uses family planning methods because there is no one to*

*stop them or ask them questions” (Provider, Kigamboni, medium-performing control facility). They felt that it was common for married women to **need methods that can be hidden** from their partner: “She will tell you, ‘I am married and my husband does not want me to use family planning.’... You advise her to choose another method that she will use without her husband’s knowledge, for example, she may put a stick or an injection, or use a loop. Those are the methods if your husband does not want to use family planning. He may not know if he is using it” (Provider, Kigamboni, medium-performing control facility).*

A client’s experience spoke to the intersections of age, marital status, parity, and whether the client was a student:

“The service provider asked me one question: Do you have a family? I told her no, I am a student. The act of telling her I was a student and knowing my age shocked her! But I think if I told her I have a family, I am someone’s wife, I have two children and want to wait for some time so I can have another child—then she would see me as an adult... From the way she was telling me how to use the family planning method, she told me to use the long-term method because I have no family. That’s exactly what she said. ‘Because you are a young girl, you have to stay without having a child until you achieve your goals’” (20 years old, unmarried, no children, at a higher-performing treatment facility in Ilala).

Some clients at both treatment and control sites said the provider recommended or discouraged certain methods because of their marital status and parity. This led one client to think that married clients may have more choice in methods: *“I wanted the injectable, but I was advised to use the implant. But for someone that is married, she would have received the one that she chose... they won’t influence her so much to use another method different from the one that she wants” (21 years old, unmarried, no children, at a higher-performing treatment facility in Kigamboni).*

Both clients and providers spoke about appropriateness of methods due to return to fertility. Several providers at control facilities expressed **concerns about return to fertility with certain hormonal methods**, particularly for young people: *“Excess stimuli in her body at an early age can have an effect on her body. Even when she needs to give birth, she may not be able to conceive in time and this may lead to conflict in her marriage” (Control provider, Kinondoni, medium-performing control facility).* A client at a treatment facility similarly experienced this: *“The provider asked me, ‘Do you have a child?’ I replied, ‘I do not have a child now’... Because I don’t have a child, he wants me to use the stick for five years since I’m still young, and if you want a child after five years, you can remove the stick and get pregnant” (19 years old, unmarried, no children, at a treatment facility in a higher-performing treatment facility in Ilala).*

Three clients at three different treatment facilities reported the provider told them that IUDs could not be used by nulliparous and unmarried women. There were some disagreements among providers at control sites about what methods were appropriate for different types of women. Some felt that **IUDs were not appropriate** for nulliparous women, while others specifically recommended IUDs for young nulliparous women as it is non-hormonal, and this was perceived as having the shortest return to fertility.

Comparison with quantitative findings

Interviews with providers supported findings from the provider survey: providers began recognizing their own biased beliefs about family planning for young women as a result of Beyond Bias, which translated into changes in their service provision. However, while provider attitudes about the impact of hormonal methods on fertility improved among intervention providers in the provider survey, qualitative interviews and overall levels in the provider survey highlight this as a persistent belief for some providers. While qualitative data documented instances of bias toward young women, it also found several instances of better treatment for young women, which is consistent with the quantitative data. Qualitative interviews with managers and providers also supported the changes in service provision reflected in the client exit data. Providers highlighted that they started serving additional young clients by prioritizing young clients when they entered the facility. Interviews with control providers and clients served at control facilities supported

evidence of potentially biased care for married nulliparous women, which is consistent with the intersectionality analysis of specific mystery client profiles. As demonstrated in the mystery client data, qualitative data also showed that providers in both intervention and control sites tended to have preferred methods they encouraged clients to use (Table A31 shows that a large portion of providers in both intervention and control sites encouraged a method).

Cost analysis

We worked with Pathfinder to extract all expenditures put toward the Beyond Bias project. We use these data to estimate the cost of implementing the intervention for 12 months with one month of preparation to set up the project. We exclude all costs that are associated with international staff and research because these costs would not be incurred if the intervention were scaled up. We categorize costs into several categories to assess which parts of the intervention are driving the cost. Labor costs are based on monthly salaries of local staff. Materials and resources include things like printing, fuel, building fees, and vehicle fees. The intervention activities include all non-labor costs that were specific to each intervention pillar. We included youth enumerator payments as part of the Rewards intervention. We combine the Connect and Summit intervention costs because these were challenging for the in-country staff to separate. We used the total number of intervention clinics in each country to estimate cost per clinic, the total number of providers at intervention facilities to estimate cost per provider, and the total number of clients who visited the intervention facilities over this period to estimate cost per client exposed. Over this 12-month period, intervention clinics served 95,003 new clients in Tanzania, 10,472 new clients in Pakistan, and 50,533 new clients in Burkina Faso. The table below reports the costs for each category, total costs, and costs per clinic/provider/client for each country.

| | TZ | | PK | | BF | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----|------------------|-----|------------------|-----|
| | Cost | % | Cost | % | Cost | % |
| Labor | \$94,328 | 47% | \$52,874 | 37% | \$63,520 | 27% |
| Materials and Resources | \$31,444 | 16% | \$21,156 | 15% | \$15,170 | 7% |
| Intervention Activities | \$75,641 | 38% | \$70,754 | 49% | \$154,237 | 66% |
| Rewards | \$58,017 | 29% | \$69,288 | 48% | \$114,386 | 49% |
| Summit and Connect | \$17,624 | 9% | \$1,466 | 1% | \$39,851 | 17% |
| Total | \$201,413 | | \$144,784 | | \$232,927 | |
| <i>Cost per clinic</i> | \$5,444 | | \$3,531 | | \$5,972 | |
| <i>Cost per provider</i> | \$1,352 | | \$3,531 | | \$523 | |
| <i>Cost per new client exposed</i> | \$2.12 | | \$13.83 | | \$4.61 | |
| Total (w/o enumerators) | \$159,573 | | \$80,850 | | \$150,634 | |
| <i>Cost per clinic (w/o enumerators)</i> | \$4,313 | | \$1,972 | | \$3,862 | |
| <i>Cost per provider (w/o enumerators)</i> | \$1,071 | | \$1,972 | | \$339 | |
| <i>Cost per new client exposed (w/o enumerators)</i> | \$1.68 | | \$7.72 | | \$2.98 | |
| Costs exclude international staff and research activities. Total number of new clients exposed is based on number of new clients attending intervention clinics over the 12-month study period; 95,003 in Tanzania, 10,472 in Pakistan, and 50,533 in Burkina Faso. | | | | | | |

Running the Beyond Bias intervention for 12 months costs \$5,444 per clinic, \$1,352 per provider, and \$2.12 per client exposed in Tanzania. In Pakistan, it costs \$3,531 per clinic/provider and \$13.83 per client exposed. In Burkina Faso, it costs \$5,972 per clinic, \$523 per provider, and \$4.61 per client exposed. In terms of cost per person exposed and cost per provider, this puts the intervention near the upper end of social and behavioral change interventions focusing on family planning. For example, a recent USAID sponsored report found that 12 provider training interventions cost \$397/provider on average, with the most expensive costing \$2,467 (Avenir Health, 2021).

The Connect and Summit interventions were relatively inexpensive aside from the labor needed to organize the events. Summit and Connect were more costly in Tanzania and Burkina Faso than in Pakistan because the Connect intervention had an in-person component, whereas in Pakistan it was done entirely through WhatsApp. The Rewards intervention was by far the costliest, accounting for about a third of total costs in Tanzania and nearly half of total costs in Pakistan and Burkina Faso. A large portion of this is payments to youth enumerators who were collecting the data used for the Rewards scores. This intensive data collection might not be feasible at scale-up, and other options could make the intervention substantially less expensive (e.g., self-administered exit surveys or using administrative data). We provide a lower bound of what these costs would look like with a less expensive data collection modality by excluding the cost of youth enumerator payments, which would reduce the costs per clinic by 21% in Tanzania, 44% in Pakistan, and 35% in Burkina Faso.

Discussion

The Beyond Bias project set out to design and implement an intervention to help “ensure that young people have access to empathetic, nonjudgmental, quality counseling and provision of a full range of contraceptive methods regardless of their marital status or parity.”²⁸ It appears that the intervention helped move closer to achieving this objective. The Beyond Bias intervention caused providers to report more empathetic, non-biased attitudes toward the target groups, to counsel young clients on the full range of methods more frequently, and improved young clients’ perceptions of how they were treated during FP visits. However, the intervention mostly did not reduce the extent to which age, marital status, and parity affect the quality of counseling or the types of contraceptive methods offered. Nor did it lead to an increase in uptake of an expanded range of contraceptive methods for adolescents and youth who came into the clinic. The lack of change in the influence of client attributes and methods received does not necessarily mean that the intervention was not successful. We find little evidence that age, marital status, and parity had a large effect on counseling, method uptake, or methods received in absence of the intervention, so there was never a real chance to reduce the effect of these client characteristics. This suggests that any intervention that targets women who are already coming into FP clinics in our study setting is unlikely to lead to a large reduction in disparities by age, marital status, and parity that have been observed at the population level. Moreover, most women in the control group received a method and reported that it was their method of choice, so there was also limited room for (measurable) improvement.

Although we do not find important improvements in method uptake, methods received, or disparities, this does not mean that the intervention does not have the potential to improve these outcomes. First, in a setting where disparities in care for the target groups are large, this intervention could be effective at reducing these disparities. However, exit survey results from five other countries also show little evidence of such disparities, so it is unclear how common these are (Speizer and Calhoun, 2020). Second, the improved attitudes and beliefs, counseling quality, and client experiences from Beyond Bias could cause more young women to come into the clinic, and receive better care when they do. These target populations account for a very small portion of the client population (e.g., only 8% percent of clients were age 15-19, and only 6% did not have a child; less than 1 percent of clients were unmarried in Pakistan). This could be because they

²⁸ Beyond Bias Project Overview: <https://www.pathfinder.org/publications/beyond-bias/>

are worried about poor treatment or judgment from providers. A recent study from Senegal shows that women avoid clinics where there is greater provider bias (Speizer et al., 2021). Some women might avoid clinics altogether if they do not know of a clinic where they could get unbiased care. We do not find any evidence of increased client volume resulting from the intervention (Figures A10, A13, and A16), but this could be because clients were not aware of the improved treatment and counseling they would receive. For example, during qualitative interviews in both Pakistan and Tanzania, providers reported no longer restricting care and turning away certain women (e.g., unmarried or very young women) after participating in the intervention; however, if few women with these attributes visit the facilities due to anticipated poor treatment, the potential for improved behavior is not observed in our client exit data. Over time, more women who avoided coming to FP clinics in absence of the intervention because they knew they would receive bias care could start visiting the clinic, thus reducing disparities in modern contraception use. Future work should explore coupling the Beyond Bias intervention with outreach efforts to inform the community about clinics that have less biased care (e.g., by making Rewards scores public).

How do we reconcile the fact that 1) we observe biased attitudes and beliefs of providers with respect to age, marital status, and parity in provider surveys and qualitative interviews in the control group; and 2) disparities in modern contraception use for young women are well documented in the literature; but 3) we do not observe large disparities in care or methods received based on age, marital status, and parity among clients visiting control clinics? First, this could be because the subset of young/unmarried/nulliparous women who come into the clinic are those that are the most determined to get the methods they want and the information they need to make their decision. They might also have private information that we do not observe in the data that makes their situation more socially acceptable or that leads them to experience less bias (e.g., they know the provider from elsewhere or they expect the provider will be sympathetic to their specific situation). Women who avoid the clinic might do so because they know they would experience biased care and be denied their preferred method. Thus, reducing disparities in modern contraception use for young women might require an additional focus on young women who choose not to come into the clinic. Second, providers might have biased attitudes and beliefs but still follow their training and best practices when counseling and dispensing methods. Thus, these biases might not pass through to client outcomes. Over half of providers in the control group had already received training on youth friendly services,²⁹ many through other Pathfinder programs, which might partly explain why we do not observe disparities for young women in our setting even in the presence of attitudinal bias. Third, some of our qualitative data indicate that reports of biased attitudes/beliefs and discrimination against young women often refer to very young women (i.e., under age 15). Our mystery clients were 16 or older and almost no exit surveys were conducted with women 15 or younger. Thus, it is entirely possible that women 15 or younger receive biased care or are denied services, and that outcomes for these women would be better at intervention clinics, but we do not capture this information in our data. In addition, qualitative interviews from Burkina Faso and Tanzania revealed that some intervention clinics extended their hours to serve youth during off-hours. As exit surveys were only conducted during normal clinic hours, we may have missed visits from the youth that were most likely to experience bias. Similarly, in Pakistan, our unmarried mystery clients were design to be as socially acceptable as possible out of concerns of extremely poor treatment or danger. In other words, this was the unmarried profile that was least likely to experience bias.

Another anomaly from our analysis is that we document important improvements in the information given to clients (e.g., more counseling on the full range of methods in Table A12), but we do not observe a change in methods received (Figures A7 to A15). If clients were not receiving their method of (informed) choice in absence of the intervention, we would expect counseling on a larger range of methods to change the method they choose. There are two potential explanations for why we see improved counseling but no change in method mix. First, most women could already be receiving their method of informed choice, so

²⁹ In the provider survey, 56% of control providers in Tanzania, 75% of control providers in Pakistan, and 45% of control providers in Burkina Faso reported receiving training on youth-friendly services in the past.

more information does not change their choice. Second, intervention providers might provide more method information than control providers but still encourage the same set of methods as control providers. This is supported by Table A31, which shows that a large portion of providers encouraged one specific method for mystery clients (60% in Tanzania, 40% in Pakistan, and 30% in Burkina Faso), and the intervention did not have much of an effect on which methods were encouraged. They also discouraged methods at a similar rate. This is also supported by the interview data; for example, in Tanzania where providers expressed strong opinions about which methods are appropriate (generally discouraging injections and pills and encouraging IUDs and implants) and clients likewise reported being steered toward certain methods. Thus, intervention providers might counsel on an implant and an injection but encourage the implant and discourage the injection, whereas control providers only counsel on the implant and omit the injection. Both scenarios would result in the client taking an implant.

One key challenge with provider bias research outlined by Solo and Festin (2019) is to estimate how provider bias affects client outcomes. This study is uniquely positioned to explore these pathways because the intervention induced an exogenous change in provider attitudes and beliefs, which are the foundation of bias, through randomization of the intervention. We find that reducing the extent to which attitudes and beliefs exhibit bias can lead to measurable changes in the way providers counsel and interact with clients. However, provider bias does not appear to be strongly associated with the FP methods received by clients.

One promising result is that mystery clients perceived a significantly greater likelihood of taking a modern method and their method choice when visiting intervention clinics. This effect was particularly strong in Tanzania, which is also the only country where we observe an improvement in these outcomes in the exit survey data. It is not clear exactly how to interpret this, and it is likely a combination of several different aspects of the visit rather than just method dispensing. But clearly, mystery clients in Tanzania (and Pakistan to a lesser extent) thought they had access to an expanded range of methods in intervention clinics compared with control clinics. Mystery clients were also assigned a method preference (IUD/implant or injectable), and they were more likely to think they could take their preferred method at intervention clinics. Real clients might not have a clear sense of what their preferred method is, so they might report receiving their method of choice even when there were other methods that better suited them (most women think they got their method of choice). In contrast, we knew exactly what the preferred method for mystery clients was.

The project team expected from the outset of this project that the intersection of age, marital status, and parity would be an important predictor of provider bias (e.g., that parity is particularly important if a woman is married or that marital status is particularly important if a woman is young). While we had limited ability to explore this in the quantitative data (see Limitations section), the qualitative interviews supported this concept and suggested that intersectionality goes beyond just age, marital status, and parity. People embody multiple identities at once, and the qualitative interviews indicate that providers may treat clients differently based not only on their age but also, for example, whether they are a young person who is in school (and therefore have a “promising future” and may be more “deserving” of family planning so they can achieve their goals); or an out-of-school young person (who is perceived to have fewer life prospects and therefore may not “need” family planning, as she will soon marry and begin childbearing). This concept of intersectionality also may influence which method(s) are encouraged, as the qualitative results from providers and clients suggest that students are perceived as “too busy” to come back often and therefore need longer-term methods. Additionally, especially in Burkina Faso and Tanzania, the overlay with the HIV crisis is worth noting: many providers felt that it is important to counsel young people in particular on barrier methods, as they are perceived to be at higher risk for HIV and STI infections. Whether this risk is viewed as heterogeneous, and whether and how this affects choice of FP methods—for example, whether young people are taking up dual methods—are important areas for further study.

The evaluation results in Tanzania were most promising. This is the only country where we see significant improvements in every outcome domain, and effects were mostly consistent across data sources. Engagement with the intervention was very strong, and it seemed to be well received per the qualitative results: very few providers interviewed expressed challenges with engaging in the intervention, and it was

common for interviewees to share anecdotes that contrasted their prior attitudes and behavior to their current approach, particularly toward young people.

In Pakistan, the intervention showed promise, but engagement was much lower than in Tanzania, effects were not as consistent across data sources, and there was no impact on method dispensing. More intervention engagement could have led to larger effects. There were also many implementation challenges, such as refusal to participate and provider attrition. Of note, a majority of providers interviewed mentioned that they had challenges with Connect (technological barriers, not enough time to engage fully, and being annoyed by the frequency of contact), and Rewards was not received as positively as in other countries. This suggests that private providers operating their own practice will be more challenging than larger public clinics to keep engaged with the various intervention components. Although there were positive aspects of the intervention that may have been uniquely beneficial to solo providers—especially the connections with other providers working in this space both through Connect and Rewards—the particulars of designing an implementation strategy that works for solo providers need to be carefully considered. There may also be gendered differences in the ability to engage with the intervention, particularly at single-provider facilities—for example if female solo providers also have less off-hours time to participate in Connect due to household duties—which we did not explore here but merit further study.

Burkina Faso showed similar improvements in provider attitudes and beliefs as Tanzania and Pakistan, but we do not see improvements in care quality and perceived treatment in Burkina Faso. One potential explanation for this is that providers already had relatively unbiased attitudes and beliefs in the control arm. Table A6 shows that providers in Burkina Faso were more likely to agree/disagree with statements that indicated less bias (e.g., 94% of control providers in Burkina Faso agreed that they would provide FP to a client that they thought was too young, compared to only 63% in Tanzania and 56% in Pakistan). In addition, the qualitative interviews with providers and clients in Burkina Faso yielded fewer insights about biased care, at either treatment or control facilities. Thus, biased attitudes and beliefs may have been less of a problem in Burkina Faso prior to the intervention. This is consistent with a recent qualitative study, which found “overwhelmingly that providers are happy to give contraception to young, unmarried, and nulliparous women” (Senderowicz, 2019). Another explanation is that providers in Burkina Faso engaged less with the intervention; only 65% of providers we surveyed in the intervention arm in Burkina Faso reported attending the Summit (compared to over 80% in the other two countries), so it is possible they were less exposed to behavior change content.³⁰ The qualitative interviews also revealed systemic issues that could not be addressed by the intervention, such as providers being very busy, not having enough space to provide privacy, and having method supply issues. Policy and program stakeholders also spoke about the importance of institutionalization and integration—ideally within government structures and activities—for effective scale-up and sustainability, and encouraging this is already underway.

The different treatment effects experienced by different countries could be related to different levels of exposure to the intervention pre-pandemic (five months in Pakistan, three months in Tanzania, and one month in Burkina Faso). However, our examination of treatment effects over time does not show a clear pattern of larger improvements as time passes, so it is not clear that the differences in pre-pandemic exposure was important, but we cannot rule it out either.

The findings from qualitative interviews with providers are largely consistent with quantitative findings in terms of how providers said their behavior and practices changed in response to the intervention. However, the qualitative data revealed specific instances of provider bias toward the target groups—both in intervention and control sites—in all three countries, which might appear to conflict with quantitative data where we found that biases are not very frequent and that age, marital status, and parity do not have strong effects on care received or perceived treatment by the provider. This discrepancy may be because qualitative

³⁰ The low Summit attendance in Burkina Faso is partly driven by the sizable proportion (~16%) of providers that worked at the clinic for less than 12 months. About 77% of providers who worked at the clinic for 12+ months attended Summit.

interviews go deeper into specific interactions, which could reveal examples and memories of bias that we did not capture in the cross-sectional, immediate-recall quantitative data. Providers could also recall instances of bias for very young client (e.g., 15 or under), which we do not capture in our quantitative data. There is ample room to improve measurement of bias, and future work should build off the learnings from this project. However, many of the biases we document in the qualitative section *are* detected by the exit surveys and by mystery clients (e.g., whether they were treated poorly because of age), and it is important to not interpret the qualitative data as a measure of frequency of biased interactions. The qualitative interviews were designed to provide more detail and depth to experiences of bias, whereas the quantitative data document the extent of the problem. It is thus not clear that there is a discordance between the qualitative reports of bias and the quantitative estimates of the extent of bias. The qualitative interviews revealed details on specific instances of bias, and the quantitative data revealed that these instances were relatively rare (although they did happen) and did not lead to large disparities for the target groups.

In all three countries, policy and program stakeholders were largely enthusiastic about the intervention and encouraging about the prospect of scaling up or introducing in new countries. The most common concerns were about social/community norms in scale-up areas, and stakeholders suggested needs analyses and community-based sensitization activities alongside scale-up. Additionally, it was common for stakeholders in all countries to reflect on how the government should be involved; integration with ongoing services was seen as essential for scale-up and sustainability, but stakeholders wondered if there was sufficient priority and “political will” to achieve this. Stakeholders were also optimistic about the impact that Beyond Bias has had, but several said they were waiting on these evaluation results before making strong recommendations about continuation or scale-up.

The qualitative analysis also highlighted potential ways for improving the effectiveness of the intervention. Some providers suggested that they did not fully understand the Rewards scoring system and thus did not know how to change their behavior to improve their score, which was discouraging. Making the scoring system more transparent and linked to specific behaviors could help guide providers’ behavior change strategies to increase their score. Finding ways of keeping providers engaged and carving out time in busy schedules is another area where effectiveness could be enhanced.

Limitations

This work should be interpreted in light of its limitations, of which there are several. First, provider bias is a somewhat abstract concept that manifests in many different ways by different providers, and experienced differently by different types of clients. Measuring and quantifying provider bias is, thus, very challenging, and there are likely aspects of bias that we did not pick up with our quantitative survey instruments (e.g., bias based on whether a young client is a student). Future work should build on the measures we created for this project to refine measurement of bias at FP clinics.

Second, a key goal of the Beyond Bias program and the FP community at large is to ensure that all clients receive their method of informed choice regardless of age, marital status, and parity. This is very challenging to measure because 1) clients could over-report receiving their method of choice due to social desirability bias, and 2) clients might not be aware of what their method of *informed* choice is if the provider did not appropriately inform them about all methods. This could partly explain why we see very high rates of receiving method of choice in the client exit data (over 90% in Burkina Faso and Tanzania), but a large portion of mystery client visits recorded that they did not think they could have taken their method of choice (method of choice was assigned to mystery clients by the study team). Future work should focus on validating a measure to assess whether clients received their method of informed choice.

Third, we knew from the outset that the intersection of multiple client characteristics was important for provider bias (e.g., we expected that parity would be more important for married women and that marital status would be more important for younger women). However, there are a large number of subgroups that could be created when examining intersectionality, and we did not have sufficient statistical power to fully

explore the interaction of different client characteristics. Our mystery client sample included only 40 visits per profile (20 in each arm), and some profiles were extremely rare in the client exit data (e.g., married + nulliparous clients accounted for less than 1% the data). This limits our ability draw conclusions about which combinations of characteristics leads to the most biased care and which profiles benefited the most from the intervention. The field would benefit from a larger sample of mystery client visits such that profile specific analyses were feasible.

Fourth, the provider survey, the client exit survey, and the qualitative interviews rely on self-reports, which are susceptible to social desirability bias. Providers, especially in the intervention group, could have overstated positive attitudes and beliefs about the target group because the Beyond Bias intervention trained them on what the “right” answer was. Similarly, clients could understate the degree to which they perceived poor treatment from providers because they did not want to make the provider look bad. Mystery clients largely address this issue, but they have other weaknesses, such as not actually taking a method and potentially having different experiences than real clients.

Fifth, we lack baseline data for many of the outcomes we assess. Although random assignment of the intervention ensures that outcomes and potential confounding factors are balanced at baseline on average, it is possible there was chance imbalance on some characteristics that could have biased our estimates in unpredictable ways.

Sixth, while we compare themes that emerge in the interviews between control and intervention sites, we interviewed a larger number of clients and providers from intervention facilities, limiting our ability to have captured as much variation in experiences in the control sites.

Finally, we are unable to assess the effects of this intervention at the community level and thus could not estimate the effect on community perceptions of provider bias or unmet need for FP. Future work should explore the community level impacts of the Beyond Bias intervention.

Conclusion

The Beyond Bias intervention was effective at changing provider attitudes and beliefs to be less biased. In Tanzania and Pakistan, this led to improved patient centered care and better client experiences, but not in Burkina Faso. Despite improvements in care, there is limited evidence that this intervention impacted the types of FP methods received among young women who visited the clinic. Future work should test whether coupling this intervention with community outreach efforts can increase modern contraception use for young women who would not otherwise come into the clinic.

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Appendix Tables

| Table A1. Methods considered for counseled on range of methods outcome based on different client preferences in client exit data | |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <i>Method Preferences</i> | <i>Methods</i> |
| No Preference | IUD, Implant, Injectable, Pill |
| Easy to hide | IUD, Implant, Injectable |
| Easy to stop using | Pill, Injectable |
| Last a long time | IUD, Implant |
| Does not require taking a pill | IUD, Implant, Injectable |
| Does not require a procedure | Injectable, Pill |
| Does not want another child | Permanent, IUD, Implant |

Table A2. Baseline Balance Between Intervention and Control Clinics

| | <i>Pooled Difference</i> | Tanzania | | | Burkina Faso | | |
|-----------------------------------------------------------------------|------------------------------|----------|--------------|------------|--------------|--------------|------------|
| | | Control | Intervention | Difference | Control | Intervention | Difference |
| Number of clinics | | 37 | 36 | | 39 | 39 | |
| Number of providers per facility (TZ/BF) | -0.236 | 4.432 | 4.139 | 0.293 | 10.769 | 11.41 | -0.641 |
| <i>Number of new clients by age (monthly average)</i> | | | | | | | |
| Age <20 | 2.721 | 20.243 | 24.931 | 4.687 | 5.615 | 6.369 | 0.754 |
| Age 20-24 | -0.711 | 53.631 | 52.889 | -0.742 | 7.287 | 7.277 | -0.010 |
| Age 25+ | -7.083 | 79.045 | 67.847 | -11.198 | 7.667 | 6.169 | -1.497 |
| <i>Number of methods by type (new clients, monthly average)</i> | | | | | | | |
| LARC | -7.555 | 125.383 | 112.032 | -13.350 | 10.790 | 11.303 | 0.513 |
| Injectable | 3.562 | 14.275 | 21.153 | 6.878 | 6.836 | 6.831 | -0.005 |
| Pill | -0.029 | 6.122 | 6.537 | 0.415 | 3.051 | 2.574 | -0.477 |
| Other | -0.751 | 7.140 | 5.944 | -1.195 | 0.256 | 0.097 | -0.159 |
| Total | -5.073 | 152.919 | 145.667 | -7.252 | 20.569 | 19.815 | -0.754 |
| <i>Number of returning clients by age (monthly average)</i> | | | | | | | |
| Age <20 | 1.559 | N/A | N/A | | 2.482 | 4.041 | 1.559 |
| Age 20-24 | 5.846 | N/A | N/A | | 8.836 | 14.682 | 5.846 |
| Age 25+ | 6.415 | N/A | N/A | | 22.267 | 28.682 | 6.415 |
| <i>Number of methods by type (returning clients, monthly average)</i> | | | | | | | |
| LARC | N/A | N/A | N/A | | 12.056 | 13.410 | 1.354 |
| Injectable | 6.055 | 18.009 | 21.370 | 3.361 | 14.944 | 24.026 | 9.082 |
| Pill | 0.000 | 8.324 | 5.972 | -2.352 | 6.913 | 9.538 | 2.626 |
| Other | N/A | N/A | N/A | | 0.559 | 2.200 | 1.641 |
| Total | 7.137 | 26.333 | 27.343 | 1.009 | 33.585 | 47.405 | 13.821 |

NOTES: PK administrative data was only available starting in September 2020 so is not included. Data was extracted from the District Health Information Software (DHIS2) in Tanzania and Burkina Faso and include the six months prior to the initial summit held in each country. Data represents May 2019 through October 2019 in Tanzania and August 2019 through December 2019 in Burkina Faso. Returning users in Burkina do not include those renewing the same method. Other methods in Tanzania include female and male condoms and female and male sterilization. In Burkina Faso, other methods include female and male condoms, natural methods, and other methods. Data on returning users of LARC methods and other methods was not collected until 2021 in Tanzania.

Table A3. Balance Between Intervention and Control Providers

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|-----------------------------------|-------------------|----------|--------------|------------|----------|--------------|------------|--------------|--------------|------------|
| | <i>Difference</i> | Control | Intervention | Difference | Control | Intervention | Difference | Control | Intervention | Difference |
| <i>Number of providers</i> | | 141 | 118 | | 32 | 38 | | 154 | 159 | |
| <i>Number of clinics</i> | | 37 | 35 | | 32 | 38 | | 39 | 39 | |
| Provider Age (years) | 0.815 | 39.273 | 40.581 | 1.308 | 43.233 | 43.000 | -0.233 | 40.893 | 41.526 | 0.633 |
| Provider married | -0.029 | 0.799 | 0.784 | -0.014 | 0.875 | 0.895 | 0.020 | 0.765 | 0.713 | -0.051 |
| Provider has 1+ child | 0.015 | 0.907 | 0.907 | 0.000 | 0.759 | 0.895 | 0.136 | 0.909 | 0.911 | 0.002 |
| Provider ever used FP | 0.002 | 0.772 | 0.795 | 0.023 | 0.480 | 0.500 | 0.020 | 0.903 | 0.885 | -0.017 |
| <i>Provider qualifications</i> | | | | | | | | | | |
| Doctor/Health officer/DHMS | 0.028 | 0.007 | 0.051 | 0.044 | 0.125 | 0.026 | -0.099 | 0.026 | 0.069 | 0.043 |
| Nurse/Nurse-Midwife | -0.014 | 0.865 | 0.814 | -0.052 | 0.063 | 0.132 | 0.069 | 0.032 | 0.031 | -0.001 |
| Midwife | 0.005 | 0.128 | 0.136 | 0.008 | 0.531 | 0.737 | 0.206* | 0.942 | 0.899 | -0.042 |
| Lady Health Visitor | -0.019* | N/A | N/A | N/A | 0.281 | 0.105 | -0.176* | N/A | N/A | N/A |
| <i>Economic status of clients</i> | | | | | | | | | | |
| Well off or middle class | -0.038 | 0.128 | 0.059 | -0.068* | 0.281 | 0.105 | -0.176* | 0.065 | 0.082 | 0.017 |
| Poor or vulnerable | 0.006 | 0.348 | 0.271 | -0.076 | 0.312 | 0.237 | -0.076 | 0.305 | 0.396 | 0.091 |
| A mix | 0.031 | 0.496 | 0.644 | 0.148** | 0.344 | 0.474 | 0.130 | 0.578 | 0.491 | -0.087 |
| Don't know | 0.002 | 0.028 | 0.025 | -0.003 | 0.063 | 0.184 | 0.122 | 0.052 | 0.031 | -0.021 |
| <i>Frequency of FP care</i> | | | | | | | | | | |
| 1-2 days per week | 0.008 | 0.035 | 0.034 | -0.002 | 0.031 | 0.026 | -0.005 | 0.019 | 0.038 | 0.018 |
| 3-5 days per week | 0.017 | 0.837 | 0.831 | -0.006 | 0.250 | 0.368 | 0.118 | 0.143 | 0.157 | 0.014 |
| 6-7 days per week | -0.025 | 0.128 | 0.136 | 0.008 | 0.719 | 0.605 | -0.113 | 0.838 | 0.805 | -0.033 |

NOTES: Source is endline provider survey. Lady Health Visitors is a cadre of providers specific to Pakistan and therefore is missing in TZ and BF. Difference between control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. In Pakistan, there were no doctors and all providers in the Doctor/Health officer/DHMS row had a DHMS qualification.

*=p<.1; **=p<.05; ***=p<.01

| Table A4. Characteristics of Clients Seeking Family Planning Care | | | | |
|------------------------------------------------------------------------------------|---------------|----------|----------|--------------|
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| Number clients | 77,971 | 26,915 | 9,869 | 41,187 |
| Age 15-19 | 0.083 | 0.070 | 0.061 | 0.101 |
| Age 20-24 | 0.318 | 0.346 | 0.348 | 0.284 |
| Age 25+ | 0.599 | 0.584 | 0.591 | 0.615 |
| Married | 0.765 | 0.664 | 0.996 | 0.779 |
| At least 1 child | 0.940 | 0.954 | 0.973 | 0.916 |
| No Education | 0.282 | 0.030 | 0.294 | 0.444 |
| Primary Education | 0.344 | 0.524 | 0.271 | 0.244 |
| Secondary+ Education | 0.374 | 0.446 | 0.435 | 0.312 |
| Perceived SES (scale of 1-6) | 2.886 | 2.852 | 2.463 | 3.010 |
| Notes: Includes data from client exit survey between September 2020 to August 2021 | | | | |

Table A5. Baseline Balance Between Intervention and Control Clients

| | <i>Pooled</i> | Tanzania | | | Burkina Faso | | |
|-----------------------------------|-------------------|----------|--------------|------------|--------------|--------------|------------|
| | <i>Difference</i> | Control | Intervention | Difference | Control | Intervention | Difference |
| <i>Number of Baseline Surveys</i> | | 444 | 584 | | 769 | 894 | |
| <i>Demographics</i> | | | | | | | |
| Age 15-19 | 0.011 | 0.063 | 0.078 | 0.015 | 0.078 | 0.086 | 0.008 |
| Age 20-24 | 0.000 | 0.324 | 0.333 | 0.009 | 0.268 | 0.263 | -0.004 |
| Age 25+ | -0.011 | 0.613 | 0.589 | -0.024 | 0.655 | 0.651 | -0.004 |
| Married | 0.036 | 0.578 | 0.660 | 0.081 | 0.789 | 0.801 | 0.012 |
| At least 1 child | -0.006 | 0.964 | 0.958 | -0.006 | 0.934 | 0.928 | -0.005 |
| No Education | 0.005 | 0.034 | 0.027 | -0.007 | 0.437 | 0.450 | 0.013 |
| Primary Education | 0.004 | 0.520 | 0.527 | 0.006 | 0.243 | 0.245 | 0.002 |
| Secondary Education | -0.009 | 0.446 | 0.446 | 0.000 | 0.320 | 0.305 | -0.015 |
| Perceived SES (scale of 1-6) | 0.080 | 2.775 | 2.925 | 0.149 | 2.992 | 3.026 | 0.034 |
| <i>Person Centered FP Care</i> | | | | | | | |
| Received services that day | 0.019* | 0.949 | 0.984 | 0.036** | 0.967 | 0.976 | 0.009 |
| Asked about preference | 0.004 | 0.680 | 0.678 | -0.002 | 0.733 | 0.740 | 0.007 |
| Essential Questions Index | 0.013 | 0.603 | 0.593 | -0.009 | 0.491 | 0.518 | 0.027 |
| Permission not required | 0.015 | 0.574 | 0.603 | 0.029 | 0.524 | 0.532 | 0.008 |
| <i>Method Received</i> | | | | | | | |
| Received a modern method | 0.024 | 0.796 | 0.889 | 0.093* | 0.845 | 0.828 | -0.017 |
| Received LARC | -0.006 | 0.518 | 0.543 | 0.025 | 0.234 | 0.208 | -0.025 |
| Received injectables | -0.007 | 0.230 | 0.277 | 0.046 | 0.489 | 0.450 | -0.039 |
| Received method of choice | 0.033 | 0.736 | 0.838 | 0.103** | 0.820 | 0.810 | -0.010 |
| <i>Perceived Quality of Care</i> | | | | | | | |
| Satisfied with answers | 0.023 | 0.750 | 0.773 | 0.023 | 0.774 | 0.798 | 0.024 |
| Would recommend | 0.006 | 0.727 | 0.736 | 0.009 | 0.787 | 0.791 | 0.004 |
| Perceived interaction quality | 0.004 | 0.289 | 0.237 | -0.052 | 0.432 | 0.470 | 0.038 |

NOTES: Education and Perceived SES are from exit surveys collected from September 2020-August 2021. All other data are from client survey exit data between October 28th, 2019 and November 18th, 2019 in Tanzania, and between January 6 and February 19, 2020 in Burkina Faso (both prior to the first Summit). Baseline data from Pakistan are not available as client exit data were not collected prior to the launch of the initial summit. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility.

*=p<.1; **=p<.05; ***=p<.01

Table A6. Provider Attitudes and Beliefs Related to Family Planning Care

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|--------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|----------|----------|--------------|----------|--------------|--------------|----------|
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of providers | | 141 | 118 | | 32 | 38 | | 154 | 159 | |
| Number of clinics | | 37 | 35 | | 32 | 38 | | 39 | 39 | |
| No method restrictions based on age | 0.234*** | 0.489 | 0.797 | 0.307*** | 0.688 | 0.816 | 0.128 | 0.552 | 0.748 | 0.196*** |
| No method restrictions based on marital status | 0.071** | 0.837 | 0.907 | 0.070 | 0.781 | 0.895 | 0.113 | 0.812 | 0.874 | 0.063 |
| No method restrictions based on parity | 0.149*** | 0.681 | 0.847 | 0.167*** | 0.844 | 0.868 | 0.025 | 0.662 | 0.824 | 0.162*** |
| FP care specific index | 0.660*** | 0.000 | 0.661 | 0.661*** | 0.000 | 0.558 | 0.558** | 0.000 | 0.682 | 0.682*** |
| <i>Agree or strongly agree...</i> | | | | | | | | | | |
| Okay for young clients who are unmarried to use contraception | 0.062*** | 0.894 | 0.966 | 0.072** | 0.375 | 0.526 | 0.151 | 0.955 | 0.987 | 0.033* |
| Married & unmarried clients should have the same FP options | 0.043 | 0.674 | 0.712 | 0.038 | 0.500 | 0.711 | 0.211* | 0.890 | 0.899 | 0.010 |
| Young women <20 have capacity to make health care decisions, including about contraception | 0.058** | 0.922 | 0.907 | -0.015 | 0.469 | 0.816 | 0.347*** | 0.903 | 0.956 | 0.053* |
| You feel comfortable providing contraception to an unmarried client | 0.063*** | 0.887 | 0.975 | 0.088** | 0.594 | 0.789 | 0.196* | 0.974 | 0.987 | 0.013 |
| You feel comfortable providing contraception to a married client who has not yet had a child | 0.092*** | 0.809 | 0.949 | 0.141*** | 0.813 | 0.816 | 0.003 | 0.890 | 0.962 | 0.073** |
| You are always confident you have the clinical skills to provide contraceptives safely to young, unmarried clients | 0.037** | 0.957 | 0.992 | 0.034* | 0.750 | 0.868 | 0.118 | 0.948 | 0.969 | 0.021 |
| Providing appropriate contraceptives to young, unmarried clients is completely in your control | 0.063* | 0.929 | 0.915 | -0.014 | 0.813 | 0.816 | 0.003 | 0.747 | 0.887 | 0.140** |
| Hormonal methods are safe for youth's growing bodies (under 20) | 0.189*** | 0.440 | 0.678 | 0.238*** | 0.406 | 0.316 | -0.090 | 0.532 | 0.742 | 0.210*** |
| You would provide FP services to a client even if you thought they were too young to use contraception | 0.099*** | 0.638 | 0.856 | 0.218*** | 0.562 | 0.579 | 0.016 | 0.942 | 0.962 | 0.021 |
| <i>Disagree or strongly disagree...</i> | | | | | | | | | | |
| Unmarried youth clients require consent from parents before FP provided | 0.079*** | 0.830 | 0.915 | 0.085** | 0.219 | 0.447 | 0.229** | 0.935 | 0.975 | 0.040 |
| Young married clients require husband's consent before FP provided | 0.155*** | 0.582 | 0.771 | 0.190*** | 0.156 | 0.368 | 0.212** | 0.760 | 0.874 | 0.114** |
| Married women who do not have any children should not use FP | 0.124*** | 0.660 | 0.814 | 0.154*** | 0.375 | 0.526 | 0.151 | 0.851 | 0.943 | 0.093*** |
| Contraceptives are more appropriate for women at least 20 years old than for women <20 | 0.117*** | 0.695 | 0.839 | 0.144*** | 0.250 | 0.289 | 0.039 | 0.818 | 0.931 | 0.113*** |
| Contraceptives are more appropriate for married women | 0.040* | 0.837 | 0.907 | 0.070* | 0.219 | 0.289 | 0.071 | 0.955 | 0.962 | 0.008 |
| It is important for women who have not been pregnant | 0.147*** | 0.496 | 0.788 | 0.292*** | 0.406 | 0.342 | -0.064 | 0.831 | 0.906 | 0.074* |

| | | | | | | | | | | |
|--------------------------------------------------------------------------------------------------------|----------|-------|-------|----------|-------|-------|----------|-------|-------|----------|
| to prove their fertility before using some FP methods | | | | | | | | | | |
| For a family planning consultation, it's important to know if the client is married or unmarried | 0.163*** | 0.348 | 0.610 | 0.263*** | 0.188 | 0.421 | 0.234** | 0.701 | 0.767 | 0.066 |
| If the client hasn't yet had a child, she should avoid using injectables | 0.232*** | 0.383 | 0.627 | 0.244*** | 0.281 | 0.526 | 0.245** | 0.656 | 0.874 | 0.218*** |
| If the client hasn't yet had a child, she should avoid using an IUD | 0.097*** | 0.809 | 0.924 | 0.115*** | 0.438 | 0.632 | 0.194 | 0.883 | 0.943 | 0.060 |
| If the client hasn't yet had a child, she should avoid using implants | 0.067** | 0.844 | 0.907 | 0.063 | 0.281 | 0.395 | 0.113 | 0.890 | 0.950 | 0.060* |
| You usually know what a young client <20 needs for FP as soon as they come in | -0.029 | 0.319 | 0.246 | -0.073 | 0.250 | 0.211 | -0.039 | 0.662 | 0.673 | 0.011 |
| You usually decide what family planning method young clients <20 should use | 0.028 | 0.589 | 0.653 | 0.064 | 0.250 | 0.263 | 0.013 | 0.968 | 0.969 | 0.001 |
| You prefer not to provide FP methods to unmarried clients if they will not take HIV test | 0.033 | 0.738 | 0.805 | 0.067 | 0.469 | 0.605 | 0.137 | 0.994 | 0.975 | -0.019 |
| Young women without children should not use products that might delay fertility once stopped | 0.224*** | 0.426 | 0.602 | 0.176*** | 0.156 | 0.132 | -0.025 | 0.448 | 0.767 | 0.319*** |
| It's okay for another medical professional to come into the room when you're giving an FP consultation | 0.113*** | 0.716 | 0.864 | 0.148** | 0.719 | 0.474 | -0.245** | 0.604 | 0.767 | 0.163** |
| Young clients (<20) are not capable of choosing the method that is best for them | 0.067* | 0.582 | 0.686 | 0.105 | 0.156 | 0.105 | -0.051 | 0.812 | 0.874 | 0.063 |
| A client with one daughter will have different FP needs than a client with one son | -0.029 | 0.950 | 0.890 | -0.061 | 0.594 | 0.605 | 0.012 | 0.981 | 0.969 | -0.012 |
| You usually counsel unmarried clients < 20 to practice abstinence | 0.222*** | 0.397 | 0.686 | 0.289*** | 0.312 | 0.237 | -0.076 | 0.597 | 0.830 | 0.233*** |

NOTES: Source is endline provider survey. FP care specific index (the primary outcome for this attitudes and beliefs) is a standardized index of all the variables listed below the index in this table. Variables were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more supportive family planning care attitudes. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility.

*=p<.1; **=p<.05; ***=p<.01

| Table A7. Adjusted Treatment Effects: Provider Attitudes and Beliefs Related to Family Planning Care | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|----------|--------------|
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| No method restrictions based on age | 0.230*** | 0.291*** | 0.135 | 0.219*** |
| No method restrictions based on marital status | 0.063** | 0.061 | 0.200* | 0.087** |
| No method restrictions based on parity | 0.149*** | 0.137** | 0.085 | 0.175*** |
| FP care specific index | 0.660*** | 0.642*** | 0.434 | 0.630*** |
| <i>Agree or strongly agree...</i> | | | | |
| Okay for young clients who are unmarried to use contraception | 0.058** | 0.067** | 0.180 | 0.030* |
| Married clients and unmarried clients should have the same FP options | 0.052 | 0.078 | 0.210 | 0.015 |
| Young women <20 have the capacity to make health care decisions for themselves, including about contraception | 0.050* | -0.001 | 0.331** | 0.057** |
| You feel comfortable providing contraception to an unmarried client | 0.060*** | 0.086** | 0.068 | 0.010 |
| You feel comfortable providing contraception to a married client who has not yet had a child | 0.101*** | 0.106** | -0.002 | 0.060* |
| You are always confident that you have the necessary clinical skills to provide contraceptives safely to your young, unmarried clients | 0.024 | 0.022 | 0.056 | 0.016 |
| Providing the appropriate contraceptives to your young, unmarried clients is completely in your control | 0.062* | -0.018 | 0.017 | 0.134** |
| Hormonal methods are safe for youth's growing bodies (under 20) | 0.189*** | 0.210*** | -0.033 | 0.211*** |
| You would provide family planning services to a client even if you thought they were too young to be using contraception | 0.080** | 0.193*** | -0.012 | 0.015 |
| <i>Disagree or strongly disagree...</i> | | | | |
| Unmarried youth clients require consent from parents before FP provided | 0.052* | 0.069* | 0.190 | 0.031 |
| Young married clients require husband's consent before FP provided | 0.135*** | 0.172** | 0.217* | 0.113** |
| Married women who do not have any children should not use FP | 0.112*** | 0.157** | 0.030 | 0.084*** |
| Contraceptives are more appropriate for women at least 20 years old than for women <20 | 0.102*** | 0.162*** | 0.019 | 0.096** |
| Contraceptives are more appropriate for married women | 0.028 | 0.073* | 0.012 | 0.007 |
| It is important for women who have not been pregnant to prove their fertility before using some FP methods | 0.136*** | 0.259*** | -0.129 | 0.061* |
| For a family planning consultation, it's important to know if the client is married or unmarried | 0.163*** | 0.264*** | 0.232* | 0.050 |
| If the client hasn't yet had a child, she should avoid using injectables | 0.238*** | 0.294*** | 0.126 | 0.211*** |
| If the client hasn't yet had a child, she should avoid using an IUD | 0.079*** | 0.101** | 0.100 | 0.049 |
| If the client hasn't yet had a child, she should avoid using implants | 0.058* | 0.115** | -0.056 | 0.052 |
| You usually know what a young client under age 20 needs for FP as soon as they come in | -0.026 | -0.080 | -0.074 | 0.016 |
| You usually decide what family planning method young clients under aged 20 should use | 0.008 | 0.069 | -0.148 | -0.014 |
| You prefer not to provide an FP method to an unmarried client if they will not first take HIV test | 0.024 | 0.004 | 0.165 | -0.021 |
| Young women without children should not use any product that might cause a delay in fertility once stopped | 0.226*** | 0.192*** | -0.054 | 0.319*** |
| It's okay for another medical professional to come into the room when you're giving an FP consultation | 0.117*** | 0.152*** | -0.305** | 0.146** |

| | | | | |
|-------------------------------------------------------------------------------------------------|-----------------|-----------------|--------|-----------------|
| Young clients (under 20) are not capable of choosing the method that is best for them | <i>0.068</i> | 0.110 | -0.081 | 0.054 |
| A client with one daughter will have different family planning needs than a client with one son | <i>-0.027</i> | -0.024 | -0.151 | 0.003 |
| You usually counsel unmarried clients <20 to practice abstinence | <i>0.220***</i> | <i>0.314***</i> | -0.033 | <i>0.242***</i> |

NOTES: Data from endline provider survey. Table shows the difference between intervention and control group estimated from a multivariable linear regression with standard errors clustered at the facility. For Tanzania and Burkina Faso, we controlled for strata on which randomization was conducted. For all countries, we also controlled for the following provider characteristics: provider age, whether the provider was married, whether the provider that had ever used FP in the past, whether the provider had at least one child, whether the provider characterized the majority of their clients as vulnerable or poor, whether the provider reported working part time (1-2 days a week), and provider qualification (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor). In the pooled model, we included only provider characteristics.

*=p<.1; **=p<.05; ***=p<.01

Table A8. Underlying Provider Attitudes and Beliefs that Could be Drivers of Bias

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|-----------------------------------------------------------------------------------------|-----------------|----------|--------------|-----------------|----------|--------------|----------------|--------------|--------------|-----------------|
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of Providers | | 141 | 118 | | 32 | 38 | | 154 | 159 | |
| Number of Clinics | | 37 | 35 | | 32 | 38 | | 39 | 39 | |
| <i>Underlying attitudes/beliefs Index</i> | <i>0.637***</i> | 0.000 | 0.733 | <i>0.733***</i> | 0.000 | 0.614 | <i>0.614**</i> | 0.000 | 0.563 | <i>0.563***</i> |
| <i>Agree or strongly agree with...</i> | | | | | | | | | | |
| Sex is part of a healthy life for young women | <i>0.135***</i> | 0.284 | 0.525 | <i>0.242***</i> | 0.781 | 0.789 | 0.008 | 0.773 | 0.849 | 0.076 |
| It is okay for young women to have sex before marriage | <i>0.126***</i> | 0.121 | 0.339 | <i>0.218***</i> | 0.062 | 0.053 | -0.010 | 0.468 | 0.547 | 0.080 |
| <i>Disagree or strongly disagree with...</i> | | | | | | | | | | |
| As a provider, you have a responsibility to teach young women how to behave | <i>0.016</i> | 0.014 | 0.076 | <i>0.062**</i> | 0.125 | 0.079 | -0.046 | 0.058 | 0.050 | -0.008 |
| Young couples should have children as soon as possible after marriage | <i>0.103***</i> | 0.553 | 0.610 | 0.057 | 0.344 | 0.526 | 0.183 | 0.494 | 0.616 | 0.123** |
| Providing contraceptives for unmarried young women may make them more promiscuous | <i>0.113***</i> | 0.631 | 0.771 | <i>0.140**</i> | 0.125 | 0.316 | <i>0.191*</i> | 0.838 | 0.912 | <i>0.074*</i> |
| Important to help youth clients understand when their actions are immoral/irresponsible | <i>0.035</i> | 0.014 | 0.068 | <i>0.054**</i> | 0.031 | 0.053 | 0.021 | 0.065 | 0.088 | 0.023 |
| Young FP clients may need to be punished for bad behavior | <i>0.075**</i> | 0.730 | 0.780 | 0.049 | 0.594 | 0.711 | 0.117 | 0.857 | 0.943 | 0.086** |
| Irresponsible for young women to have sex before they are married | <i>0.141***</i> | 0.574 | 0.737 | <i>0.163**</i> | 0.219 | 0.132 | -0.087 | 0.695 | 0.868 | <i>0.173***</i> |
| Providing young unmarried clients with FP makes you worry about spread of HIV | <i>0.126***</i> | 0.674 | 0.822 | <i>0.148***</i> | 0.156 | 0.342 | <i>0.186*</i> | 0.766 | 0.862 | <i>0.095*</i> |

NOTES: Source is endline provider survey. The Underlying Provider Attitudes and Beliefs index is a standardized index of all the variables listed in this table. Variables were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more supportive family planning care attitudes. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility
 *= $p < .1$; **= $p < .05$; ***= $p < .01$

| Table A9. Underlying Provider Attitudes and Beliefs that Could be Drivers of Bias (with Controls) | | | | |
|----------------------------------------------------------------------------------------------------------|---------------|----------|----------|--------------|
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Underlying attitudes/beliefs Index | 0.665*** | 0.782*** | 0.872*** | 0.524*** |
| <i>Agree or strongly agree with...</i> | | | | |
| Sex is part of a healthy life for young women | 0.148*** | 0.239*** | -0.003 | 0.076* |
| It is okay for young women to have sex before they are married | 0.127** | 0.227*** | 0.055 | 0.076 |
| <i>Disagree or strongly disagree with...</i> | | | | |
| As a provider, you have a responsibility to teach younger women how behave | 0.016 | 0.048* | -0.093 | 0.008 |
| Young couples should have children as soon as possible after getting married | 0.090** | 0.064 | 0.027 | 0.140** |
| Providing contraceptives for unmarried young women may make them more promiscuous | 0.111*** | 0.120* | 0.316*** | 0.068* |
| Important to help youth clients understand when their actions are immoral/irresponsible | 0.022 | 0.044* | 0.048 | 0.007 |
| Young family planning clients may need to be punished for bad behavior | 0.078** | 0.077 | 0.093 | 0.079* |
| It is irresponsible for young women to have sex before they are married | 0.145*** | 0.227*** | -0.048 | 0.156** |
| Providing young unmarried clients with FP makes you worry about spread of HIV | 0.123*** | 0.189*** | 0.169 | 0.090* |

NOTES: Data from endline provider survey. Table shows the difference between intervention and control group estimated from a multivariable linear regression with standard errors clustered at the facility. For Tanzania and Burkina Faso, we controlled for strata on which randomization was conducted. For all countries, we also controlled for the following provider characteristics: provider age, whether the provider was married, whether the provider had ever used FP in the past, whether the provider had at least one child, whether the provider characterized the majority of their clients as vulnerable or poor, whether the provider reported working part time (1-2 days a week), and provider qualification (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor). In the pooled model, we included only provider characteristics.

*=p<.1; **=p<.05; ***=p<.01

Table A10. Provider Attitudes and Beliefs Related to Professional Environment and Community Factors

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|--------------|---------|----------|--------------|--------|--------------|--------------|----------|
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of Providers | | 141 | 118 | | 32 | 38 | | 154 | 159 | |
| Number of Clinics | | 37 | 35 | | 32 | 38 | | 39 | 39 | |
| <i>Index of professional environment factors</i> | <i>0.211*</i> | 0.000 | 0.115 | 0.115 | 0.000 | 0.020 | 0.020 | 0.000 | 0.333 | 0.333* |
| <i>Agree or strongly agree...</i> | | | | | | | | | | |
| Most of your colleagues feel comfortable providing FP to an unmarried women <20 | <i>0.065*</i> | 0.780 | 0.898 | 0.118** | 0.719 | 0.658 | -0.061 | 0.844 | 0.893 | 0.049 |
| Most of your colleagues feel comfortable providing FP to a married women w/o children | <i>0.094**</i> | 0.716 | 0.831 | 0.114* | 0.719 | 0.763 | 0.044 | 0.779 | 0.868 | 0.089 |
| Your boss/Greenstar supports you in providing any/all methods to youth <25 | <i>0.011</i> | 0.979 | 0.983 | 0.004 | 0.875 | 0.868 | -0.007 | 0.968 | 0.987 | 0.020 |
| <i>Disagree or strongly disagree...</i> | | | | | | | | | | |
| Your colleagues have expressed their disapproval to you about the consultations you provide to young girls about FP | <i>0.019</i> | 0.887 | 0.907 | 0.020 | 0.438 | 0.500 | 0.062 | 0.955 | 0.962 | 0.008 |
| People in your community have expressed their disapproval to you about the consultations you provide to young girls about FP | <i>0.019</i> | 0.858 | 0.881 | 0.023 | 0.594 | 0.553 | -0.041 | 0.896 | 0.925 | 0.028 |
| Your colleagues and you have different opinions about what advice should be given to young clients about FP | <i>0.117***</i> | 0.660 | 0.746 | 0.086 | 0.312 | 0.263 | -0.049 | 0.675 | 0.855 | 0.180*** |
| In your workplace the policy about providing FP services to youth < 25 is sometimes unclear | <i>0.035</i> | 0.433 | 0.492 | 0.059 | 0.344 | 0.316 | -0.028 | 0.682 | 0.711 | 0.029 |
| <i>Index of community factors</i> | <i>0.127</i> | 0.000 | 0.003 | 0.003 | 0.000 | 0.087 | 0.087 | 0.000 | 0.237 | 0.237 |
| <i>Disagree or strongly disagree...</i> | | | | | | | | | | |
| Providing contraceptives to youth makes you worry about clinic's reputation | <i>0.009</i> | 0.943 | 0.932 | -0.011 | 0.531 | 0.684 | 0.153 | 0.987 | 0.981 | -0.006 |
| Worry that providing youth with FP will damage her reputation in community | 0.002 | 0.929 | 0.915 | -0.014 | 0.625 | 0.605 | -0.020 | 0.942 | 0.962 | 0.021 |

| | | | | | | | | | | |
|-----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|
| You worry about FP clients and families blaming you for future fertility problems | 0.002 | 0.823 | 0.847 | 0.025 | 0.656 | 0.632 | -0.025 | 0.922 | 0.912 | -0.010 |
|-----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|

NOTES: Source is endline provider survey. Index of professional environment factors and the index of community factors are standardized indices of all the variables listed below each index in this table. Variables were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more supportive family planning care attitudes. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility.

*=p<.1; **=p<.05; ***=p<.01

Table A11. Underlying Attitudes and Beliefs not Expected to be Affected by the Intervention

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|-----------------------------------------------------------------------------|-----------------|----------|--------------|----------|----------|--------------|--------|--------------|--------------|----------|
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of Providers | | 141 | 118 | | 32 | 38 | | 154 | 159 | |
| Number of Clinics | | 37 | 35 | | 32 | 38 | | 39 | 39 | |
| <i>Underlying beliefs/attitudes Index (not targeted by BB)</i> | <i>0.419***</i> | 0.000 | 0.328 | 0.328** | 0.000 | 0.394 | 0.394* | 0.000 | 0.500 | 0.500*** |
| <i>Agree or strongly agree with...</i> | | | | | | | | | | |
| You know a young woman who had a serious health problem after a pregnancy | <i>0.097**</i> | 0.702 | 0.737 | 0.035 | 0.719 | 0.842 | 0.123 | 0.286 | 0.428 | 0.142** |
| You have seen young women harmed by unwanted pregnancies | <i>0.080**</i> | 0.844 | 0.907 | 0.063 | 0.750 | 0.868 | 0.118 | 0.688 | 0.774 | 0.085 |
| According to your religious beliefs, it is okay limit number children | <i>0.018</i> | 0.539 | 0.551 | 0.012 | 0.406 | 0.395 | -0.012 | 0.468 | 0.497 | 0.029 |
| Poor girls can get better paying jobs is they avoid pregnancy before age 19 | <i>0.009</i> | 0.794 | 0.831 | 0.036 | 0.875 | 0.842 | -0.033 | 0.708 | 0.704 | -0.003 |
| You enjoy working with young clients in general | <i>0.054***</i> | 0.993 | 0.992 | -0.001 | 0.781 | 0.895 | 0.113 | 0.851 | 0.937 | 0.086** |
| You're paid fairly for the work that you do | <i>0.061*</i> | 0.298 | 0.390 | 0.092 | 0.500 | 0.632 | 0.132 | 0.149 | 0.170 | 0.020 |
| <i>Disagree or strongly disagree with...</i> | | | | | | | | | | |
| It can be embarrassing for you to discuss sex with younger clients | <i>0.018</i> | 0.844 | 0.898 | 0.054 | 0.844 | 0.737 | -0.107 | 0.896 | 0.912 | 0.016 |
| Young women today have no modesty when they talk about sex | <i>0.058</i> | 0.468 | 0.610 | 0.142** | 0.375 | 0.316 | -0.059 | 0.552 | 0.566 | 0.014 |
| Young women take longer to counsel on contraceptives than older clients | <i>-0.014</i> | 0.333 | 0.356 | 0.023 | 0.281 | 0.289 | 0.008 | 0.188 | 0.138 | -0.050 |
| Your religion considers it a sin for unmarried women to use contraception | <i>0.099**</i> | 0.546 | 0.636 | 0.089 | 0.219 | 0.316 | 0.097 | 0.617 | 0.723 | 0.106* |
| You cannot provide services to young women with no money | <i>0.027</i> | 0.950 | 0.949 | -0.001 | 0.500 | 0.632 | 0.132 | 0.942 | 0.969 | 0.027 |
| If the client hasn't yet had a child, she should avoid using pills | <i>0.046*</i> | 0.794 | 0.873 | 0.079 | 0.531 | 0.632 | 0.100 | 0.961 | 0.969 | 0.008 |
| You fear regulatory consequences for | <i>0.082***</i> | 0.801 | 0.915 | 0.114*** | 0.375 | 0.526 | 0.151 | 0.942 | 0.981 | 0.040* |

| | | | | | | | | | | |
|-------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| providing FP to young unmarried girls | | | | | | | | | | |
| You prefer to provide contraceptive methods that are quicker and easier | 0.005 | 0.518 | 0.534 | 0.016 | 0.156 | 0.079 | -0.077 | 0.935 | 0.950 | 0.015 |
| In general, it's more difficult to work with young clients under 20 | 0.061 | 0.660 | 0.686 | 0.027 | 0.375 | 0.395 | 0.020 | 0.455 | 0.553 | 0.099 |

NOTES: Source is endline provider survey. Index of *underlying beliefs/attitudes Index (not targeted by BB)* are standardized indices of all the variables listed below the index in this table. Variables were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more supportive family planning care attitudes. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility.

*=p<.1; **=p<.05; ***=p<.01

Table A12. Patient Centered FP Care

| Table A12. Patient Centered FP Care | | | | | | | | | | |
|-------------------------------------------------|---------------|----------|--------------|----------|----------|--------------|----------|--------------|--------------|----------|
| Exit Survey | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 5066 | 6411 | | 1221 | 3478 | | 7542 | 8589 | |
| Received services that day [#] | 0.014* | 0.951 | 0.989 | 0.037* | 0.995 | 0.994 | -0.001 | 0.994 | 0.995 | 0.001 |
| Counseled on full range of methods [#] | 0.093** | 0.508 | 0.619 | 0.111 | 0.177 | 0.244 | 0.068 | 0.677 | 0.760 | 0.083* |
| Essential questions index | 0.055** | 0.744 | 0.827 | 0.084* | 0.728 | 0.791 | 0.063 | 0.676 | 0.710 | 0.034 |
| Method information index | 0.091** | 0.706 | 0.819 | 0.113* | 0.632 | 0.781 | 0.149 | 0.655 | 0.718 | 0.063 |
| Mystery Clients | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Received services that day [#] | 0.000 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0.000 | 0.987 | 0.987 | 0.000 |
| Counseled on full range of methods [#] | 0.065* | 0.723 | 0.792 | 0.069 | 0.309 | 0.537 | 0.228*** | 0.699 | 0.682 | -0.017 |
| Essential questions index | 0.052** | 0.592 | 0.655 | 0.063* | 0.333 | 0.472 | 0.138*** | 0.346 | 0.346 | 0.000 |
| Method information index | 0.100*** | 0.723 | 0.882 | 0.159*** | 0.456 | 0.610 | 0.154* | 0.589 | 0.609 | 0.020 |
| Discrete Choice Experiment | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 564 | 472 | | 128 | 152 | | 616 | 636 | |
| Received services | 0.015** | 1.000 | 1.000 | 0.000 | 0.789 | 0.921 | 0.132* | 0.998 | 1.000 | 0.002 |
| Counseled on full range of methods [#] | 0.148*** | 0.096 | 0.233 | 0.137*** | 0.055 | 0.243 | 0.189*** | 0.560 | 0.708 | 0.147* |
| Counseled on LARC | 0.086*** | 0.878 | 0.928 | 0.050** | 0.422 | 0.730 | 0.308*** | 0.873 | 0.940 | 0.067* |
| Counseled on Injectable | 0.170*** | 0.225 | 0.379 | 0.154*** | 0.523 | 0.678 | 0.154* | 0.677 | 0.863 | 0.186*** |

NOTES: Only clients who received services are included in counseling on full range of methods, essential questions index, and method information index outcomes. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Pooled column includes all three countries and controls for country fixed effects. The discrete choice experiment is from the endline provider survey. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021. N's for specific questions vary based on how many respondents answered each question.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A13. Patient Centered FP Care (with Controls)

| <i>Exit Survey</i> | | | | |
|-------------------------------------------------|---------------|----------|----------|--------------|
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Received services that day [#] | 0.014* | 0.039** | -0.001 | 0.000 |
| Counseled on full range of methods [#] | 0.089** | 0.120* | 0.086 | 0.072*** |
| Essential Questions Index | 0.056** | 0.053 | 0.057 | 0.026 |
| Method information index | 0.091*** | 0.114* | 0.142 | 0.049* |
| <i>Mystery Clients</i> | | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Received services that day [#] | 0.000 | 0.000 | 0.000 | -0.002 |
| Counseled on full range of methods [#] | 0.065* | 0.056 | 0.227*** | -0.004 |
| Essential Questions Index | 0.051** | 0.038 | 0.131*** | -0.001 |
| Method information index | 0.101*** | 0.164*** | 0.159* | 0.019 |
| <i>Discrete Choice Experiment</i> | | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Received services | 0.007 | 0.000 | 0.050 | 0.002 |
| Counseled on full range of methods [#] | 0.157*** | 0.113*** | 0.133** | 0.171*** |
| Counseled on LARC | 0.073*** | 0.028 | 0.210** | 0.072*** |
| Counseled on Injectable | 0.176*** | 0.114** | -0.012 | 0.174*** |

NOTES: Table shows the difference between intervention and control group estimated from a multivariable linear regression with standard errors clustered at the facility. For Tanzania and Burkina Faso, we controlled for strata on which randomization was conducted regardless of the data source. Pooled column includes all three countries and controls for country fixed effects.

In the client exit survey, client age (15-19 vs. 20-24), marital status (married or unmarried), parity (no child vs. child), education level (secondary education or more vs. less than secondary), perceived social status, and an indicator of whether the client had ever used FP in the past were included. For counseled on a full range of methods, the essential questions index, and the method information index outcomes, we also included whether the client had a method in mind prior to the visit. For the outcomes received services and the essential questions index in Tanzania and Burkina Faso, we also controlled for the average of this outcome at baseline from the client exit surveys. Client exit survey data included clients under 25 years old and data collected between September 2020 and August 2021.

In both mystery client and client exit survey regressions in Tanzania and Burkina Faso, we controlled for the mean age of the surveyed providers at the facility, the proportion of the surveyed providers that were married, the proportion of providers that had ever used FP in the past, the proportion of providers with at least one child, the proportion of providers characterizing the majority of their clients as vulnerable or poor, the proportion of providers who reported working part time (1-2 days a week), and the proportion of providers with each of the following qualifications (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor) at the facility. In pooled models using the client exit survey, we included client characteristics only.

In the mystery client models, we included an indicator of the profile the client played (1-8 for all combinations of age (16/17 vs. 24), marital status (unmarried/married), and parity (nulliparous/parous). In the mystery client pooled models, we included only the mystery client profile. In Pakistan, the 19/20 years old were grouped with the 24 years old from Tanzania and Burkina Faso.

In the DCE country-specific and pooled models, we included the following specific provider characteristics: provider age, whether the provider was married, whether the provider had ever used FP in the past, whether the provider had at least one child, whether the provider characterized the majority of their clients as vulnerable or poor, whether the provider reported working part time (1-2 days a week), and provider qualification (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor). We also controlled for the profile displayed to the provider (combination of age (15/20/25), marital status (married/unmarried), and parity (unmarried/married).

primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A14. Method Dispensing

| <i>Exit Survey</i> | | | | | | | | | | |
|------------------------------------------------------------------------|-----------------|----------|--------------|----------|----------|--------------|--------|--------------|--------------|---------|
| <i>Method dispensed by provider</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 4820 | 6114 | | 1209 | 3450 | | 7170 | 8123 | |
| Any modern method [#] | <i>0.019*</i> | 0.911 | 0.958 | 0.047** | 0.813 | 0.817 | 0.004 | 0.934 | 0.936 | 0.002 |
| LARC | <i>0.000</i> | 0.582 | 0.581 | -0.002 | 0.134 | 0.163 | 0.029 | 0.275 | 0.270 | -0.005 |
| Injectables | <i>0.015</i> | 0.225 | 0.263 | 0.038 | 0.431 | 0.462 | 0.031 | 0.550 | 0.546 | -0.004 |
| Method of choice | <i>0.022*</i> | 0.888 | 0.938 | 0.050** | 0.755 | 0.770 | 0.015 | 0.922 | 0.925 | 0.003 |
| <i>Mystery Clients</i> | | | | | | | | | | |
| <i>Thought they could get if they were a real client</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Any modern method [#] | <i>0.060*</i> | 0.750 | 0.882 | 0.132*** | 0.882 | 0.927 | 0.044 | 0.608 | 0.609 | 0.001 |
| LARC | <i>0.077**</i> | 0.642 | 0.785 | 0.143** | 0.059 | 0.110 | 0.051 | 0.493 | 0.517 | 0.024 |
| Injectables | <i>0.067*</i> | 0.216 | 0.382 | 0.166*** | 0.294 | 0.402 | 0.108 | 0.483 | 0.426 | -0.057 |
| Method of choice | <i>0.081**</i> | 0.453 | 0.625 | 0.172*** | 0.176 | 0.232 | 0.055 | 0.519 | 0.526 | 0.006 |
| <i>DCE</i> | | | | | | | | | | |
| <i>Provider reported would be appropriate to provide modern method</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 564 | 472 | | 128 | 152 | | 616 | 636 | |
| Any modern method [#] | <i>0.033***</i> | 0.949 | 0.977 | 0.028* | 0.719 | 0.849 | 0.130* | 0.977 | 0.994 | 0.016** |

NOTES: Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Pooled column includes all three countries and controls for country fixed effects. The discrete choice experiment is from the endline provider survey. Client exit data includes data collected from September 2020 to August 2021. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

| Table A15. Method Dispensing (with Controls) | | | | |
|-----------------------------------------------------|-----------------------------------|----------|----------|--------------|
| | <i>Exit Survey</i> | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Any modern method [#] | 0.018 | 0.042** | -0.008 | 0.002 |
| LARC | -0.002 | -0.022 | 0.025 | -0.007 |
| Injectables | 0.015 | 0.034 | 0.013 | -0.008 |
| Method of choice | 0.020* | 0.039** | -0.001 | 0.003 |
| | <i>Mystery Clients</i> | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Any modern method [#] | 0.061* | 0.102* | 0.043 | -0.004 |
| LARC | 0.077** | 0.084 | 0.048 | 0.009 |
| Injectables | 0.071** | 0.119*** | 0.106 | -0.067 |
| Method of choice | 0.082** | 0.143** | 0.052 | -0.010 |
| | <i>Discrete Choice Experiment</i> | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Any modern method [#] | 0.029** | 0.020 | 0.007 | 0.017** |

NOTES: Table shows the difference between intervention and control group estimated from a multivariable linear regression with standard errors clustered at the facility. Pooled column includes all three countries and controls for country fixed effects. For Tanzania and Burkina Faso, we controlled for strata on which randomization was conducted regardless of the data source.

In the client exit survey, client age (15-19 vs. 20-24), marital status (married or unmarried), parity (no child vs. child), education level (secondary education or more v less than secondary), perceived social status, and an indicator of whether the client had ever used FP in the past were included. In Tanzania and Burkina Faso, we also controlled for the baseline facility average of each outcome using the client exit surveys collected in 2019 and early 2020. Client exit survey data included clients under 25 years old and data collected between September 2020 and August 2021.

In both mystery client and client exit survey regressions in Tanzania and Burkina Faso, we controlled for the mean age of the surveyed providers at the facility, the proportion of the surveyed providers that were married, the proportion of providers that had ever used FP in the past, the proportion of providers with at least one child, the proportion of providers characterizing the majority of their clients as vulnerable or poor, the proportion of providers who reported working part time (1-2 days a week), and the proportion of providers with each of the following qualifications (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor) at the facility. In pooled models using the client exit survey, we included client characteristics only.

In the mystery client models, we included an indicator of the profile the client played (1-8 for all combinations of age (16/17 vs. 24), marital status (unmarried/married), and parity (nulliparous/parous)). In the mystery client pooled models, we included only the mystery client profile. In Pakistan, the 19/20 years old were grouped with the 24 years old from Tanzania and Burkina Faso.

In the DCE country-specific and pooled models, we included the following specific provider characteristics: provider age, whether the provider was married, whether the provider had ever used FP in the past, whether the provider had at least one child, whether the provider characterized the majority of their clients as vulnerable or poor, whether the provider reported working part time (1-2 days a week), and provider qualification (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor). We also controlled for the profile displayed to the provider (combination of age (15/20/25), marital status (married/unmarried), and parity (unmarried/married)).

primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A16. Perceived Treatment

| Table A16. Perceived Treatment | | | | | | | | | | |
|--------------------------------------------|---------------|----------|--------------|----------|----------|--------------|----------|--------------|--------------|--------|
| <i>Exit Survey</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 5066 | 6411 | | 1221 | 3478 | | 7542 | 8589 | |
| Perceived treatment Index [#] | 0.115 | 0.005 | 0.284 | 0.279** | 0.209 | 0.268 | 0.060 | 0.011 | 0.023 | 0.012 |
| Would recommend to friend | 0.019 | 0.816 | 0.858 | 0.041 | 0.895 | 0.912 | 0.017 | 0.852 | 0.857 | 0.004 |
| Not judged or scolded | 0.002 | 0.989 | 0.989 | 0.000 | 0.858 | 0.932 | 0.074 | 0.980 | 0.968 | -0.012 |
| Did not feel uncomfortable b/c of sex life | 0.013 | 0.650 | 0.694 | 0.044 | 0.966 | 0.984 | 0.018 | 0.966 | 0.957 | -0.009 |
| <i>Mystery Clients</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Perceived treatment Index [#] | 0.381*** | 0.000 | 0.496 | 0.496*** | 0.000 | 0.657 | 0.657*** | 0.000 | 0.139 | 0.139 |
| Would recommend to friend | 0.071*** | 0.639 | 0.710 | 0.072*** | 0.643 | 0.854 | 0.210*** | 0.691 | 0.693 | 0.002 |
| Not judged or scolded | 0.044 | 0.818 | 0.917 | 0.099** | 0.809 | 0.878 | 0.069 | 0.878 | 0.857 | -0.021 |
| Did not feel uncomfortable b/c of sex life | 0.018 | 0.784 | 0.826 | 0.043 | 0.941 | 0.976 | 0.034 | 0.962 | 0.948 | -0.013 |

NOTES: Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Pooled column includes all three countries and controls for country fixed effects. Client exit data includes data collected from September 2020 to August 2021. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

| Table A17. Perceived Treatment (with Controls) | | | | |
|-------------------------------------------------------|------------------------|----------|----------|--------------|
| | <i>Exit Survey</i> | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Perceived treatment Index [#] | 0.104 | 0.281** | -0.004 | 0.004 |
| Would recommend to friend | 0.019 | 0.045* | 0.012 | 0.002 |
| Not judged or scolded | 0.004 | 0.002 | 0.087 | -0.017** |
| Did not feel uncomfortable b/c of sex life | 0.011 | 0.079 | 0.020* | -0.005 |
| | <i>Mystery Clients</i> | | | |
| | <i>Pooled</i> | Tanzania | Pakistan | Burkina Faso |
| | <i>Effect</i> | Effect | Effect | Effect |
| Perceived treatment Index [#] | 0.380*** | 0.542*** | 0.659*** | 0.121 |
| Would recommend to friend | 0.071*** | 0.064** | 0.212*** | 0.010 |
| Not judged or scolded | 0.043 | 0.114*** | 0.065 | -0.029 |
| Did not feel uncomfortable b/c of sex life | 0.017 | 0.078** | 0.035 | -0.006 |

NOTES: Table shows the difference between intervention and control group estimated from a multivariable linear regression with standard errors clustered at the facility. Pooled column includes all three countries and controls for country fixed effects.

For Tanzania and Burkina Faso, we controlled for strata on which randomization was conducted regardless of the data source. In these two countries we also controlled for the mean age of the surveyed providers at the facility, the proportion of the surveyed providers that were married, the proportion of providers that had ever used FP in the past, the proportion of providers with at least one child, the proportion of providers characterizing the majority of their clients as vulnerable or poor, the proportion of providers who reported working part time (1-2 days a week), and the proportion of providers with each of the following qualifications (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor) at the facility

In the client exit survey, client age (15-19 vs. 20-24), marital status (married or unmarried), parity (no child vs. child), education level (secondary education or more vs. less than secondary), perceived social status, an indicator of whether the client had ever used FP in the past, and whether they had a method of family planning in mind prior to the visit were included. In Tanzania and Burkina Faso, we also controlled for the baseline facility average for the outcome “Would recommend to a friend” using the client exit surveys collected in 2019 and early 2020. Client exit survey data included clients under 25 years old and data collected between September 2020 and August 2021. In pooled models using the client exit survey, we included client characteristics only.

In the mystery client models, we included an indicator of the profile the client played (1-8 for all combinations of age (16/17 vs. 24), marital status (unmarried/married), and parity (nulliparous/parous)). In the mystery client pooled models, we included only the mystery client profile. In Pakistan, the 19/20 years old were grouped with the 24 years old from Tanzania and Burkina Faso.

primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A18. Client Volumes Between Intervention and Control Clinics

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|-----------------------------------------------------------------|-------------------|----------|--------------|------------|----------|--------------|------------|--------------|--------------|------------|
| | <i>Difference</i> | Control | Intervention | Difference | Control | Intervention | Difference | Control | Intervention | Difference |
| Number of clinics | | 37 | 36 | | 37 | 38 | | 39 | 39 | |
| Total family planning clients | 6.872 | 226.742 | 226.346 | -0.395 | 18.885 | 23.204 | 4.319** | 95.079 | 108.335 | 13.256 |
| Number of new users total | -4.834 | 161.704 | 148.423 | -13.281 | 8.604 | 9.382 | 0.778 | 35.577 | 34.577 | -1.000 |
| <i>Number of clients by age (monthly average)</i> | | | | | | | | | | |
| Age <20 | 1.614 | 23.693 | 22.988 | -0.704 | 2.665 | 4.856 | 2.192*** | 14.923 | 18.288 | 3.365 |
| Age 20-24 | 0.619 | 65.886 | 63.870 | -2.016 | 4.867 | 5.756 | 0.889 | 28.639 | 31.528 | 2.889 |
| Age 25+ | -1.193 | 71.298 | 59.365 | -11.933 | 11.353 | 12.592 | 1.238 | 51.068 | 58.160 | 7.092 |
| <i>Number of methods by type (all clients, monthly average)</i> | | | | | | | | | | |
| LARC | -3.314 | 140.560 | 124.997 | -15.564 | 5.746 | 6.730 | 0.984 | 36.626 | 37.835 | 1.209 |
| Injectable | 7.806* | 43.805 | 57.260 | 13.456 | 7.508 | 8.385 | 0.878 | 39.201 | 46.744 | 7.543 |
| Pill | 2.245 | 26.507 | 28.677 | 2.170 | 5.495 | 7.997 | 2.502*** | 14.767 | 16.897 | 2.130 |
| Other | 0.611 | 17.003 | 15.549 | -1.454 | 0.136 | 0.092 | -0.044 | 4.485 | 6.859 | 2.374 |

NOTES: PK administrative data includes data from September 2020 to June 2021. Data was extracted from the District Health Information Software (DHIS2) in Tanzania and Burkina Faso and includes the full study period (September 2020 – August 2021). Family planning clients in Burkina Faso do not include those renewing the same method. Other methods in Tanzania include female and male condoms and female and male sterilization. In Burkina Faso, other methods include female and male condoms, natural methods, and other methods. Data on returning users of LARC methods and other methods was not collected until 2021 in Tanzania and therefore the number of LARC and pill users in Tanzania only include January 2021 to August 2021. Age of family planning users was only available for new users so in Tanzania, disaggregation by age only includes new users while in Pakistan and Burkina Faso, both new and returning users are captured. The total number of family planning clients in Tanzania is included from January 2021 to August 2021.

Table A19. Disparities by Age (Patient Centered FP Care)

| <i>Exit Survey</i> <i>Age 15-19 compared to age 25+</i> | | | | | | | | | | |
|-----------------------------------------------------------------------|---------------|----------|--------------|---------|-----------|--------------|--------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 8758 | 8537 | | 1831 | 4149 | | 13656 | 15691 | |
| Number of clients <20 | | 741 | 1116 | | 129 | 681 | | 2004 | 2287 | |
| Received services that day [#] | -0.006 | 0.031* | 0.019** | -0.012 | 0.007** | 0.004 | -0.003 | 0.002 | 0.003** | 0.001 |
| Counseled on full range of methods [#] | 0.012 | 0.171*** | 0.168*** | -0.004 | -0.136*** | -0.020 | 0.116 | 0.094*** | 0.143*** | 0.049 |
| Essential questions index | 0.008 | 0.097*** | 0.132*** | 0.035 | 0.173*** | 0.096* | -0.077 | 0.059** | 0.063*** | 0.004 |
| Method information index | -0.001 | 0.135*** | 0.157*** | 0.022 | -0.189 | -0.044 | 0.145 | 0.084*** | 0.083*** | -0.002 |
| <i>Mystery Clients</i> <i>Age 16/17 compared to age 24</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | N/A | N/A | N/A | 158 | 156 | |
| Number of young (16/17) visits | | 74 | 72 | | N/A | N/A | N/A | 79 | 79 | |
| Received services that day [#] | -0.013 | 0.000 | 0.000 | 0.000 | N/A | N/A | N/A | 0.000 | -0.025 | -0.025 |
| Counseled on full range of methods [#] | -0.047 | 0.041 | -0.028 | -0.068 | N/A | N/A | N/A | 0.013 | -0.014 | -0.027 |
| Essential Questions Index | 0.003 | -0.041 | 0.023 | 0.064 | N/A | N/A | N/A | -0.026 | -0.079* | -0.054 |
| Method information index | 0.028 | -0.122* | -0.042 | 0.080 | N/A | N/A | N/A | -0.112 | -0.134* | -0.022 |
| <i>Discrete Choice Experiment</i> <i>Age 15 compared to age 25</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 369 | 311 | | 86 | 106 | | 414 | 434 | |
| Number of young profiles | | 180 | 166 | | 42 | 53 | | 205 | 227 | |
| Received services | 0.007 | 0 | 0 | 0 | -0.08 | -0.012 | .069 | -0.005 | 0 | .005 |
| Counseled on full range of methods [#] | -0.040 | -0.034 | -0.115*** | -0.082* | -0.067 | -0.164** | -0.097 | -0.054 | -0.038 | .017 |
| Counseled on LARC | 0.007 | -0.024 | .038 | .062 | -0.051 | -0.129* | -0.079 | .01 | .011 | 0 |
| Counseled on injections | 0.009 | -0.094** | -0.132** | -0.038 | -0.14 | -0.123 | .017 | -0.043 | .004 | .046 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is under 20, treatment assignment, and the interaction of under-20 and treatment assignment. The “Control” column is the coefficient on under-20 variable. The “Intervention” column is the sum of the under-20 coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean clients under-20 do better and negative coefficients mean clients under-20 do worse. A positive number if the “Effect” column means that the intervention improved the outcome more for younger women. Client exit data includes data collected from September 2020 to August 2021. N’s for specific questions vary based on how many respondents answered each question. Only clients who received services are included in counseling on full range of methods, essential questions index, and method information index outcomes. The discrete choice experiment is from the endline provider survey.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A20. Disparities by Age (Method Dispensing)

| <i>Exit Survey</i> Method dispensed by provider Age 15-19 compared to age 25+ | | | | | | | | | | |
|-------------------------------------------------------------------------------------------------------------|---------------|-----------|--------------|--------|----------|--------------|----------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 8758 | 8537 | | 1831 | 4149 | | 13656 | 15691 | |
| Number of clients <20 | | 741 | 1116 | | 129 | 681 | | 2004 | 2287 | |
| Any modern method [#] | 0.001 | 0.058*** | 0.035*** | -0.024 | 0.132** | 0.121** | -0.011 | 0.002 | 0.002 | 0.000 |
| LARC | -0.018 | 0.201*** | 0.253*** | 0.052 | 0.109* | -0.056 | -0.166** | 0.186*** | 0.199*** | 0.013 |
| Injectables | 0.030 | -0.077*** | -0.136*** | -0.059 | 0.023 | 0.152* | 0.129 | -0.140*** | -0.113*** | 0.027 |
| Method of choice | 0.002 | 0.062*** | 0.044*** | -0.017 | 0.165** | 0.159*** | -0.006 | 0.010 | 0.002 | -0.008 |
| <i>Mystery Clients</i> Thought they could get if they were a real client Age 16/17 compared to age 24 | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | N/A | N/A | N/A | 158 | 156 | |
| Number of young (16/17) visits | | 74 | 72 | | N/A | N/A | N/A | 79 | 79 | |
| Any modern method [#] | 0.014 | -0.176** | -0.069 | .106 | N/A | N/A | N/A | -1 | -0.184** | -0.084 |
| LARC | -0.001 | -0.014 | .042 | .055 | N/A | N/A | N/A | -0.109 | -0.189** | -0.081 |
| Injectables | -0.035 | -0.108 | -0.236*** | -0.128 | N/A | N/A | N/A | -0.16* | -0.053 | .107 |
| Method of choice | -0.064 | -0.068 | -0.194** | -0.127 | N/A | N/A | N/A | -0.117 | -0.169** | -0.052 |
| <i>DCE</i> Provider reported method appropriate Age 15 compared to age 25 | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 369 | 311 | | 86 | 106 | | 414 | 434 | |
| Number of young profiles | | 180 | 166 | | 42 | 53 | | 205 | 227 | |
| Any modern method [#] | 0.039** | -0.065** | -0.004 | 0.061* | -0.177** | -0.029 | 0.147 | -0.002 | 0 | 0.002 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is under 20, treatment assignment, and the interaction of under-20 and treatment assignment. The “Control” column is the coefficient on under-20. The “Intervention” column is the sum of the under-20 coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean clients under-20 do better and negative coefficients mean clients under-20 do worse. A positive number if the “Effect” column means that the intervention improved the outcome more for younger women. Client exit data includes data collected from September 2020 to August 2021. The discrete choice experiment is from the endline provider survey.

[#] = Primary outcome
* = p < .1; ** = p < .05; *** = p < .01

Table A21. Disparities by Age (Perceived Patient Centeredness)

| <i>Exit Survey</i> <i>Age 15-19 compared to age 25+</i> | | | | | | | | | | |
|----------------------------------------------------------------|----------------|----------|--------------|---------|----------|--------------|---------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 8758 | 8537 | | 1831 | 4149 | | 13656 | 15691 | |
| Number of clients <20 | | 741 | 1116 | | 129 | 681 | | 2004 | 2287 | |
| Perceived Treatment Index [#] | <i>0.012</i> | 0.080 | 0.228** | 0.148 | 0.505*** | 0.277* | -0.228 | -0.109* | -0.185*** | -0.076 |
| Would recommend to friend | <i>0.002</i> | 0.008 | 0.036** | 0.027 | 0.081*** | 0.018 | -0.063* | -0.017* | -0.025*** | -0.008 |
| Not judged or scolded | <i>0.000</i> | 0.001 | 0.005 | 0.004 | -0.257 | -0.070 | 0.187 | -0.008 | -0.011 | -0.003 |
| Did not feel uncomfortable b/c of sex life | <i>0.010</i> | -0.021 | 0.043 | 0.063 | -0.022 | 0.004 | 0.026 | -0.009 | -0.016 | -0.007 |
| <i>Mystery Clients</i> <i>Age 16/17 compared to age 24s</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | N/A | N/A | N/A | 158 | 156 | |
| Number of young (16/17) visits | | 74 | 72 | | N/A | N/A | N/A | 79 | 79 | |
| Perceived Treatment Index [#] | <i>-0.268*</i> | 0.136 | -0.265* | -0.402* | N/A | N/A | N/A | -0.216* | -0.361** | -0.145 |
| Would recommend to friend | <i>-0.030</i> | -0.007 | -0.031 | -0.024 | N/A | N/A | N/A | -0.074 | -0.108*** | -0.034 |
| Not judged or scolded | <i>-0.107*</i> | 0.068 | -0.083 | -0.151* | N/A | N/A | N/A | -0.038 | -0.104** | -0.066 |
| Did not feel uncomfortable b/c of sex life | <i>0.035</i> | 0.135** | 0.236*** | 0.101 | N/A | N/A | N/A | -0.026 | -0.052 | -0.026 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is under 20, treatment assignment, and the interaction of under-20 and treatment assignment. The “Control” column is the coefficient on under-20. The “Intervention” column is the sum of the under-20 coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean clients under-20 do better and negative coefficients mean clients under-20 do worse. A positive number in the “Effect” column means that the intervention improved the outcome more for younger women. Client exit data includes data collected from September 2020 to August 2021.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A22. Disparities by Marital Status (Patient Centered FP Care)

| <i>Exit Survey</i> <i>Unmarried compared to married</i> | | | | | | | | | | |
|---------------------------------------------------------------------------|----------------|----------|--------------|----------|-----------|--------------|---------|--------------|--------------|---------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 13083 | 13832 | | 2923 | 6946 | | 19194 | 21993 | |
| Unmarried clients | | 4318 | 5002 | | 7 | 26 | | 4253 | 4874 | |
| Received services that day [#] | <i>0.008</i> | -0.002 | 0.000 | 0.002 | 0.008* | 0.011 | 0.003 | 0.000 | -0.002 | -0.002 |
| Counseled on full range of methods [#] | <i>0.026</i> | 0.036 | 0.050 | 0.014 | 0.169 | -0.243*** | -0.412 | 0.053* | 0.060** | 0.008 |
| Essential Questions Index | <i>0.014</i> | 0.026 | 0.023 | -0.003 | -0.042 | -0.205** | -0.163 | -0.035* | -0.001 | 0.034 |
| Method information index | <i>0.036</i> | -0.011 | 0.011 | 0.022 | 0.092 | 0.083 | -0.009 | -0.038 | 0.005 | 0.043 |
| <i>Mystery Clients</i> <i>Unmarried compared to married</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Unmarried visits | | 74 | 72 | | 19 | 21 | | 78 | 78 | |
| Received services that day [#] | <i>-0.021</i> | 0 | 0 | 0.000 | 0 | 0 | 0.000 | .025 | -.025 | -0.050* |
| Counseled on full range of methods [#] | <i>-0.032</i> | .068 | .167** | 0.099 | .031 | -.125 | -0.156 | .038 | .005 | -0.034 |
| Essential Questions Index | <i>-0.034</i> | -.32*** | -.282*** | 0.037 | -.218*** | -.339*** | -0.120 | -.026 | -.06* | -0.035 |
| Method information index | <i>0.026</i> | .014 | .042 | 0.028 | .209 | .242** | 0.032 | -.023 | .013 | 0.036 |
| <i>Discrete Choice Experiment</i> <i>Unmarried compared to married</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 564 | 472 | | 128 | 152 | | 616 | 636 | |
| Unmarried profiles | | 282 | 236 | | 64 | 76 | | 308 | 318 | |
| Received services | <i>0.006</i> | 0.000 | 0.000 | 0.000 | -0.172*** | -0.079* | 0.094 | 0.003 | 0.000 | -0.003 |
| Counseled on full range of methods [#] | <i>0.053**</i> | -0.042** | 0.038* | 0.080*** | -0.047 | -0.091 | -0.044 | -0.022 | 0.029 | 0.051 |
| Counseled on LARC | <i>0.031</i> | 0.002 | 0.055** | 0.052 | -0.094 | -0.012 | 0.081 | -0.004 | 0.003 | 0.007 |
| Counseled on injections | <i>0.041*</i> | -0.035 | -0.009 | 0.027 | -0.234*** | -0.064 | 0.170** | 0.005 | 0.026 | 0.021 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is unmarried, Intervention assignment, and the interaction of unmarried and treatment assignment. The “Control” column is the coefficient on unmarried. The “Intervention” column is the sum of the unmarried coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean unmarried clients do better and negative coefficients mean unmarried clients do worse. A positive number if the “Effect” column means that the intervention improved the outcome more for unmarried women. Client exit data includes data collected from September 2020 to August 2021. The discrete choice experiment is from the endline provider survey.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

| Table A23. Disparities by Marital Status (Method Dispensing) | | | | | | | | | | |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------|--------------|--------|-----------|--------------|--------|--------------|--------------|--------|
| | <i>Exit Survey Method dispensed by provider Unmarried compared to married</i> | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 13083 | 13832 | | 2923 | 6946 | | 19194 | 21993 | |
| Unmarried clients | | 4318 | 5002 | | 7 | 26 | | 4253 | 4874 | |
| Any modern method [#] | <i>0.011</i> | -0.002 | -0.003 | -0.001 | -0.045 | 0.028 | 0.073 | 0.016** | 0.011* | -0.005 |
| LARC | <i>0.017</i> | -0.005 | 0.046* | 0.051 | 0.049 | -0.090 | -0.140 | 0.031** | 0.043*** | 0.011 |
| Injectables | <i>-0.001</i> | 0.002 | -0.019 | -0.022 | -0.166 | 0.001 | 0.167 | 0.022 | 0.004 | -0.018 |
| Method of choice | <i>0.011</i> | 0.003 | 0.005 | 0.002 | 0.017 | 0.027 | 0.010 | 0.011 | 0.008 | -0.003 |
| | <i>Mystery Clients Thought they could get if they were a real client Unmarried compared to married</i> | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Unmarried profiles | | 74 | 72 | | 19 | 21 | | 78 | 78 | |
| Any modern method [#] | <i>0.059</i> | -0.041 | 0.069 | 0.110 | -0.093 | -0.001 | 0.092 | -0.010 | -0.012 | -0.002 |
| LARC | <i>-0.028</i> | 0.041 | -0.042 | -0.082 | -0.072 | -0.138** | -0.066 | 0.031 | 0.028 | -0.003 |
| Injectables | <i>0.186**</i> | 0.108 | 0.292*** | 0.184 | -0.216* | 0.009 | 0.225 | 0.077 | 0.008 | -0.069 |
| Method of choice | <i>0.076</i> | 0.095 | 0.222*** | 0.128 | -0.190** | -0.073 | 0.117 | 0.026 | 0.079 | 0.053 |
| | <i>DCE Provider reported method appropriate Unmarried compared to married</i> | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 564 | 472 | | 128 | 152 | | 616 | 636 | |
| Unmarried profiles | | 282 | 236 | | 64 | 76 | | 308 | 318 | |
| Any modern method [#] | <i>0.020</i> | -0.014 | 0.015 | 0.029 | -0.221*** | -0.065 | 0.156* | 0.012 | 0.000 | -0.013 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is unmarried, treatment assignment, and the interaction of unmarried and treatment assignment. The “Control” column is the coefficient on unmarried. The “Intervention” column is the sum of the unmarried coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean unmarried clients do better and negative coefficients mean unmarried clients do worse. A positive number in the “Effect” column means that the intervention improved the outcome more for unmarried women. Client exit data includes data collected from September 2020 to August 2021. The discrete choice experiment is from the online provider survey.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A24. Disparities by Marital Status (Perceived Patient Centeredness)

| <i>Exit Survey</i> <i>Unmarried compared to married</i> | | | | | | | | | | |
|----------------------------------------------------------------|---------------|-----------|--------------|--------|----------|--------------|----------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 13083 | 13832 | | 2923 | 6946 | | 19194 | 21993 | |
| Number of unmarried clients | | 4318 | 5002 | | 7 | 26 | | 4253 | 4874 | |
| Perceived Treatment Index [#] | <i>0.106</i> | -0.179** | -0.023 | 0.156 | -0.300 | 0.217 | 0.518 | -0.055 | -0.023 | 0.032 |
| Would recommend to friend | <i>0.005</i> | -0.008 | 0.008 | 0.016 | -0.091 | 0.004 | 0.095 | 0.011 | 0.005 | -0.005 |
| Not judged or scolded | <i>-0.002</i> | -0.004 | -0.003 | 0.001 | -0.031 | 0.030 | 0.061 | 0.002 | 0.011* | 0.009 |
| Did not feel uncomfortable b/c of sex life | <i>0.029</i> | -0.046 | -0.003 | 0.043 | 0.026*** | -0.109 | -0.135* | 0.002 | 0.007 | 0.006 |
| <i>Mystery Clients</i> <i>Unmarried compared to married</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Number of visits by unmarried profiles | | 74 | 72 | | 19 | 21 | | 78 | 78 | |
| Perceived Treatment Index [#] | <i>0.038</i> | -0.486*** | -0.363*** | 0.123 | 0.176 | -0.039 | -0.215 | -0.342** | -0.185 | 0.157 |
| Would recommend to friend | <i>-0.032</i> | 0.000 | 0.024 | 0.024 | 0.157** | -0.034 | -0.192** | -0.099** | -0.070* | 0.030 |
| Not judged or scolded | <i>0.048</i> | -0.014 | -0.028 | -0.014 | -0.246* | -0.092 | 0.154 | -0.167*** | -0.082 | 0.085 |
| Did not feel uncomfortable b/c of sex life | <i>0.006</i> | -0.135** | -0.097* | 0.038 | 0.000 | 0.024 | 0.025 | -0.026 | -0.053 | -0.028 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is unmarried, treatment assignment, and the interaction of unmarried and treatment assignment. The “Control” column is the coefficient on unmarried. The “Intervention” column is the sum of the unmarried coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean unmarried clients do better and negative coefficients mean unmarried clients do worse. A positive number in the “Effect” column means that the intervention improved the outcome more for unmarried women. Client exit data includes data collected from September 2020 to August 2021.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A25. Disparities by Parity (Patient Centered FP Care)

| <i>Exit Survey</i> | | | | | | | | | | |
|-------------------------------------------------|---------------|-----------|--------------|--------|-----------|--------------|----------|--------------|--------------|--------|
| <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 13083 | 13832 | | 2923 | 6946 | | 19194 | 21993 | |
| Nulliparous clients | | 507 | 771 | | 40 | 193 | | 1690 | 1840 | |
| Received services that day | -0.004 | 0.006 | 0.007 | 0.001 | 0.003 | -0.013 | -0.016 | 0.000 | -0.001 | -0.001 |
| Counseled on full range of methods [#] | 0.024 | 0.027 | -0.001 | -0.028 | -0.062 | 0.221*** | 0.283*** | -0.033 | -0.010 | 0.023 |
| Essential Questions Index | 0.012 | 0.005 | 0.005 | 0.000 | -0.006 | -0.012 | -0.006 | -0.013 | 0.019 | 0.031 |
| Method information index | 0.023 | 0.049* | 0.060*** | 0.011 | 0.027 | 0.122 | 0.096 | 0.021 | 0.052*** | 0.032 |
| <i>Mystery Clients</i> | | | | | | | | | | |
| <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Nulliparous visits | | 74 | 72 | | 43 | 52 | | 79 | 77 | |
| Received services that day | 0.010 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.025 | 0.025 |
| Counseled on full range of methods [#] | 0.124** | -0.122** | 0.028 | 0.149* | -0.058 | -0.026 | 0.032 | -0.141* | -0.039 | 0.102 |
| Essential Questions Index | 0.062 | -0.014 | 0.032 | 0.046 | 0.083 | 0.104* | 0.022 | -0.154*** | -0.087** | 0.067 |
| Method information index | 0.010 | 0.014 | 0.042 | 0.028 | -0.011 | -0.128 | -0.117 | -0.138* | -0.103 | 0.035 |
| <i>Discrete Choice Experiment</i> | | | | | | | | | | |
| <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 564 | 472 | | 128 | 152 | | 616 | 636 | |
| Nulliparous profiles | | 282 | 236 | | 64 | 76 | | 308 | 318 | |
| Received services | 0.000 | 0.000 | 0.000 | 0.000 | -0.012 | -0.025 | -0.013 | -0.003 | 0.000 | 0.003 |
| Counseled on full range of methods [#] | 0.032 | -0.047* | -0.058* | -0.011 | -0.076** | -0.063 | 0.013 | -0.135*** | -0.059* | 0.077* |
| Counseled on LARC | 0.044 | -0.110*** | -0.094*** | 0.016 | -0.123** | -0.037 | 0.087 | -0.123*** | -0.069* | 0.054 |
| Counseled on injections | 0.019 | -0.031 | -0.061* | -0.030 | -0.199*** | -0.087 | 0.112 | -0.114*** | -0.067** | 0.048 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is nulliparous, treatment assignment, and the interaction of unmarried and treatment assignment. The “Control” column is the coefficient on nulliparous. The “Intervention” column is the sum of the nulliparous coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean nulliparous clients do better and negative coefficients mean nulliparous clients do worse. A positive number if the “Effect” column means that the intervention improved the outcome more for nulliparous women. Client exit data includes data collected from September 2020 to August 2021. The discrete choice experiment is from the endline provider survey.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A26. Disparities by parity (Method Dispensing)

| <i>Exit Survey</i> | | | | | | | | | | |
|----------------------------------------------------------|---------------|-----------|--------------|--------|-----------|--------------|----------|--------------|--------------|--------|
| <i>Method dispensed by provider</i> | | | | | | | | | | |
| <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 13083 | 13832 | | 2923 | 6946 | | 19194 | 21993 | |
| Nulliparous clients | | 507 | 771 | | 40 | 193 | | 1690 | 1840 | |
| Any modern method [#] | -0.018 | -0.002 | 0.011 | 0.013 | -0.158 | -0.204** | -0.046 | -0.008 | -0.025* | -0.017 |
| LARC | 0.011 | -0.102** | 0.034 | 0.136* | 0.106 | -0.073* | -0.179* | 0.005 | -0.001 | -0.006 |
| Injectables | -0.032 | -0.004 | -0.081*** | -0.077 | -0.473*** | -0.198** | 0.276*** | -0.022 | -0.037** | -0.015 |
| Method of choice | -0.024 | 0.000 | 0.013 | 0.013 | -0.127 | -0.203** | -0.076 | 0.000 | -0.024 | -0.024 |
| <i>Mystery Clients</i> | | | | | | | | | | |
| <i>Thought they could get if they were a real client</i> | | | | | | | | | | |
| <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Nulliparous visits | | 74 | 72 | | 43 | 52 | | 79 | 77 | |
| Any modern method [#] | 0.059 | 0.041 | 0.125*** | 0.084 | 0.086 | 0.060 | -0.026 | -0.125 | -0.052 | 0.073 |
| LARC | -0.028 | 0.095 | 0.042 | -0.053 | 0.014 | -0.046 | -0.060 | -0.011 | 0.011 | 0.022 |
| Injectables | 0.186** | -0.162*** | -0.014 | 0.148 | -0.127 | 0.198* | 0.326* | -0.105 | 0.042 | 0.146 |
| Method of choice | 0.076 | -0.041 | 0.139* | 0.179 | 0.019 | 0.049 | 0.030 | -0.025 | -0.015 | 0.010 |
| <i>DCE</i> | | | | | | | | | | |
| <i>Provider reported method appropriate</i> | | | | | | | | | | |
| <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of profiles | | 564 | 472 | | 128 | 152 | | 616 | 636 | |
| Nulliparous profiles | | 282 | 236 | | 64 | 76 | | 308 | 318 | |
| Any modern method [#] | 0.024* | -0.055*** | -0.020 | 0.035 | 0.004 | -0.011 | -0.015 | -0.026*** | -0.006 | 0.020* |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is nulliparous, treatment assignment, and the interaction of unmarried and treatment assignment. The “Control” column is the coefficient on nulliparous. The “Intervention” column is the sum of the nulliparous coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean nulliparous clients do better and negative coefficients mean nulliparous clients do worse. A positive number in the “Effect” column means that the intervention improved the outcome more for nulliparous women. Client exit data includes data collected from September 2020 to August 2021. The discrete choice experiment is from the endline provider survey.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A27. Disparities by Parity (Perceived Treatment)

| <i>Exit Survey</i> <i>Nulliparous compared to parous</i> | | | | | | | | | | |
|-----------------------------------------------------------------|---------------|----------|--------------|---------|----------|--------------|--------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 13083 | 13832 | | 2923 | 6946 | | 19194 | 21993 | |
| Nulliparous clients | | 507 | 771 | | 40 | 193 | | 1690 | 1840 | |
| Perceived Treatment Index [#] | 0.052 | -0.027 | 0.203*** | 0.230** | 0.016 | -0.083 | -0.099 | -0.015 | 0.001 | 0.016 |
| Would recommend to friend | 0.006 | -0.007 | 0.023** | 0.030 | 0.033 | 0.018 | -0.015 | -0.007 | -0.008 | 0.000 |
| Not judged or scolded | -0.001 | -0.008 | -0.003 | 0.005 | 0.048 | 0.075 | 0.026 | 0.001 | 0.004 | 0.003 |
| Did not feel uncomfortable b/c of sex life | 0.012 | -0.010 | 0.078** | 0.088 | 0.008 | 0.015* | 0.007 | 0.002 | -0.005 | -0.007 |
| <i>Mystery Clients</i> <i>Nulliparous compared to parous</i> | | | | | | | | | | |
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Nulliparous visits | | 74 | 72 | | 43 | 52 | | 79 | 77 | |
| Perceived Treatment Index [#] | 0.061 | 0.422*** | 0.450*** | 0.028 | -0.162 | -0.240 | -0.078 | -0.402*** | -0.299* | 0.103 |
| Would recommend to friend | 0.025 | -0.034 | 0.003 | 0.037 | 0.013 | -0.042 | -0.055 | -0.067 | -0.056 | 0.011 |
| Not judged or scolded | 0.048 | -0.068 | 0.000 | 0.068 | -0.105 | 0.083 | 0.188 | -0.013 | -0.053 | -0.040 |
| Did not feel uncomfortable b/c of sex life | -0.007 | 0.108 | 0.125*** | 0.017 | -0.036 | 0.061 | 0.097 | 0.026 | -0.052 | -0.078 |

NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is nulliparous, treatment assignment, and the interaction of unmarried and treatment assignment. The “Control” column is the coefficient on nulliparous. The “Intervention” column is the sum of the nulliparous coefficient and the interaction. The “Effect” column is the interaction term. Positive numbers mean nulliparous clients do better and negative coefficients mean nulliparous clients do worse. A positive number in the “Effect” column means that the intervention improved the outcome more for nulliparous women. Client exit data includes data collected from September 2020 to August 2021.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

Table A28. Perceived Treatment Index Components (Exit Survey)

| | <i>Exit Survey</i> | | | | | | | | | |
|--------------------------------------------------------------------------|--------------------|----------|--------------|---------|----------|--------------|--------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 5066 | 6411 | | 1221 | 3478 | | 7542 | 8589 | |
| Perceived treatment Index [#] | <i>0.115</i> | 0.005 | 0.284 | 0.279** | 0.209 | 0.268 | 0.060 | 0.011 | 0.023 | 0.012 |
| <i>Proportion of clients reporting "all of the time"</i> | | | | | | | | | | |
| Felt FP provider paid attention to her during visit | <i>0.035</i> | 0.597 | 0.688 | 0.091 | 0.675 | 0.675 | 0.001 | 0.443 | 0.446 | 0.004 |
| Allowed someone you wanted to stay with you during your visit | <i>0.039</i> | 0.900 | 0.953 | 0.052* | 0.630 | 0.807 | 0.178* | 0.752 | 0.752 | -0.001 |
| Felt FP provider cares for you as person | <i>0.032</i> | 0.599 | 0.676 | 0.077 | 0.624 | 0.667 | 0.043 | 0.509 | 0.507 | -0.002 |
| Felt she could trust the FP provider with regards to care | <i>0.036</i> | 0.578 | 0.658 | 0.080 | 0.720 | 0.684 | -0.036 | 0.554 | 0.575 | 0.021 |
| Felt safe in the health facility | <i>0.023</i> | 0.697 | 0.750 | 0.053 | 0.750 | 0.747 | -0.003 | 0.598 | 0.607 | 0.009 |
| All questions answered to satisfaction | <i>0.034</i> | 0.624 | 0.696 | 0.072 | 0.833 | 0.855 | 0.023 | 0.752 | 0.762 | 0.010 |
| Given enough info about care to understand what happened | <i>0.042</i> | 0.561 | 0.657 | 0.096 | 0.688 | 0.683 | -0.005 | 0.420 | 0.434 | 0.014 |
| FP provider clearly explained things | <i>0.041</i> | 0.601 | 0.688 | 0.087 | 0.698 | 0.673 | -0.025 | 0.460 | 0.484 | 0.024 |
| Felt she could ask the FP provider any questions | <i>0.026</i> | 0.589 | 0.674 | 0.085 | 0.696 | 0.733 | 0.037 | 0.394 | 0.376 | -0.018 |
| FP provider supported anxieties and fears about procedure or choice | <i>0.035</i> | 0.724 | 0.788 | 0.065 | 0.681 | 0.725 | 0.044 | 0.595 | 0.607 | 0.012 |
| FP provider talked about how you were feeling | <i>0.029</i> | 0.512 | 0.584 | 0.072 | 0.581 | 0.640 | 0.059 | 0.386 | 0.377 | -0.008 |
| FP Provider interested in your opinions | <i>0.030</i> | 0.616 | 0.689 | 0.073 | 0.688 | 0.669 | -0.019 | 0.511 | 0.521 | 0.010 |
| Felt listened to by the FP provider | <i>0.027</i> | 0.611 | 0.696 | 0.085 | 0.729 | 0.679 | -0.050 | 0.537 | 0.539 | 0.002 |
| FP provider considered personal situation when advising about FP methods | <i>0.033</i> | 0.482 | 0.581 | 0.099 | 0.652 | 0.629 | -0.023 | 0.377 | 0.377 | 0.000 |
| Felt involved by FP provider in FP decisions | <i>0.045</i> | 0.571 | 0.665 | 0.094 | 0.726 | 0.731 | 0.005 | 0.496 | 0.515 | 0.019 |

| | | | | | | | | | | |
|----------------------------------------------------------------------------------|--------|-------|-------|---------|-------|-------|---------|-------|-------|--------|
| FP provider allowed you give opinion about what you needed | 0.031 | 0.541 | 0.622 | 0.081 | 0.697 | 0.679 | -0.018 | 0.461 | 0.467 | 0.006 |
| FP provider gave enough information for best decision about birth control method | 0.049 | 0.516 | 0.623 | 0.107 | 0.690 | 0.703 | 0.013 | 0.437 | 0.453 | 0.016 |
| FP provider gave you time to consider | 0.053 | 0.487 | 0.602 | 0.116 | 0.729 | 0.680 | -0.050 | 0.463 | 0.494 | 0.031 |
| FP provider let you say what mattered about your FP method | 0.044 | 0.549 | 0.635 | 0.086 | 0.689 | 0.660 | -0.030 | 0.468 | 0.499 | 0.032 |
| FP provider made an effort to ensure privacy | 0.051 | 0.600 | 0.704 | 0.105 | 0.621 | 0.663 | 0.042 | 0.651 | 0.666 | 0.015 |
| Feel personal info will be kept confidential | 0.032 | 0.689 | 0.774 | 0.086 | 0.878 | 0.894 | 0.016 | 0.682 | 0.680 | -0.002 |
| <i>Proportion of clients reporting "none of the time"</i> | | | | | | | | | | |
| Felt disrespected by FP provider | -0.005 | 0.988 | 0.993 | 0.005* | 0.988 | 0.993 | 0.004 | 0.984 | 0.970 | -0.015 |
| Felt treated in unfriendly manner by FP provider | -0.002 | 0.941 | 0.968 | 0.028* | 0.970 | 0.991 | 0.021** | 0.959 | 0.932 | -0.027 |
| Felt judged by FP provider | 0.000 | 0.993 | 0.993 | 0.001 | 0.890 | 0.945 | 0.055 | 0.988 | 0.975 | -0.013 |
| Felt scolded by FP provider | -0.003 | 0.993 | 0.993 | 0.000 | 0.960 | 0.983 | 0.023 | 0.986 | 0.975 | -0.010 |
| FP provider made you uncomfortable because of sex life | 0.013 | 0.650 | 0.694 | 0.044 | 0.966 | 0.984 | 0.018 | 0.966 | 0.957 | -0.009 |
| Provider pressured you to use their preferred method | -0.006 | 0.970 | 0.972 | 0.002 | 0.921 | 0.936 | 0.015 | 0.953 | 0.937 | -0.016 |
| Could be seen by others | 0.015 | 0.915 | 0.941 | 0.026 | 0.675 | 0.771 | 0.096 | 0.971 | 0.960 | -0.011 |
| Could be heard by others | 0.011 | 0.977 | 0.988 | 0.011** | 0.714 | 0.834 | 0.120 | 0.967 | 0.953 | -0.013 |

NOTES: Perceived treatment index is a standardized index constructed using all items listed in this table. Variables were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more positive treatment. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Client exit data includes data collected from September 2020 to August 2021. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021.

*=p<.1; **=p<.05; ***=p<.01

| | Table A29. Perceived Treatment Index Components (Mystery Clients) | | | | | | | | | |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------|----------|--------------|----------|----------|--------------|----------|--------------|--------------|---------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of visits | | 148 | 144 | | 68 | 82 | | 158 | 156 | |
| Perceived treatment Index [#] | <i>0.381***</i> | 0.000 | 0.496 | 0.496*** | 0.000 | 0.657 | 0.657*** | 0.000 | 0.139 | 0.139 |
| <i>Proportion of clients reporting "all of the time"</i> | | | | | | | | | | |
| Treated with respect by FP provider | <i>0.142***</i> | 0.216 | 0.389 | 0.173*** | 0.721 | 0.854 | 0.133* | 0.615 | 0.734 | 0.118 |
| Treated in a friendly manner by FP provider | <i>0.147***</i> | 0.270 | 0.465 | 0.195*** | 0.559 | 0.732 | 0.173** | 0.436 | 0.526 | 0.090 |
| FP provider paid attention to you during visit | <i>0.081**</i> | 0.223 | 0.347 | 0.124*** | 0.824 | 0.890 | 0.067 | 0.596 | 0.643 | 0.047 |
| Felt FP provider cares for you as person | <i>0.184***</i> | 0.358 | 0.556 | 0.197*** | 0.397 | 0.732 | 0.335*** | 0.660 | 0.760 | 0.099 |
| Felt she could trust the FP provider with regards to care | <i>0.173***</i> | 0.176 | 0.354 | 0.178*** | 0.588 | 0.854 | 0.265*** | 0.487 | 0.610 | 0.123* |
| Felt safe in the health facility | <i>0.141***</i> | 0.378 | 0.556 | 0.177*** | 0.912 | 0.976 | 0.064 | 0.532 | 0.675 | 0.143* |
| FP provider clearly explained things | <i>0.192***</i> | 0.169 | 0.319 | 0.151*** | 0.353 | 0.707 | 0.354*** | 0.301 | 0.455 | 0.153** |
| FP provider talked about how you were feeling | <i>0.016</i> | 0.000 | 0.028 | 0.028** | 0.015 | 0.024 | 0.010 | 0.026 | 0.032 | 0.007 |
| Felt listened to by the FP provider | <i>0.133***</i> | 0.135 | 0.306 | 0.170*** | 0.824 | 0.915 | 0.091 | 0.526 | 0.643 | 0.117 |
| FP provider considered personal situation when advising about FP methods | <i>0.077***</i> | 0.095 | 0.125 | 0.030 | 0.441 | 0.780 | 0.339*** | 0.103 | 0.097 | -0.005 |
| Felt involved by FP provider in FP decisions | <i>0.110***</i> | 0.101 | 0.243 | 0.142*** | 0.368 | 0.634 | 0.266*** | 0.327 | 0.331 | 0.004 |
| FP provider allowed you give opinion about what you needed | <i>0.071**</i> | 0.027 | 0.104 | 0.077*** | 0.353 | 0.585 | 0.232*** | 0.141 | 0.130 | -0.011 |
| FP provider gave enough information for best | <i>0.153***</i> | 0.135 | 0.229 | 0.094** | 0.309 | 0.646 | 0.338*** | 0.321 | 0.442 | 0.121* |

| | | | | | | | | | | |
|------------------------------------------------------------|----------|-------|-------|----------|-------|-------|----------|-------|-------|--------|
| decision about birth control method | | | | | | | | | | |
| FP provider let you say what mattered about your FP method | 0.050** | 0.027 | 0.090 | 0.063** | 0.221 | 0.439 | 0.218*** | 0.141 | 0.097 | -0.044 |
| FP provider made an effort to ensure privacy | 0.119*** | 0.318 | 0.486 | 0.169*** | 0.059 | 0.049 | -0.010 | 0.391 | 0.526 | 0.135* |
| Feel personal info will be kept confidential | 0.100** | 0.365 | 0.521 | 0.156*** | 0.794 | 0.951 | 0.157*** | 0.577 | 0.597 | 0.020 |
| <i>Proportion of clients reporting "none of the time"</i> | | | | | | | | | | |
| Felt judged by FP provider | 0.027 | 0.845 | 0.938 | 0.093** | 0.838 | 0.890 | 0.052 | 0.910 | 0.864 | -0.047 |
| Felt scolded by FP provider | 0.022 | 0.939 | 0.979 | 0.040* | 0.956 | 0.976 | 0.020 | 0.929 | 0.935 | 0.006 |
| FP provider made you uncomfortable because of sex life | 0.018 | 0.784 | 0.826 | 0.043 | 0.941 | 0.976 | 0.034 | 0.962 | 0.948 | -0.013 |
| Provider pressured you to use their preferred method | 0.043 | 0.493 | 0.618 | 0.125** | 0.647 | 0.634 | -0.013 | 0.904 | 0.896 | -0.008 |
| Could be seen by others | 0.036 | 0.014 | 0.000 | -0.014 | 0.456 | 0.537 | 0.081 | 0.750 | 0.812 | 0.062 |
| Could be heard by others | 0.068** | 0.831 | 0.868 | 0.037 | 0.368 | 0.549 | 0.181* | 0.737 | 0.779 | 0.042 |

NOTES: Perceived treatment index is a standardized index constructed using all items listed in this table. Variables were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more positive treatment. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility.

*=p<.1; **=p<.05; ***=p<.01

Table A30. Effect of Intervention on Additional Outcomes (Exit Survey)

| Variable | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|------------------------------------|---------------|----------|--------------|--------|----------|--------------|---------|--------------|--------------|----------|
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| <i>Patient-centered counseling</i> | | | | | | | | | | |
| Discouraged any method | -0.004* | 0.020 | 0.015 | -0.005 | 0.020 | 0.017 | -0.003 | 0.007 | 0.003 | -0.004** |
| Discouraged LARC | -0.001 | 0.003 | 0.003 | 0.000 | 0.010 | 0.011 | 0.002 | 0.002 | 0.001 | -0.002 |
| Discouraged injectable | -0.003 | 0.017 | 0.011 | -0.006 | 0.001 | 0.001 | 0.000 | 0.003 | 0.002 | -0.002 |
| Encouraged any method | -0.004 | 0.007 | 0.003 | -0.004 | 0.082 | 0.073 | -0.009 | 0.019 | 0.016 | -0.003 |
| Encouraged LARC | -0.001 | 0.006 | 0.002 | -0.003 | 0.028 | 0.052 | 0.024 | 0.012 | 0.007 | -0.005 |
| Encouraged injectable | -0.004* | 0.001 | 0.001 | 0.000 | 0.044 | 0.012 | -0.031* | 0.002 | 0.002 | 0.000 |
| <i>Client experiences</i> | | | | | | | | | | |
| Privacy provided | 0.026 | 0.831 | 0.878 | 0.047* | 0.670 | 0.756 | 0.086 | 0.863 | 0.860 | -0.003 |
| Permission not required | 0.020 | 0.539 | 0.557 | 0.018 | 0.501 | 0.579 | 0.078 | 0.579 | 0.586 | 0.007 |
| New client | 0.019 | 0.463 | 0.498 | 0.035 | 0.641 | 0.627 | -0.014 | 0.205 | 0.221 | 0.016 |

NOTES: Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Pooled column controls for country fixed-effects. Client exit data includes data collected from September 2020 to August 2021. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021.

*=p<.1; **=p<.05; ***=p<.01

Table A31. Effect of Intervention on Additional Outcomes (Mystery Clients)

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|-----------------------------------------------------|---------------|----------|--------------|-----------|----------|--------------|----------|--------------|--------------|---------|
| Variable | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| <i>Patient-centered counseling</i> | | | | | | | | | | |
| Discouraged any method | -0.035 | 0.636 | 0.621 | -0.014 | 0.172 | 0.085 | -0.087 | 0.138 | 0.109 | -0.029 |
| Discouraged LARC | -0.029 | 0.121 | 0.086 | -0.036 | 0.109 | 0.049 | -0.061 | 0.048 | 0.041 | -0.007 |
| Discouraged injectable | -0.031 | 0.607 | 0.529 | -0.079 | 0.078 | 0.049 | -0.029 | 0.041 | 0.054 | 0.013 |
| Encouraged any method | -0.016 | 0.657 | 0.607 | -0.050 | 0.406 | 0.390 | -0.016 | 0.297 | 0.313 | 0.016 |
| Encouraged LARC | 0.024 | 0.536 | 0.564 | 0.029 | 0.062 | 0.159 | 0.096** | 0.166 | 0.150 | -0.016 |
| Encouraged injectable | -0.044** | 0.050 | 0.021 | -0.029 | 0.297 | 0.232 | -0.065 | 0.076 | 0.027 | -0.049* |
| Encouraged abstinence | -0.003 | 0.007 | 0.000 | -0.007 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| <i>Client experiences</i> | | | | | | | | | | |
| Privacy provided | 0.074*** | 0.387 | 0.451 | 0.064** | 0.294 | 0.378 | 0.084 | 0.626 | 0.706 | 0.080 |
| Ask if had permission | -0.018 | 0.108 | 0.035 | -0.073** | 0.176 | 0.146 | -0.030 | 0.045 | 0.084 | 0.040 |
| Waited at least an hour | 0.039 | 0.304 | 0.424 | 0.120** | 0.000 | 0.037 | 0.037* | 0.269 | 0.234 | -0.035 |
| Discouraged method b/c of side effects | -0.044 | 0.586 | 0.550 | -0.036 | 0.141 | 0.073 | -0.067 | 0.112 | 0.073 | -0.039 |
| Asked about age | 0.027 | 0.574 | 0.618 | 0.044 | 0.500 | 0.500 | 0.000 | 0.327 | 0.351 | 0.024 |
| Asked about marital status | 0.024 | 0.446 | 0.389 | -0.057 | 0.721 | 0.768 | 0.048 | 0.263 | 0.351 | 0.088 |
| Ask how many children | -0.004 | 0.818 | 0.771 | -0.047 | 0.750 | 0.744 | -0.006 | 0.359 | 0.396 | 0.037 |
| Treated worse based on age | -0.019 | 0.047 | 0.028 | -0.020 | 0.044 | 0.024 | -0.020 | 0.083 | 0.065 | -0.018 |
| Treated worse based on marital status | -0.027** | 0.061 | 0.000 | -0.061*** | 0.044 | 0.012 | -0.032 | 0.026 | 0.032 | 0.007 |
| Treated worse based on number of children | -0.058*** | 0.176 | 0.056 | -0.120*** | 0.059 | 0.000 | -0.059** | 0.032 | 0.032 | 0.000 |
| Expressed any judgments about romantic relationship | -0.004 | 0.020 | 0.007 | -0.013 | 0.044 | 0.037 | -0.008 | 0.019 | 0.026 | 0.007 |
| Expressed any judgements about sexual activity | -0.003 | 0.020 | 0.007 | -0.013 | 0.000 | 0.037 | 0.037* | 0.026 | 0.013 | -0.013 |
| Expressed any judgments about contraception use | -0.030* | 0.101 | 0.021 | -0.081*** | 0.074 | 0.024 | -0.049 | 0.026 | 0.052 | 0.026 |
| Expressed any judgements about parity decisions | -0.013 | 0.074 | 0.021 | -0.053** | 0.015 | 0.012 | -0.003 | 0.013 | 0.032 | 0.020 |

NOTES: Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Pooled column controls for country fixed-effects.

*=p<.1; **=p<.05; ***=p<.01

| Table A32. Exit Survey Results Restricting to New Users | | | | | | | | | | |
|----------------------------------------------------------------|---------------|----------|--------------|--------|----------|--------------|--------|--------------|--------------|--------|
| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
| | <i>Effect</i> | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of clients | | 2043 | 2671 | | 664 | 1938 | | 2128 | 2359 | |
| Counseled on full range of methods [#] | <i>0.079*</i> | 0.532 | 0.610 | 0.078 | 0.179 | 0.242 | 0.064 | 0.691 | 0.779 | 0.088* |
| Any modern method [#] | <i>0.014</i> | 0.949 | 0.979 | 0.030* | 0.733 | 0.749 | 0.016 | 0.945 | 0.942 | -0.003 |
| Perceived treatment Index [#] | <i>0.102</i> | -0.035 | 0.247 | 0.282* | 0.215 | 0.088 | -0.127 | -0.095 | -0.079 | 0.016 |

NOTES: N's for specific questions vary based on how many respondents answered each question. Only clients who received services are included in counseling on full range of methods and perceived treatment index. Control and intervention group means and significance estimated using linear regression with standard errors clustered at the facility. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021. Includes only those who have never used FP before.

[#] = Primary outcome

*=p<.1; **=p<.05; ***=p<.01

| Table A33. Participation in BB Pillars | | | |
|-----------------------------------------------------------------------------------|----------|----------|--------------|
| | Tanzania | Pakistan | Burkina Faso |
| <i>Summit</i> | | | |
| Proportion FP providers at facility that attended summit | 0.983 | N/A | 0.975 |
| Proportion of facilities with full attendance at summit (all providers attended) | 0.944 | 0.902 | 0.795 |
| <i>Connect</i> | | | |
| Average in-person connect participation (providers attended/total FP providers) | 0.783 | N/A | 0.798 |
| Low participation | 0.361 | 0.390 | 0.282 |
| Medium participation | 0.306 | 0.317 | 0.385 |
| High participation | 0.333 | 0.293 | 0.333 |
| <i>Rewards</i> | | | |
| Attended 0-1 ceremonies | 0.000 | 0.146 | 0.000 |
| Attended 2 ceremonies | 0.000 | 0.415 | 0.077 |
| Attended 3 ceremonies | 1.00 | 0.439 | 0.923 |

Notes: Connect participation categories in Tanzania and Burkina Faso using the average number of providers that attended in-person Connect sessions quarterly as a percentage of the total number of FP providers employed at the facility. Low represents $\leq 70\%$ of providers participating, medium participation represents 71-84% of providers participating, and high represents $\geq 80\%$ of providers participating. In Pakistan, low participation represents 2+ quarters of passive activity on WhatsApp Connect. Medium participation represents 2+ quarters of inconsistent activity (i.e., providers participating every other week or twice a month). High participation represents 2+ quarters of consistent activity (i.e., participating in Connect activities every week).

Table A34. Rewards Scores by Quarter

| | <i>Pooled</i> | Tanzania | | | Pakistan | | | Burkina Faso | | |
|-----------------------------------------------|----------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Effect | Control | Intervention | Effect | Control | Intervention | Effect | Control | Intervention | Effect |
| Number of facilities | | 37 | 36 | | 34 | 41 | | 39 | 39 | |
| <i>Rewards Score Q1</i> | <i>0.041**</i> | <i>0.698</i> | <i>0.723</i> | <i>0.026</i> | <i>0.653</i> | <i>0.717</i> | <i>0.064</i> | <i>0.674</i> | <i>0.707</i> | <i>0.033</i> |
| Principle 1: Safe welcoming space | 0.022 | 0.709 | 0.719 | 0.01 | 0.738 | 0.749 | 0.011 | 0.61 | 0.653 | 0.043 |
| Principle 2: Sensitive communication | 0.063* | 0.537 | 0.616 | 0.079 | 0.605 | 0.672 | 0.067 | 0.475 | 0.52 | 0.045 |
| Principle 3: Seek understanding and agreement | -0.012 | 0.545 | 0.503 | -0.042 | 0.541 | 0.548 | 0.007 | 0.516 | 0.512 | -0.003 |
| Principle 4: Security of information | 0.073** | 0.744 | 0.774 | 0.029 | 0.498 | 0.653 | 0.155* | 0.732 | 0.767 | 0.035 |
| Principle 5: Say yes to a safe method | 0.013 | 0.979 | 0.985 | 0.006 | 0.934 | 0.965 | 0.031 | 0.984 | 0.989 | 0.004 |
| Principle 6: Simple comprehensive counseling | 0.043 | 0.671 | 0.743 | 0.072 | 0.659 | 0.635 | -0.024 | 0.727 | 0.802 | 0.075* |
| <i>Rewards Score Q2</i> | <i>0.029</i> | <i>0.752</i> | <i>0.789</i> | <i>0.037</i> | <i>0.741</i> | <i>0.767</i> | <i>0.026</i> | <i>0.718</i> | <i>0.741</i> | <i>0.023</i> |
| Principle 1: Safe welcoming space | 0.028 | 0.774 | 0.807 | 0.032 | 0.771 | 0.78 | 0.009 | 0.667 | 0.71 | 0.043 |
| Principle 2: Sensitive communication | 0.048 | 0.64 | 0.717 | 0.077* | 0.72 | 0.762 | 0.041 | 0.534 | 0.563 | 0.029 |
| Principle 3: Seek understanding and agreement | -0.006 | 0.595 | 0.627 | 0.032 | 0.673 | 0.623 | -0.051 | 0.562 | 0.562 | 0 |
| Principle 4: Security of information | 0.072** | 0.785 | 0.837 | 0.052 | 0.575 | 0.715 | 0.14 | 0.787 | 0.813 | 0.027 |
| Principle 5: Say yes to a safe method | -0.004 | 0.987 | 0.984 | -0.003 | 0.965 | 0.956 | -0.009 | 0.994 | 0.994 | 0 |
| Principle 6: Simple comprehensive counseling | 0.033 | 0.73 | 0.763 | 0.033 | 0.689 | 0.712 | 0.023 | 0.764 | 0.804 | 0.041 |
| <i>Rewards Score Q3</i> | <i>0.038**</i> | <i>0.786</i> | <i>0.834</i> | <i>0.048*</i> | <i>0.731</i> | <i>0.778</i> | <i>0.047</i> | <i>0.745</i> | <i>0.765</i> | <i>0.02</i> |
| Principle 1: Safe welcoming space | 0.02 | 0.771 | 0.806 | 0.035 | 0.78 | 0.786 | 0.006 | 0.691 | 0.71 | 0.02 |
| Principle 2: Sensitive communication | 0.049 | 0.667 | 0.736 | 0.069 | 0.739 | 0.772 | 0.033 | 0.558 | 0.604 | 0.047 |
| Principle 3: Seek understanding and agreement | 0.02 | 0.762 | 0.787 | 0.025 | 0.618 | 0.633 | 0.015 | 0.567 | 0.587 | 0.019 |
| Principle 4: Security of information | 0.077** | 0.818 | 0.855 | 0.037 | 0.548 | 0.729 | 0.181** | 0.825 | 0.842 | 0.017 |
| Principle 5: Say yes to a safe method | -0.003 | 0.996 | 0.992 | -0.004 | 0.968 | 0.968 | 0 | 0.998 | 0.994 | -0.003 |
| Principle 6: Simple comprehensive counseling | 0.046 | 0.701 | 0.826 | 0.124* | 0.743 | 0.734 | -0.009 | 0.834 | 0.857 | 0.022 |

NOTES: Rewards scores reflect performance across all 6 principles of unbiased family planning care. Rewards scores are compared at the facility level. While only facilities that had 10 youth clients in a quarter were included in total rewards scores calculations for actual rewards ceremonies, this table includes all facilities. In Pakistan, total rewards scores were based on principles 1-5.

*=p<.1; **=p<.05; ***=p<.01

Table A35. Primary outcome p-values after Bonferoni correction

| | Pooled | | TZ | | PK | | BF | |
|----------------------------------------------------|--------|-----------|-------|-----------|-------|-----------|-------|-----------|
| | Naïve | Corrected | Naïve | Corrected | Naïve | Corrected | Naïve | Corrected |
| Provider Unbiased FP Care Index (Provider Survey) | 0.000 | 0.000 | 0.000 | 0.000 | 0.022 | 0.088 | 0.000 | 0.001 |
| Counselled full range of methods (Mystery Clients) | 0.073 | 0.292 | 0.219 | 0.876 | 0.008 | 0.032 | 0.764 | 3.057 |
| Received modern method (Exit Survey) | 0.085 | 0.340 | 0.020 | 0.079 | 0.934 | 3.737 | 0.803 | 3.213 |
| Perceived treatment index (Mystery Clients) | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.001 | 0.352 | 1.407 |

Notes: Green = $p < 0.05$; Yellow = $p < 0.1$; Red = $p \geq 0.1$.

Table A36: Average outcomes among control facilities by client profile in Tanzania

| Profile | N | Outcomes Index | Counseling on a full range of methods | Received modern method | Received method of choice | Perceived treatment index |
|---------------------------|------|----------------|---------------------------------------|------------------------|---------------------------|---------------------------|
| Exit survey | | | | | | |
| 25+ Married Nulliparous | 10 | -1.006 | 0.000 | 0.714 | 0.714 | -0.183 |
| 25+ Married Parous | 6101 | -0.062 | 0.371 | 0.890 | 0.862 | 0.039 |
| 25+ Unmarried Parous | 1876 | -0.052 | 0.406 | 0.872 | 0.849 | -0.150 |
| <20 Married Nulliparous | 17 | 0.159 | 0.444 | 0.923 | 0.923 | 0.213 |
| <20 Unmarried Nulliparous | 239 | 0.272 | 0.554 | 0.936 | 0.914 | 0.009 |
| <20 Unmarried Parous | 295 | 0.279 | 0.567 | 0.931 | 0.917 | 0.016 |
| <20 Married Parous | 187 | 0.355 | 0.583 | 0.957 | 0.925 | 0.145 |
| 25+ Unmarried Nulliparous | 26 | 0.355 | 0.583 | 0.846 | 0.840 | 0.221 |
| Mystery Clients | | | | | | |
| 24 Married Nulliparous | 19 | -0.253 | 0.579 | 0.895 | 0.368 | 0.111 |
| 24 Unmarried Parous | 19 | -0.231 | 0.632 | 0.684 | 0.526 | -0.166 |
| 16 Unmarried Nulliparous | 19 | -0.069 | 0.737 | 0.632 | 0.421 | -0.324 |
| 16 Married Nulliparous | 18 | -0.044 | 0.556 | 0.611 | 0.278 | 0.969 |
| 24 Married Parous | 18 | 0.117 | 0.833 | 0.833 | 0.389 | -0.344 |
| 24 Unmarried Nulliparous | 18 | 0.145 | 0.778 | 0.944 | 0.667 | 0.123 |
| 16 Unmarried Parous | 18 | 0.150 | 0.889 | 0.667 | 0.389 | -0.605 |
| 16 Married Parous | 19 | 0.204 | 0.789 | 0.737 | 0.579 | 0.244 |

Notes: Ordered from poorest overall outcomes to best based on the outcomes index. Includes data from control facilities in client exit data from August 2020 to September 2021 and mystery client data. Index represents the standardized average of the standardized four outcomes included in this table. Counseling on full range of methods excludes those who were seeking to continue the same method of contraception.

| Table A37: Average outcomes among control facilities by client profile in Pakistan | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|---------------------------------------|------------------------|---------------------------|---------------------------|
| Profile | N | Outcomes Index | Counseling on a full range of methods | Received modern method | Received method of choice | Perceived treatment index |
| Exit Survey | | | | | | |
| 25+ Married Nulliparous | 6 | -0.440 | 0.000 | 0.833 | 0.833 | -0.233 |
| <20 Married Parous | 115 | -0.158 | 0.045 | 0.922 | 0.875 | 0.505 |
| <20 Married Nulliparous | 12 | -0.061 | 0.091 | 0.833 | 0.833 | 0.356 |
| 25+ Married Parous | 1691 | 0.018 | 0.178 | 0.795 | 0.721 | -0.015 |
| Mystery Clients | | | | | | |
| 19 Married Nulliparous | 24 | -0.143 | 0.250 | 0.958 | 0.250 | -0.129 |
| 19 Unmarried Nulliparous | 19 | 0.027 | 0.316 | 0.842 | 0.053 | 0.051 |
| 20 Married Parous | 25 | 0.117 | 0.360 | 0.840 | 0.200 | 0.086 |
| Notes: Ordered from poorest overall outcomes to best on the outcomes index. Includes data from control facilities in client exit data from August 2020 to September 2021 and mystery client data. Outcomes index represents the standardized average of the standardized four outcomes included in this table. Counseling on full range of methods excludes those who were seeking to continue the same method of contraception in client exit data. | | | | | | |

Table A38: Average outcomes among control facilities by client profile in Burkina Faso

| Profile | N | Outcomes Index | Counseling on a full range of methods | Received modern method | Received method of choice | Perceived treatment index |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------|---------------------------------------|------------------------|---------------------------|---------------------------|
| Exit Survey | | | | | | |
| 25+ Married Parous | 10478 | -0.073 | 0.589 | 0.925 | 0.912 | 0.086 |
| <20 Married Nulliparous | 58 | -0.071 | 0.600 | 0.794 | 0.794 | -0.248 |
| 25+ Unmarried Parous | 1056 | -0.015 | 0.655 | 0.934 | 0.907 | 0.049 |
| <20 Unmarried Nulliparous | 909 | 0.036 | 0.679 | 0.938 | 0.936 | -0.085 |
| <20 Married Parous | 599 | 0.128 | 0.690 | 0.913 | 0.902 | 0.082 |
| <20 Unmarried Parous | 438 | 0.264 | 0.798 | 0.925 | 0.904 | -0.066 |
| 25+ Unmarried Nulliparous | 94 | 0.281 | 0.750 | 0.871 | 0.835 | 0.272 |
| 25+ Married Nulliparous | 20 | 0.425 | 0.800 | 1.000 | 0.909 | 0.407 |
| Mystery Clients | | | | | | |
| 24 Unmarried Nulliparous | 20 | -0.300 | 0.600 | 0.500 | 0.421 | -0.414 |
| 17 Unmarried Nulliparous | 19 | -0.278 | 0.579 | 0.632 | 0.632 | -0.199 |
| 17 Married Nulliparous | 21 | -0.157 | 0.650 | 0.429 | 0.350 | -0.238 |
| 24 Married Parous | 21 | -0.053 | 0.600 | 0.619 | 0.421 | 0.455 |
| 24 Married Nulliparous | 19 | -0.010 | 0.684 | 0.632 | 0.632 | 0.060 |
| 17 Unmarried Parous | 20 | 0.077 | 0.800 | 0.400 | 0.250 | -0.387 |
| 17 Married Parous | 19 | 0.285 | 0.789 | 0.789 | 0.632 | 0.414 |
| 24 Unmarried Parous | 19 | 0.459 | 0.895 | 0.895 | 0.842 | 0.340 |
| Notes: Ordered from poorest overall outcomes to best. Includes data from control facilities in client exit data from August 2020 to September 2021 and mystery client data. Outcomes index represents the standardized average of the standardized four outcomes included in this table. Counseling on full range of methods excludes those who were seeking to continue the same method of contraception in the client exit data. | | | | | | |

Table A39: Average treatment effect by client profile in Tanzania

| Profile | N | Outcomes index | Counseling on a full range of methods | Received modern method | Received method of choice | Perceived treatment index |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------|---------------------------------------|------------------------|---------------------------|---------------------------|
| Client Exit | | | | | | |
| 25+ Married Nulliparous | 21 | 1.584*** | 0.667*** | 0.063 | 0.063 | 0.400 |
| <20 Married Nulliparous | 39 | 0.543 | 0.306 | 0.077 | -0.014 | 0.189 |
| <20 Unmarried Nulliparous | 706 | 0.353* | 0.121 | 0.042* | 0.055** | 0.438* |
| <20 Unmarried Parous | 689 | 0.230 | 0.084 | 0.033 | 0.042 | 0.253* |
| 25+ Married Parous | 11847 | 0.230 | 0.104 | 0.052** | 0.055** | 0.137 |
| <25+ Unmarried Parous | 3526 | 0.211 | 0.085 | 0.060 | 0.056 | 0.209 |
| <20 Married Parous | 416 | 0.158 | 0.064 | 0.002 | 0.007 | 0.181 |
| 25+ Unmarried Nulliparous | 37 | 0.043 | -0.083 | 0.154** | 0.160* | 0.385 |
| Mystery Clients | | | | | | |
| 24 Unmarried Parous | 37 | 0.719** | 0.202 | 0.205 | 0.307** | 1.074*** |
| 24 Married Nulliparous | 37 | 0.685* | 0.143 | 0.105 | 0.409*** | 1.348*** |
| 16 Married Nulliparous | 36 | 0.496 | 0.222 | 0.333** | 0.167 | 0.184 |
| 24 Unmarried Nulliparous | 36 | 0.380 | 0.167 | 0.000 | 0.167 | 0.168 |
| 16 Unmarried Parous | 36 | 0.313 | 0.056 | 0.278** | 0.167 | 0.683** |
| 16 Unmarried Nulliparous | 37 | 0.172 | 0.041 | 0.257* | 0.301* | 0.304 |
| 24 Married Parous | 36 | -0.161 | -0.111 | 0.000 | 0.056 | 0.201 |
| 16 Married Parous | 37 | -0.355 | -0.178 | -0.126 | -0.190 | -0.004 |
| Notes: Ordered from highest treatment effect to lowest treatment effect on Outcomes index. Includes data from both treatment and control facilities in client exit data from August 2020 to September 2021 and mystery client data. Outcomes index represents the standardized average of the standardized four outcomes included in this table. Counseling on full range of methods excludes those who were seeking to continue the same method of contraception in client exit data. | | | | | | |

| Table A40: Average treatment effect by client profile in Pakistan | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------|---------------------------------------|------------------------|---------------------------|---------------------------|
| Profile | N | Outcomes Index | Counseling on a full range of methods | Received modern method | Received method of choice | Perceived treatment index |
| Client Exit | | | | | | |
| 25+ Married Nulliparous | 31 | 0.845** | 0.350*** | -0.433* | -0.473** | 0.177 |
| <20 Married Nulliparous | 100 | 0.637** | 0.268*** | -0.163 | -0.186 | 0.176 |
| <20 Married Parous | 701 | 0.286** | 0.114* | -0.048 | -0.010 | 0.015 |
| 25+ Married Parous | 5131 | 0.032 | 0.005 | -0.040 | -0.015 | 0.273 |
| Mystery Client | | | | | | |
| 19 Married Nulliparous | 55 | 0.804*** | 0.331** | -0.023 | 0.008 | 0.725*** |
| 20 Married Parous | 55 | 0.574* | 0.207 | 0.060 | 0.033 | 0.709** |
| 19 Unmarried Nulliparous | 40 | 0.346 | 0.113 | 0.110 | 0.138 | 0.502** |
| Notes: Ordered from highest treatment effect to lowest on Outcomes index. Includes data from both treatment and control facilities in client exit data from August 2020 to September 2021 and mystery client data. Outcomes index represents the standardized average of the standardized four outcomes included in this table. Counseling on full range of methods excludes those who were seeking to continue the same method of contraception in client exit data. | | | | | | |

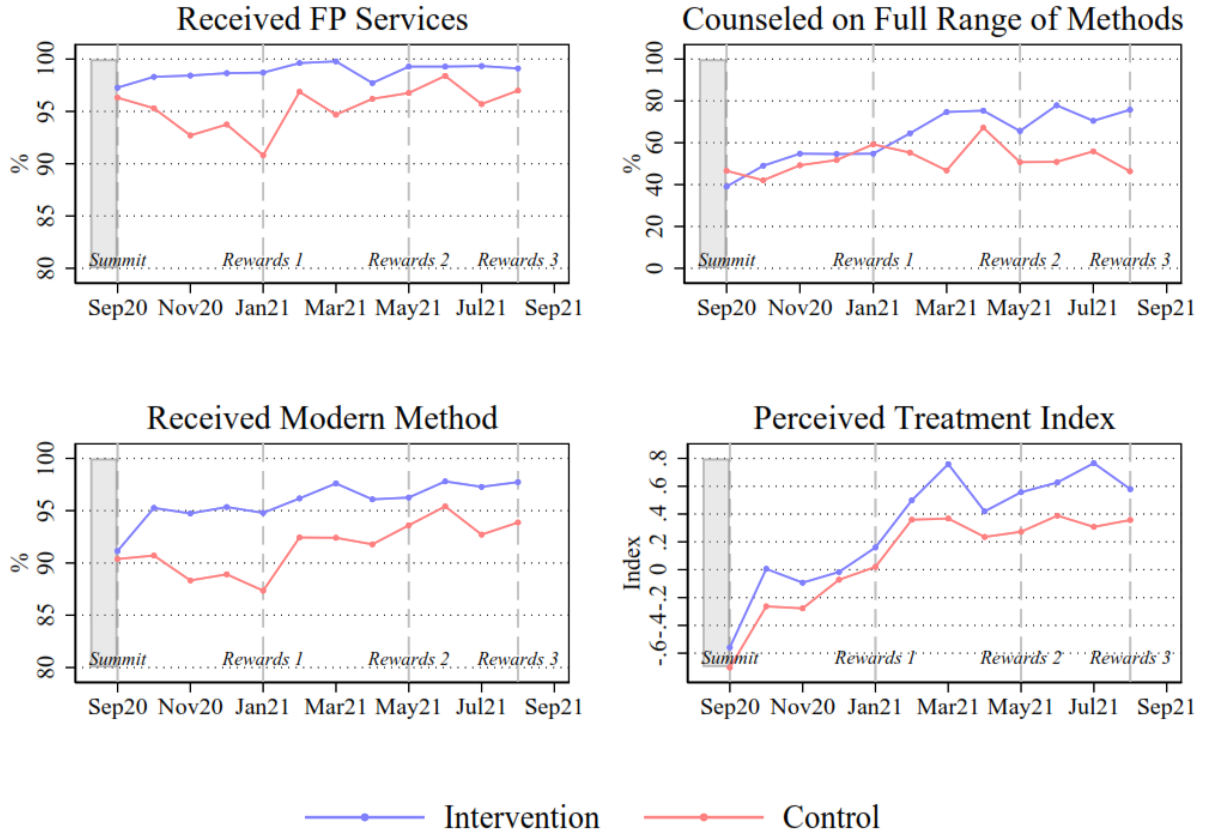
Table 41: Average treatment effect by client profile in Burkina Faso

| Profile | N | Outcomes Index | Counseling on a full range of methods | Received modern method | Received method of choice | Perceived treatment index |
|---------------------------|-------|----------------|---------------------------------------|------------------------|---------------------------|---------------------------|
| Client Exit | | | | | | |
| 25+ Unmarried Nulliparous | 200 | 0.194 | 0.112 | 0.049 | 0.065 | -0.024 |
| <20 Unmarried Nulliparous | 1917 | 0.190* | 0.096* | -0.020 | -0.035 | 0.018 |
| <20 Married Nulliparous | 117 | 0.129 | 0.090 | 0.050 | 0.050 | -0.007 |
| <20 Married Parous | 1374 | 0.116 | 0.083 | 0.037** | 0.038** | -0.136 |
| <25+ Unmarried Parous | 2379 | 0.091 | 0.015 | 0.013 | 0.027* | 0.095 |
| 25+ Married Parous | 22434 | 0.038 | 0.022 | 0.008 | 0.010 | 0.029 |
| <20 Unmarried Parous | 883 | -0.021 | -0.014 | 0.022 | 0.034* | -0.054 |
| 25+ Married Nulliparous | 36 | -1.121** | -0.467* | -0.083 | 0.008 | -0.620*** |
| Mystery Client | | | | | | |
| 24 Unmarried Nulliparous | 40 | 0.393 | 0.150 | 0.200 | 0.229 | 0.409 |
| 17 Married Nulliparous | 41 | 0.324 | 0.150 | 0.121 | 0.050 | 0.166 |
| 24 Married Parous | 41 | 0.083 | 0.050 | 0.031 | 0.029 | -0.032 |
| 17 Unmarried Parous | 42 | -0.107 | -0.100 | -0.036 | 0.050 | 0.276 |
| 24 Married Nulliparous | 38 | -0.128 | -0.105 | -0.053 | -0.105 | 0.235 |
| 24 Unmarried Parous | 37 | -0.147 | -0.117 | -0.006 | -0.009 | 0.242 |
| 17 Unmarried Nulliparous | 37 | -0.163 | -0.079 | -0.132 | -0.132 | -0.061 |
| 17 Married Parous | 38 | -0.232 | -0.105 | -0.105 | -0.053 | -0.132 |

Notes: Ordered from highest treatment effect to lowest on Outcomes index. Includes data from both treatment and control facilities in client exit data from August 2020 to September 2021 and mystery client data. Outcomes index represents the standardized average of the standardized four outcomes included in this table. Counseling on full range of methods excludes those who were seeking to continue the same method of contraception in client exit data.

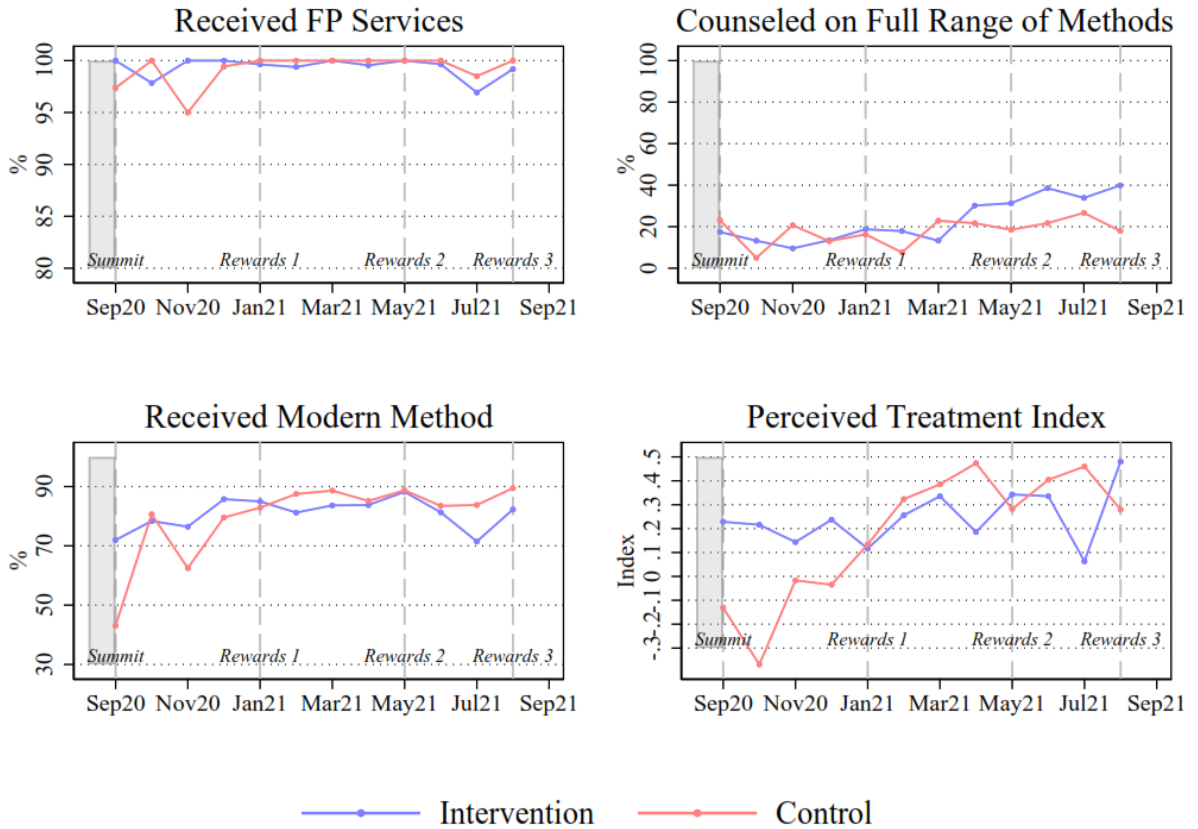
Appendix Figures

Figure A1. Client Outcomes over Time from Client Exit Survey (Tanzania)



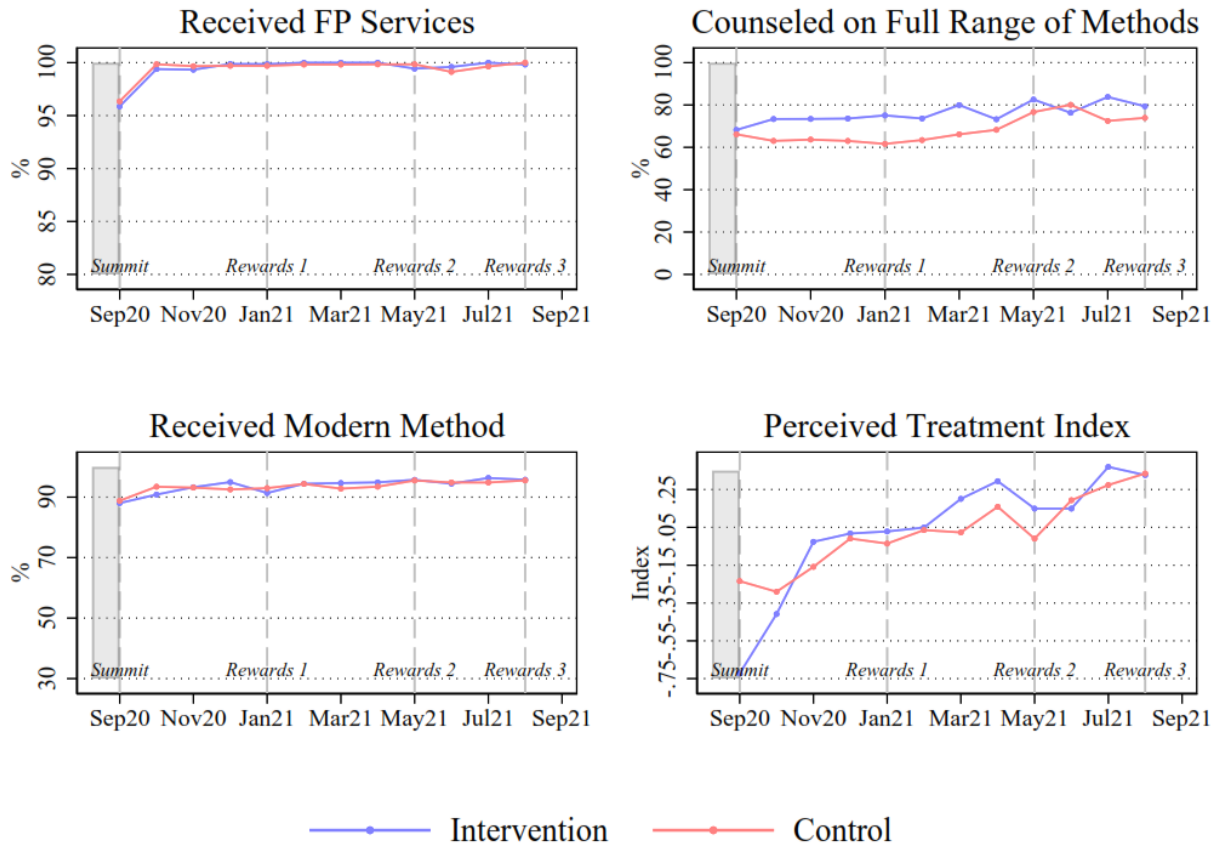
NOTES: Gray area indicates data collected prior to the intervention restart which was about 6 months after the intervention paused (i.e., 6 months without intervention exposure). This is not exactly baseline data because all treatment clinics had received a Summit in 2019 and one rewards ceremony prior to the start of the pandemic. Client exit data includes clients 24 or younger. Data collected in September 2021 after the Summits were implemented are excluded from this figure.

Figure A2. Client Outcomes over Time from Exit Survey (Pakistan)



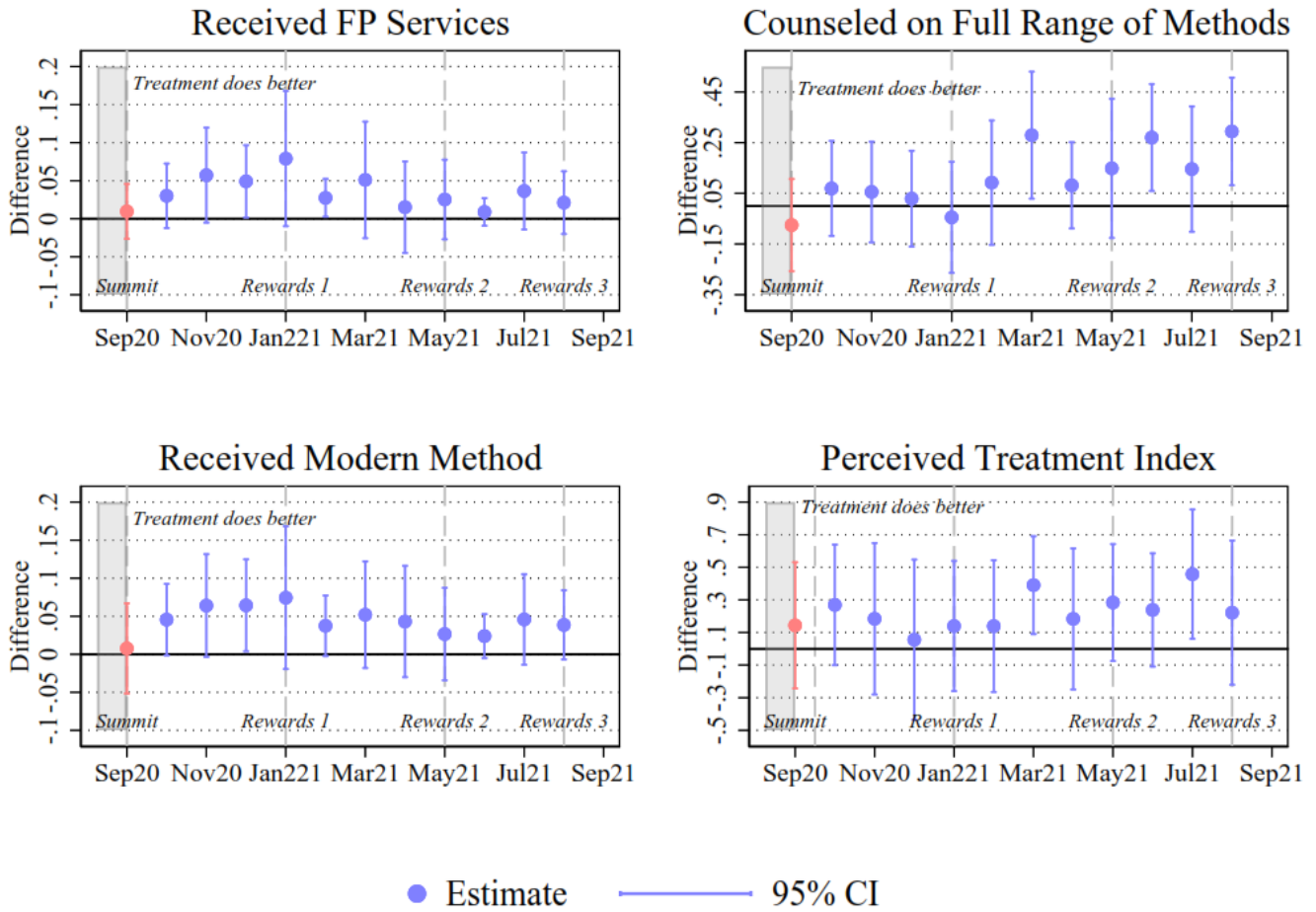
NOTES: Gray area indicates data collected prior to the intervention restart which was about 6 months after the intervention paused (i.e., 6 months without intervention exposure). This is not exactly baseline data because all treatment clinics had received a Summit in 2019 and one rewards ceremony prior to the start of the pandemic. Client exit data includes clients 24 or younger. Data collected in September 2021 after the Summits were implemented are excluded from this figure.

Figure A3. Client Outcomes over Time from Exit Survey (Burkina Faso)



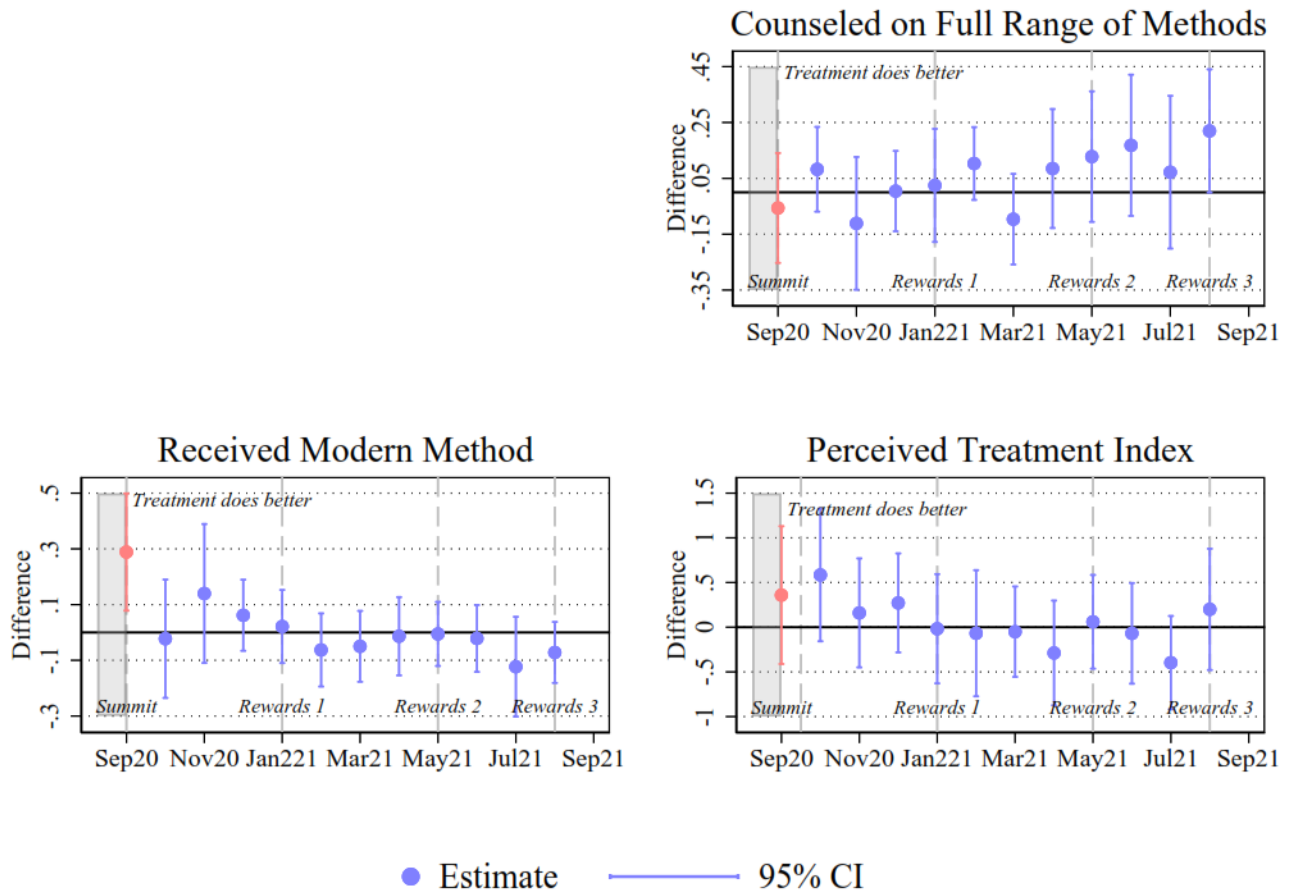
NOTES: Gray area indicates data collected prior to the intervention restart which was about 6 months after the intervention paused (i.e., 6 months without intervention exposure). This is not exactly baseline data because all treatment clinics had received a Summit in 2020. No rewards ceremonies took place prior to the pause in Burkina Faso. Client exit data includes clients 24 or younger. Data collected in September 2021 after the Summits were implemented are excluded from this figure.

Figure A4. Client Outcomes over Time from Exit Survey: Differences between the Intervention and Control Group (Tanzania)



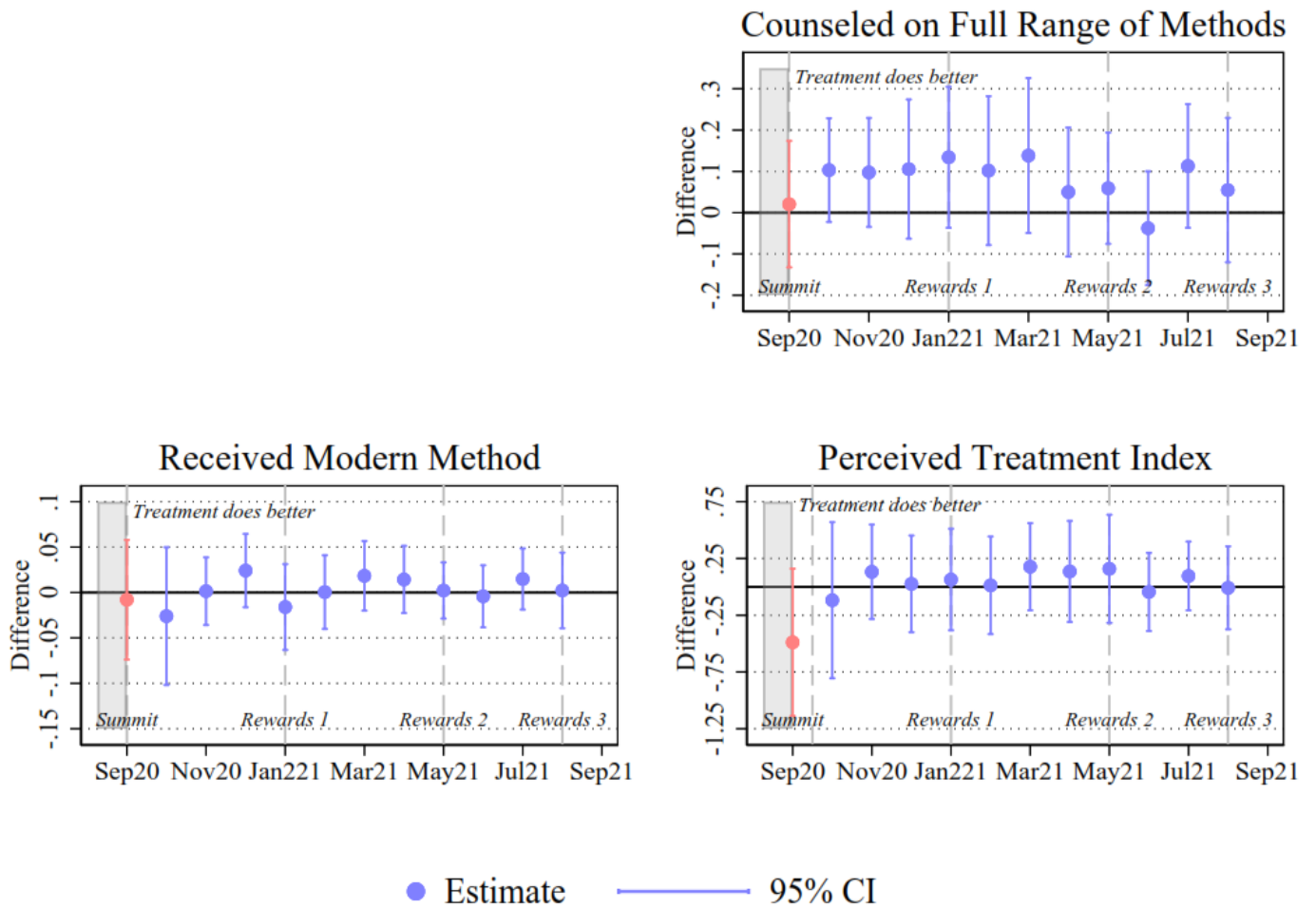
NOTES: Gray area indicates data 6 months after the intervention paused. This is not exactly baseline data because all treatment clinics had received a Summit and clinics in Pakistan and Tanzania had received a rewards ceremony prior to the start of the pandemic. Plot shows difference between treatment and control groups by month. Differences and confidence intervals were estimated using a linear model interacting intervention and an indicator of study month, allowing the effect to vary by month. Client exit survey data includes clients under 25.

Figure A5. Client Outcomes over Time from Exit Survey: Differences between the Intervention and Control Group (Pakistan)



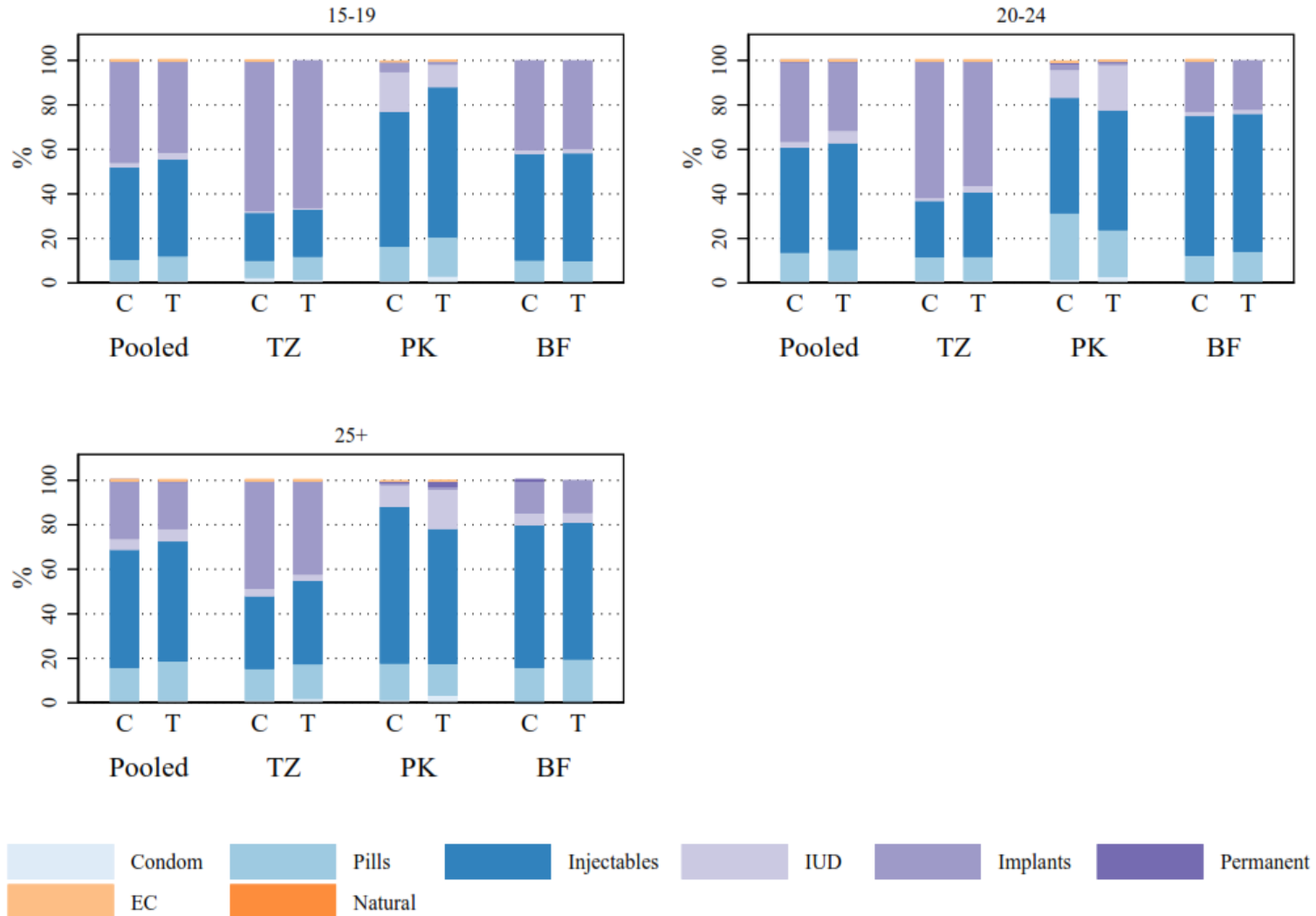
NOTES: Gray area indicates data 6 months after the intervention paused. This is not exactly baseline data because all treatment clinics had received a Summit and clinics in Pakistan and Tanzania had received a rewards ceremony prior to the start of the pandemic. Plot shows difference between treatment and control groups by month. Received services not plotted because difference is essentially zero. Client exit survey data includes clients under 25. Data collected in September 2020 after the summits had been implemented are excluded from this analysis.

Figure A6. Client Outcomes over Time from Exit Survey: Differences between the Intervention and Control Group (Burkina Faso)



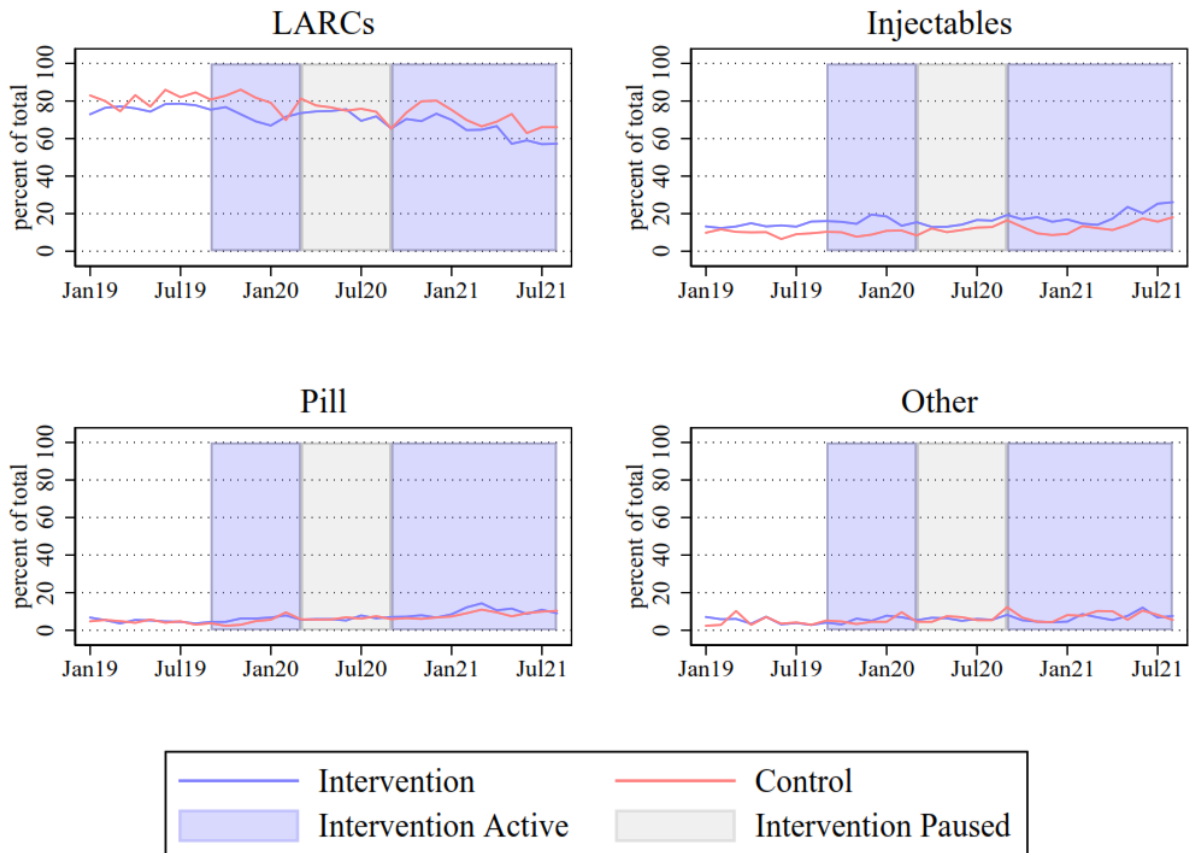
NOTES: Gray area indicates data 6 months after the intervention paused. This is not exactly baseline data because all treatment clinics had received a Summit and clinics in Pakistan and Tanzania had received a rewards ceremony prior to the start of the pandemic. Plot shows difference between treatment and control groups by month. Received services not plotted because difference is essentially zero. Client exit survey data includes clients under 25.

Figure A7. Method Mix in Client Exit Survey by Age



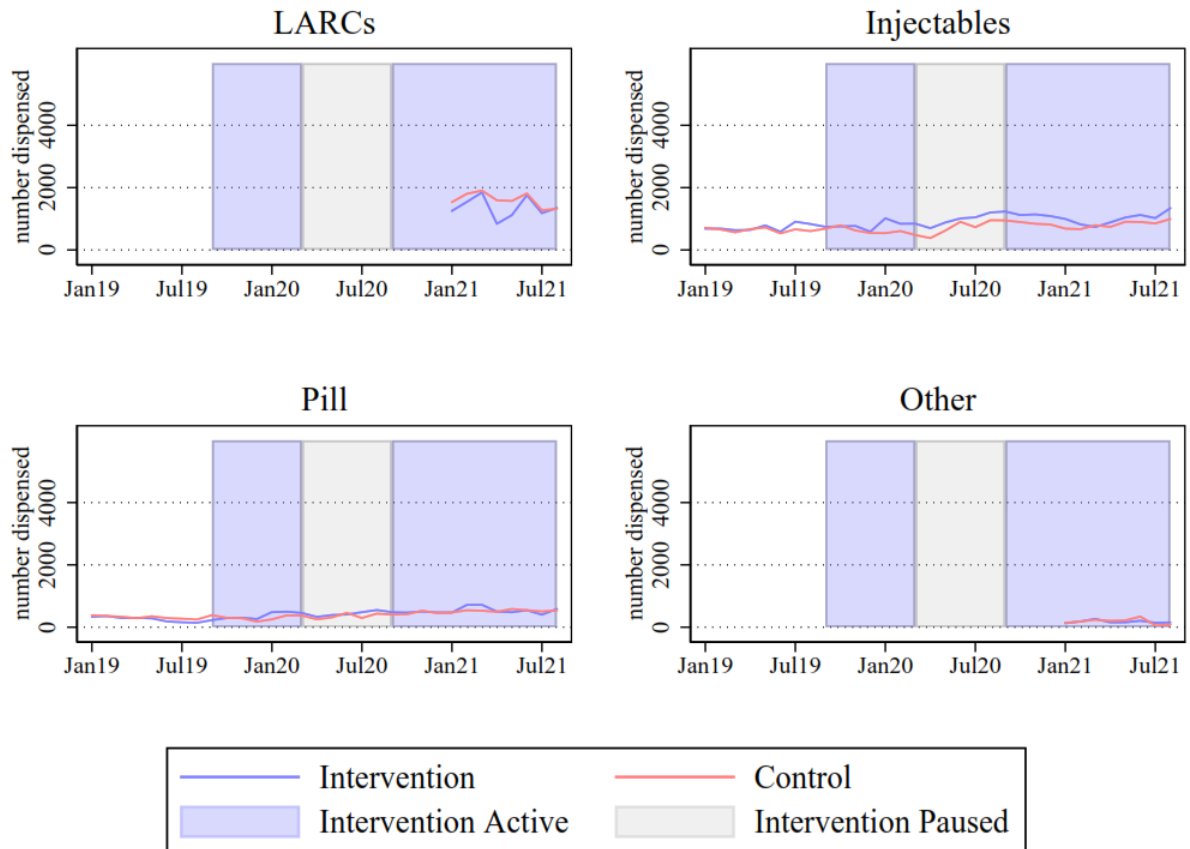
NOTES: All clients surveyed in the client exit survey who reported receiving a method of family planning in the exit survey between September 2020 and August 2021 are included. Graph depicts the method the client reported receiving. Less than a half of a percent reported receiving more than one method and were excluded from this figure.

Figure A8. Method Mix from Administrative Data (New Clients, Tanzania)



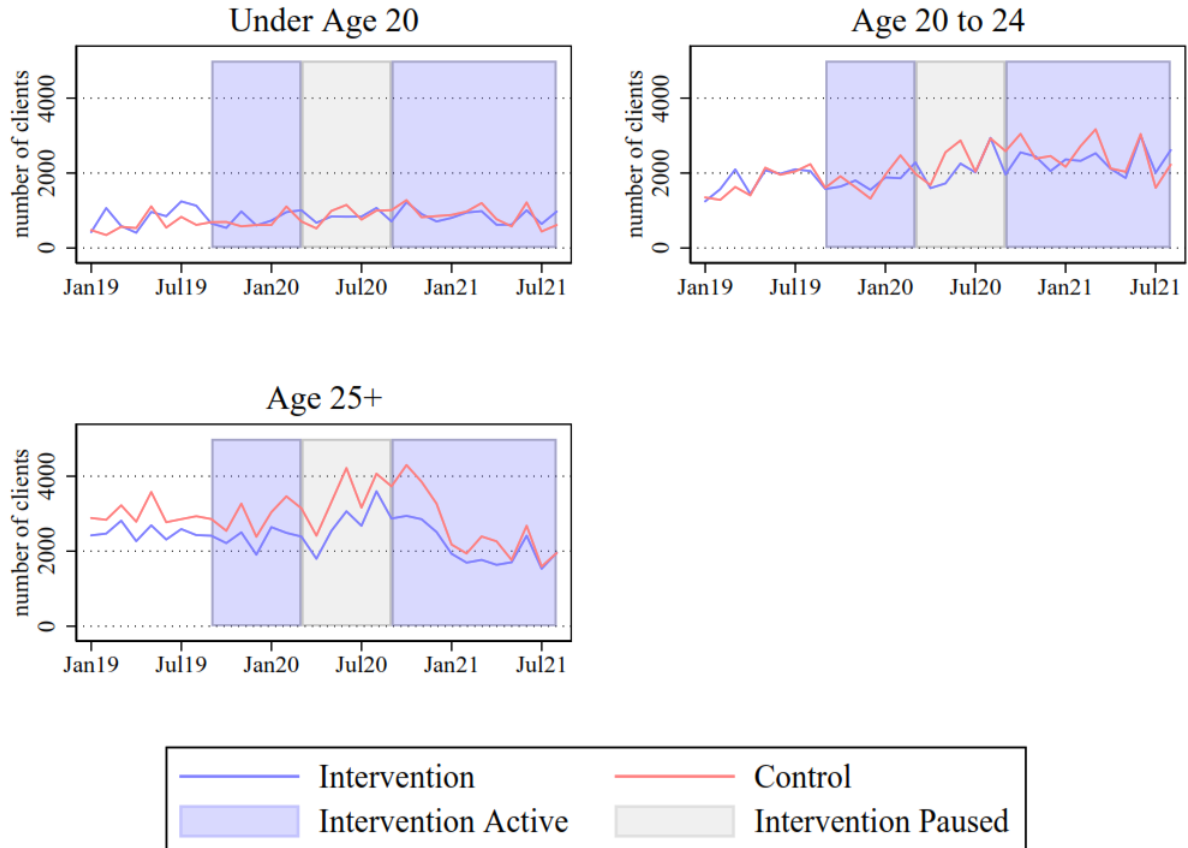
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all new users of family planning of any age. Other methods include female and male condoms, tubal ligations, and vasectomies.

Figure A9. Method Mix from Administrative Data (Returning Clients, Tanzania)



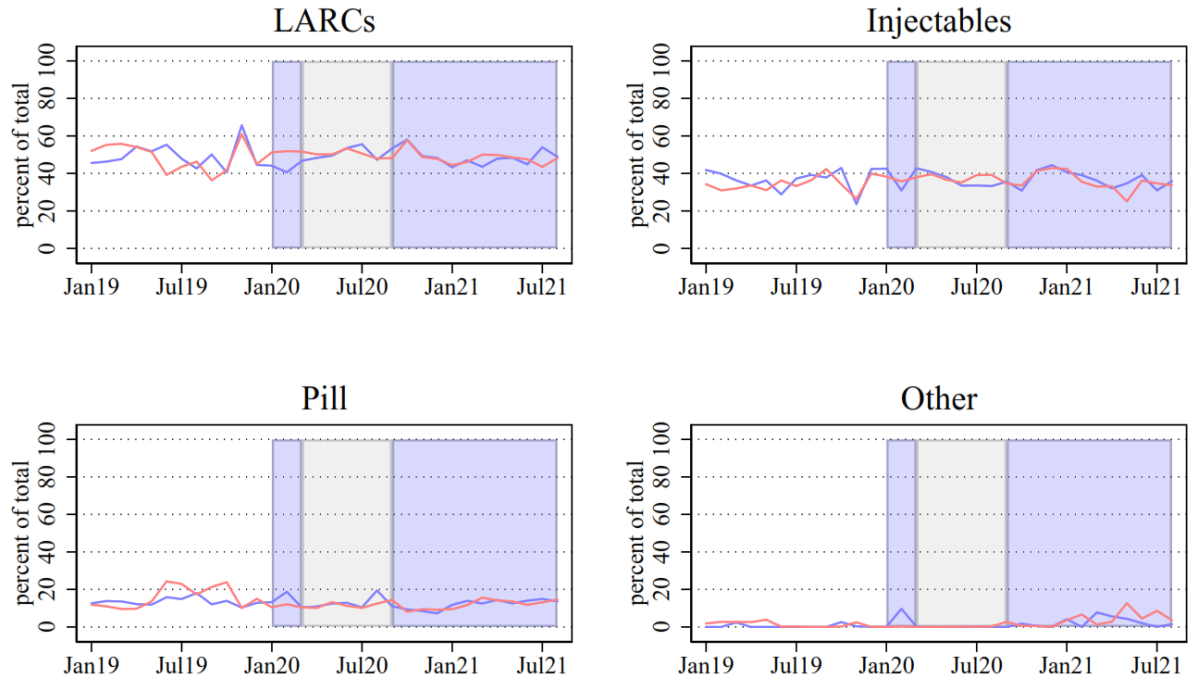
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all returning of family planning of any age. Until January of 2021, only returning users of pills and injectables were recorded. Other includes male and female condoms.

Figure A10. Client Volume by Age from Administrative Data (New Clients, Tanzania)



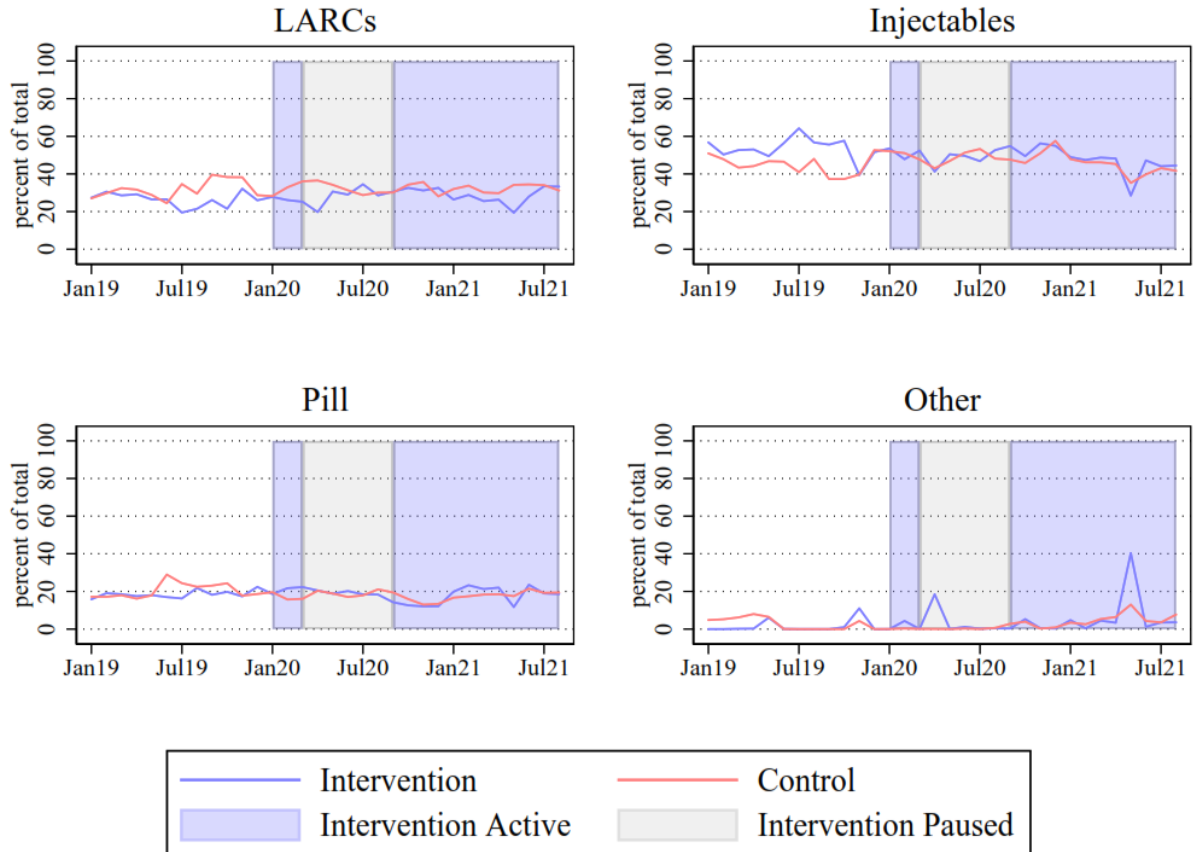
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all new users of family planning. Data on returning users by age was not collected.

Figure A11. Method Mix from Administrative Data (New Clients, Burkina Faso)



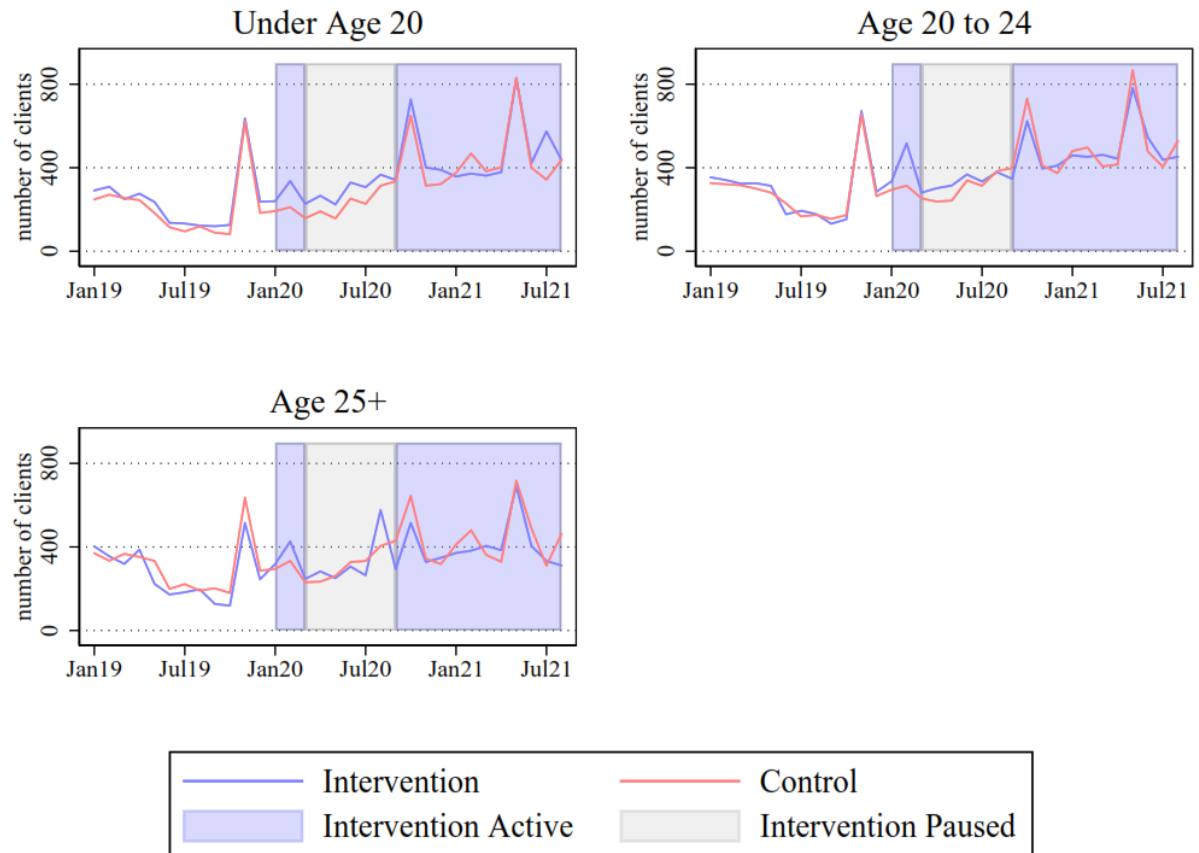
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all new users of family planning of any age. Other methods include female and male condoms, natural methods, and other methods.

Figure A12. Method Mix from Administrative Data (Returning Clients, Burkina Faso)



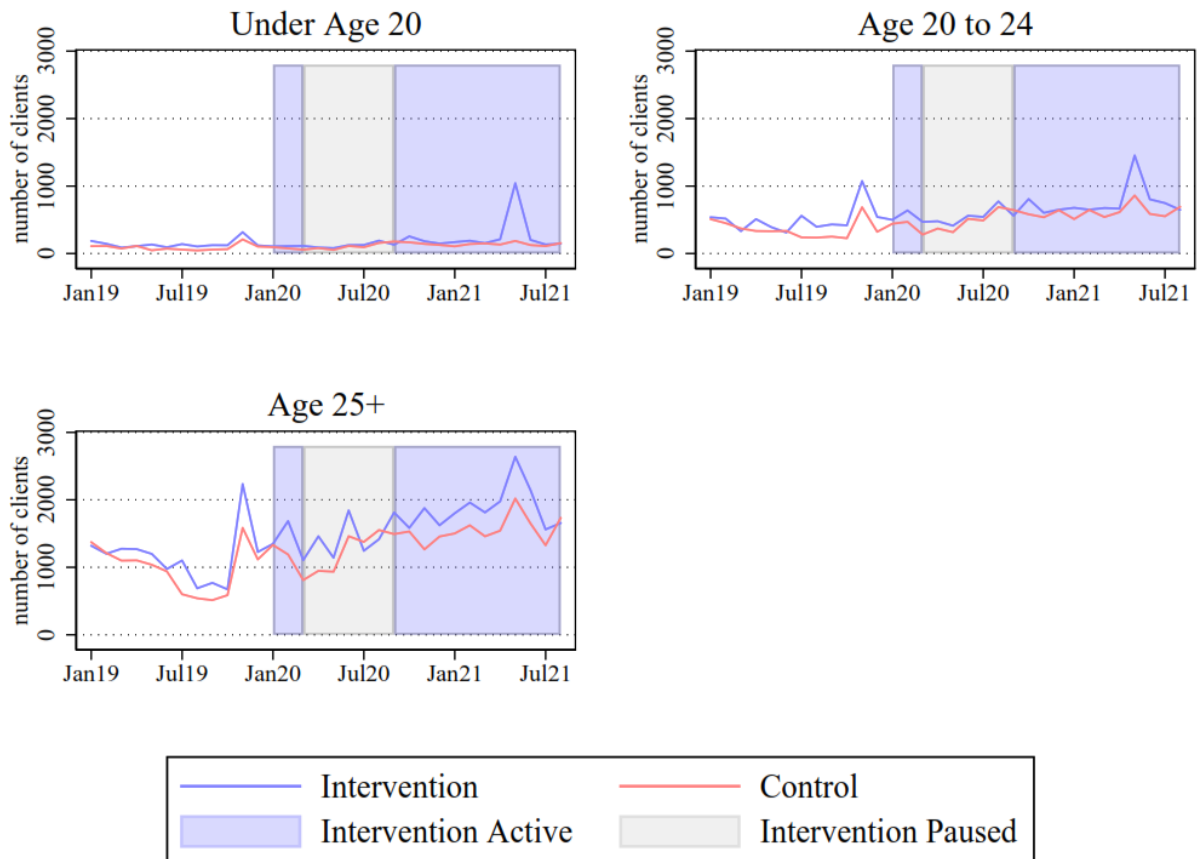
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all returning users of family planning of any age; however, data do not include clients renewing the same method. Other methods include female and male condoms, natural methods, and other methods.

Figure A13. Client Volume by Age from Administrative Data (New Clients, Burkina Faso)



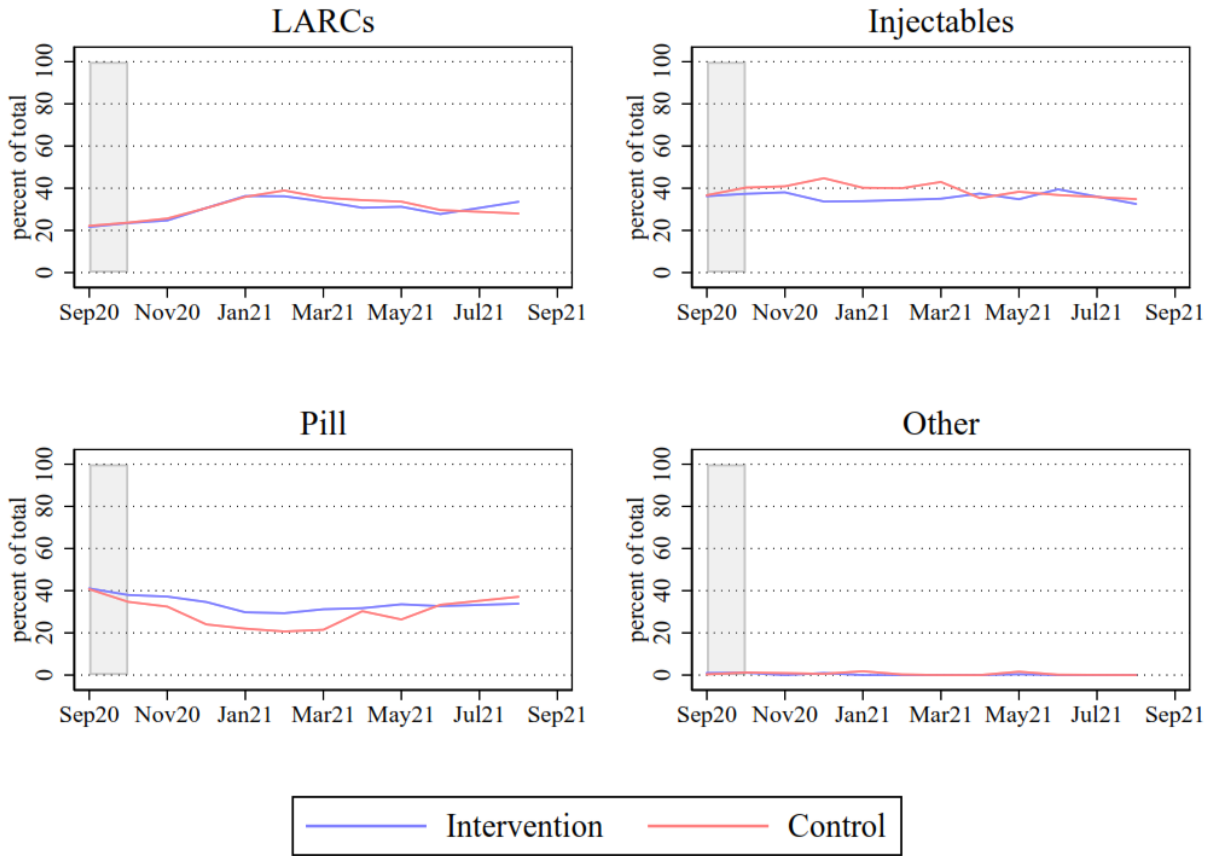
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all new users of family planning.

Figure A14. Age Distribution from Administrative Data (Returning Clients, Burkina Faso)



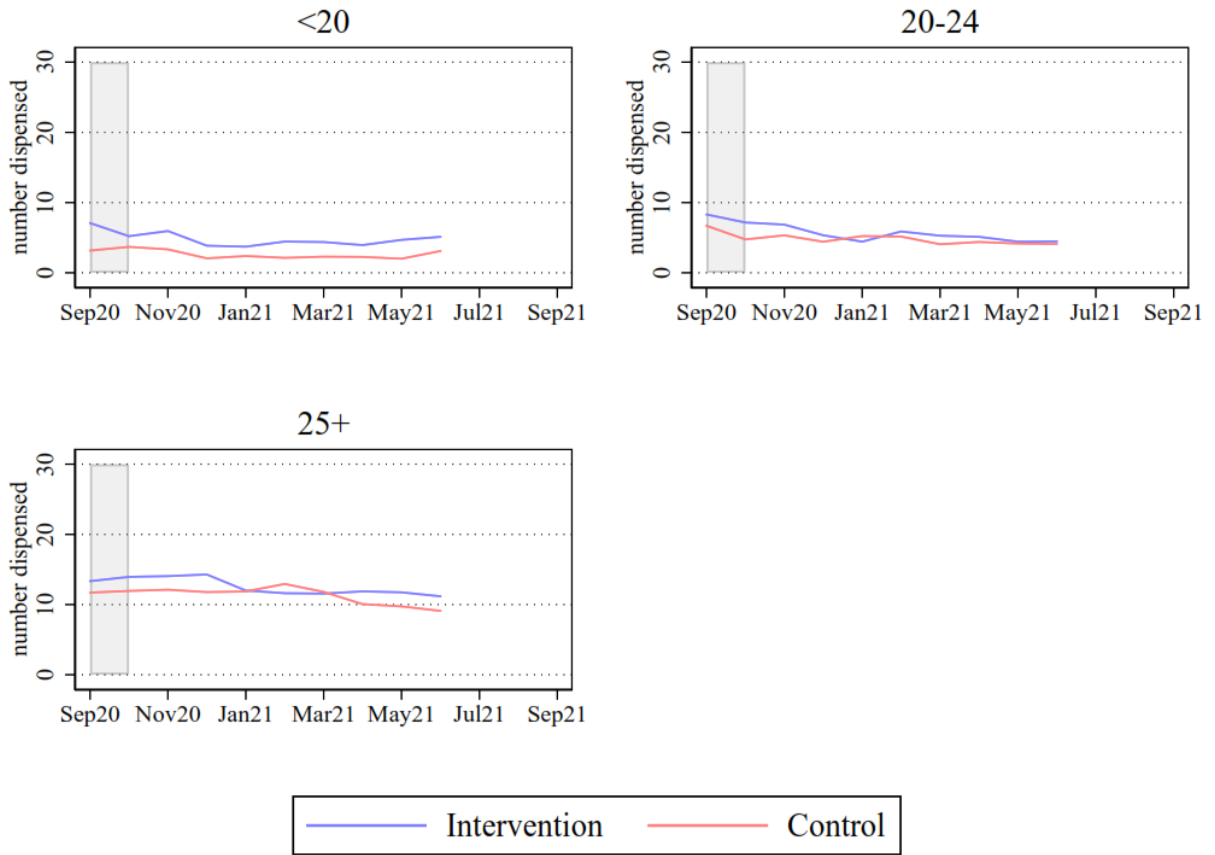
NOTES: Data are monthly service statistics extracted from the District Health Information Software (DHIS2) from January 2019 to August 2021 for all enrolled facilities. Data include all returning users of family planning; however, data do not include clients renewing the same method.

Figure A15. Method Mix from Administrative Data (All Clients, Pakistan)



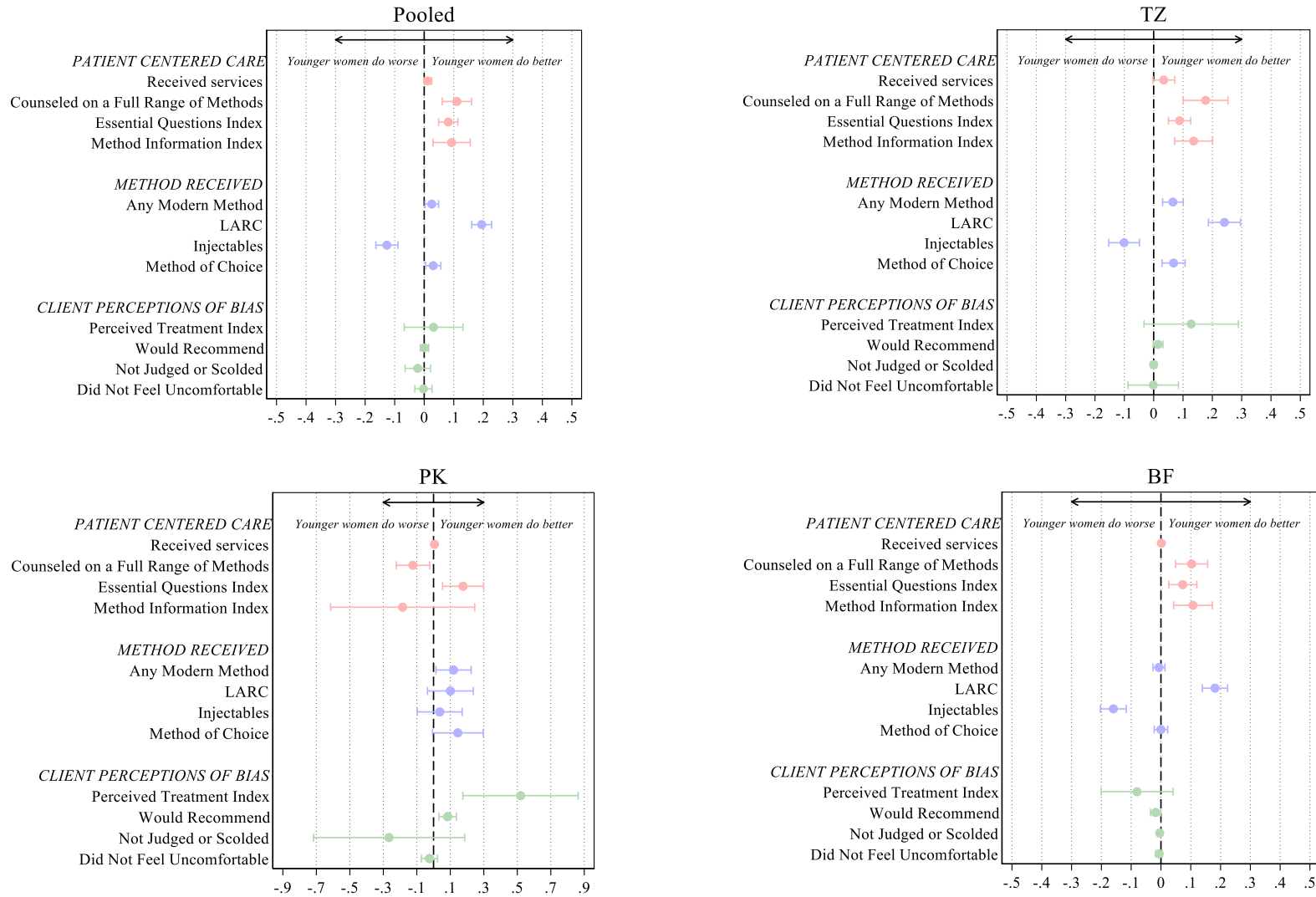
NOTES: Data are monthly service statistics reported to Green Star from September 2020 to June 2021 for 75 facilities; however, only 27 facilities reported data for the full time period. Data from July and August were excluded because a large proportion of facilities were missing data. All types of clients (new users, returning users) are included in this figure. Other methods include sterilizations and condoms.

Figure A16. Client Volume by Age from Administrative Data (All Clients, Pakistan)



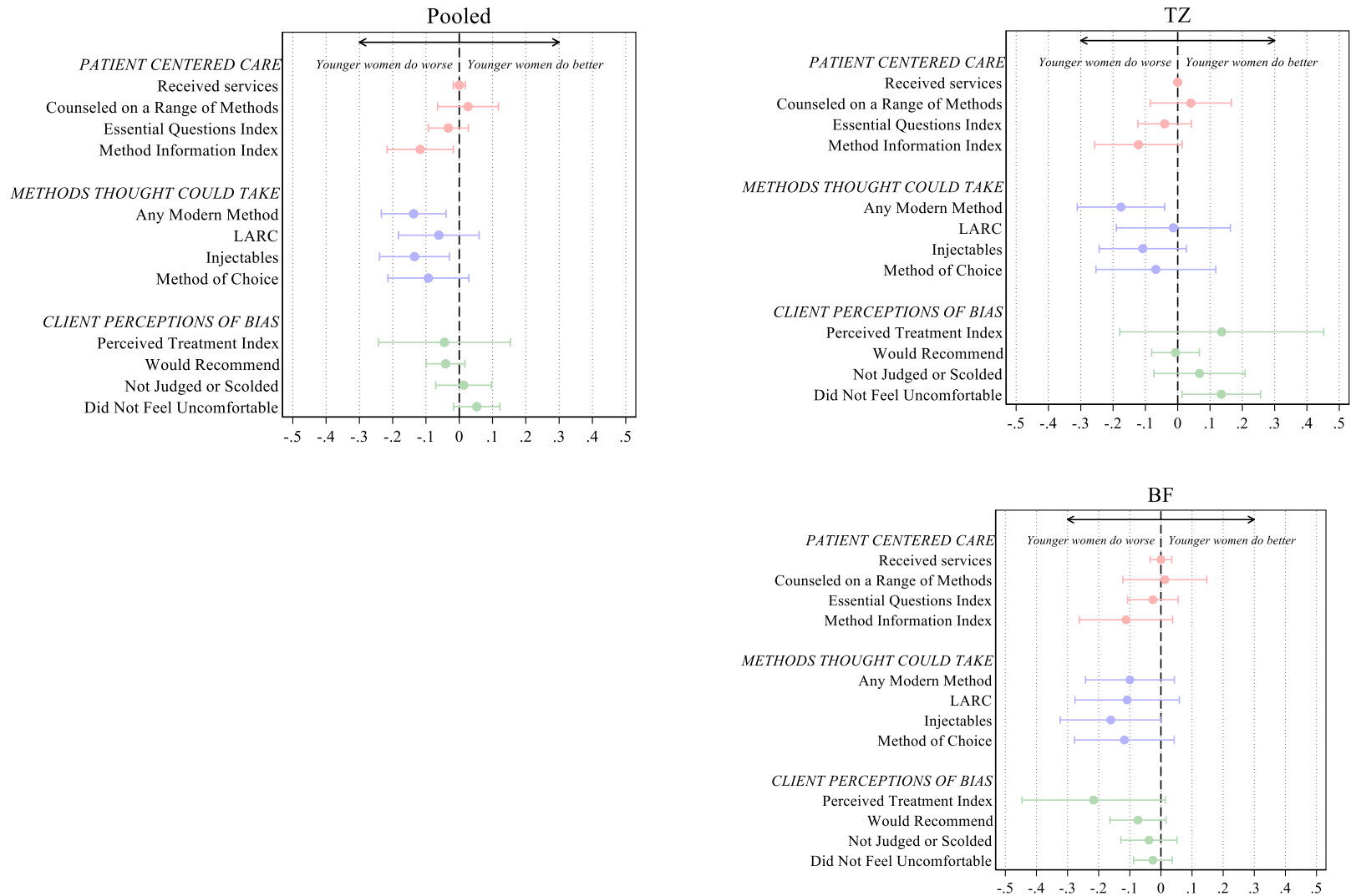
NOTES: Data are monthly service statistics reported to Green Star from September 2020 to June 2021 for 75 facilities; however, only 27 facilities reported data for the full time period. Data from July and August were excluded because a large proportion of facilities were missing data.

Figure A17. Age Disparities in the Control Group from Exit Survey (Under Age 20 vs. Age 25+)



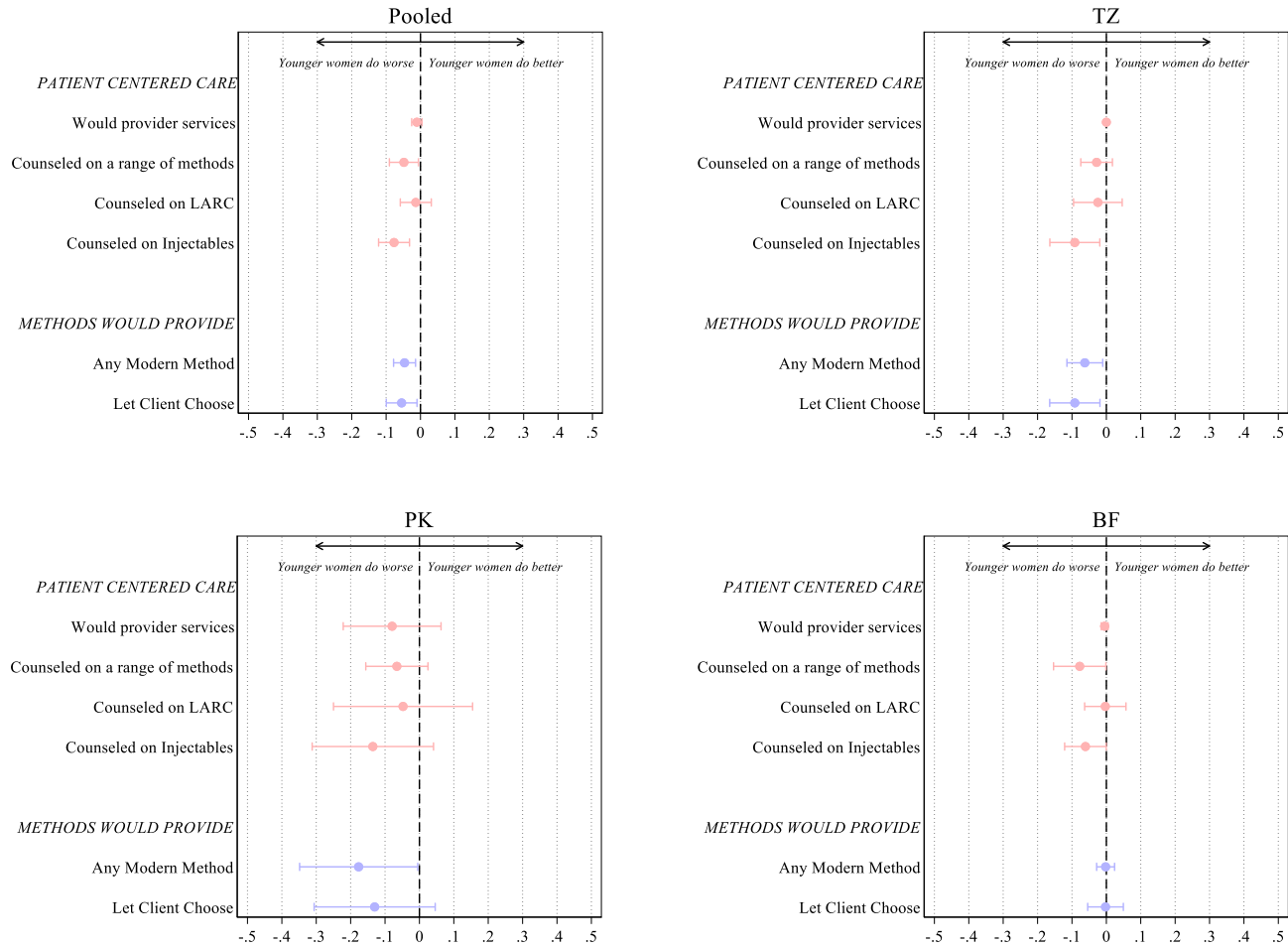
NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is under 20 (controlling for marital status and parity). Clients aged 20 to 24 are excluded. A positive number means that young women do better. Client exit data includes data collected from September 2020 to August 2021. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A18. Age Disparities in the Control Group from Mystery Clients (Age 16/17 vs. Age 24)



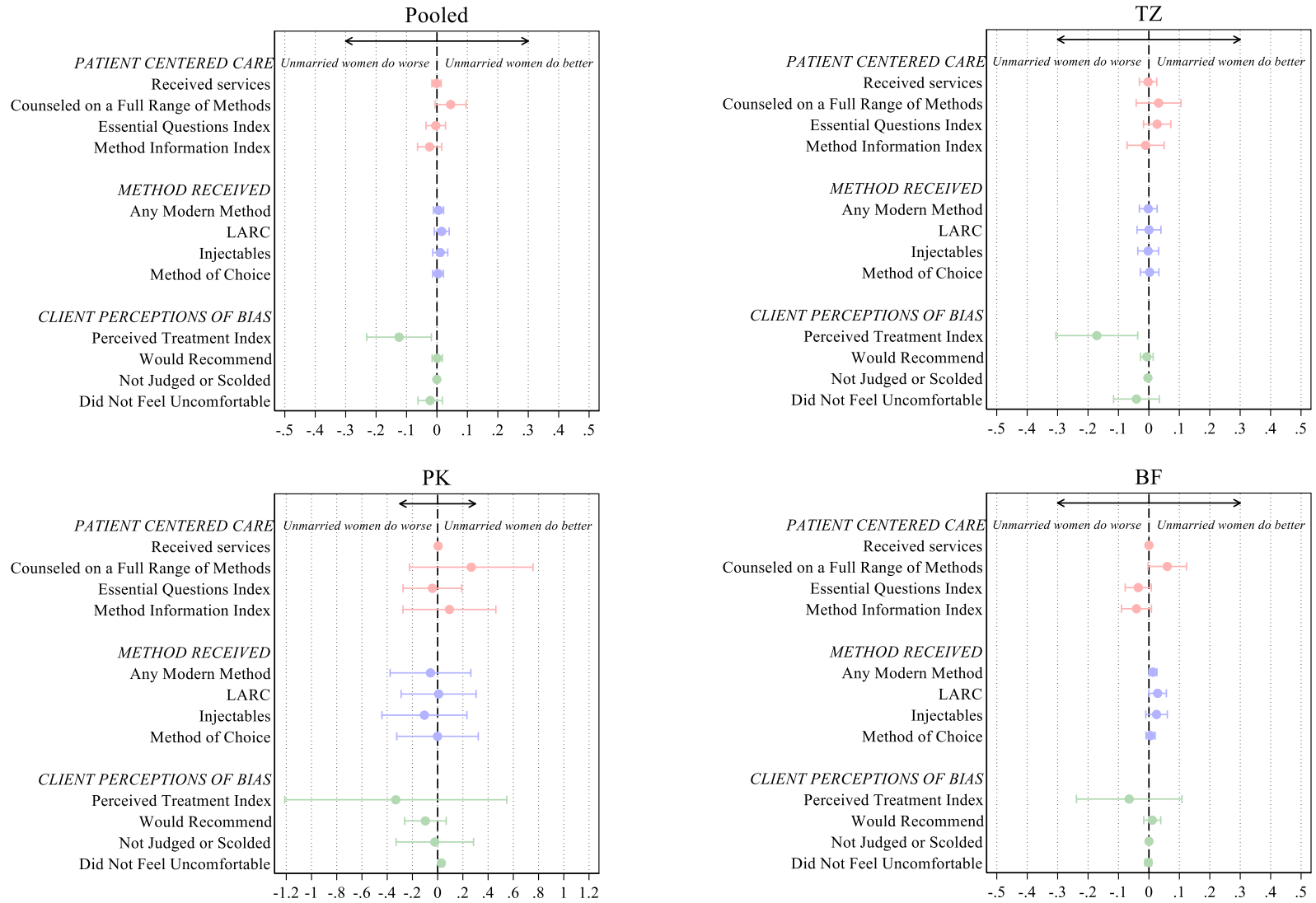
NOTES: Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is 16/17. A positive number means that the intervention improved the outcome more for younger women. Pakistan is not included because client age did not vary. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A19. Age Disparities in the Control Group from DCE (Age 15 vs. 25)



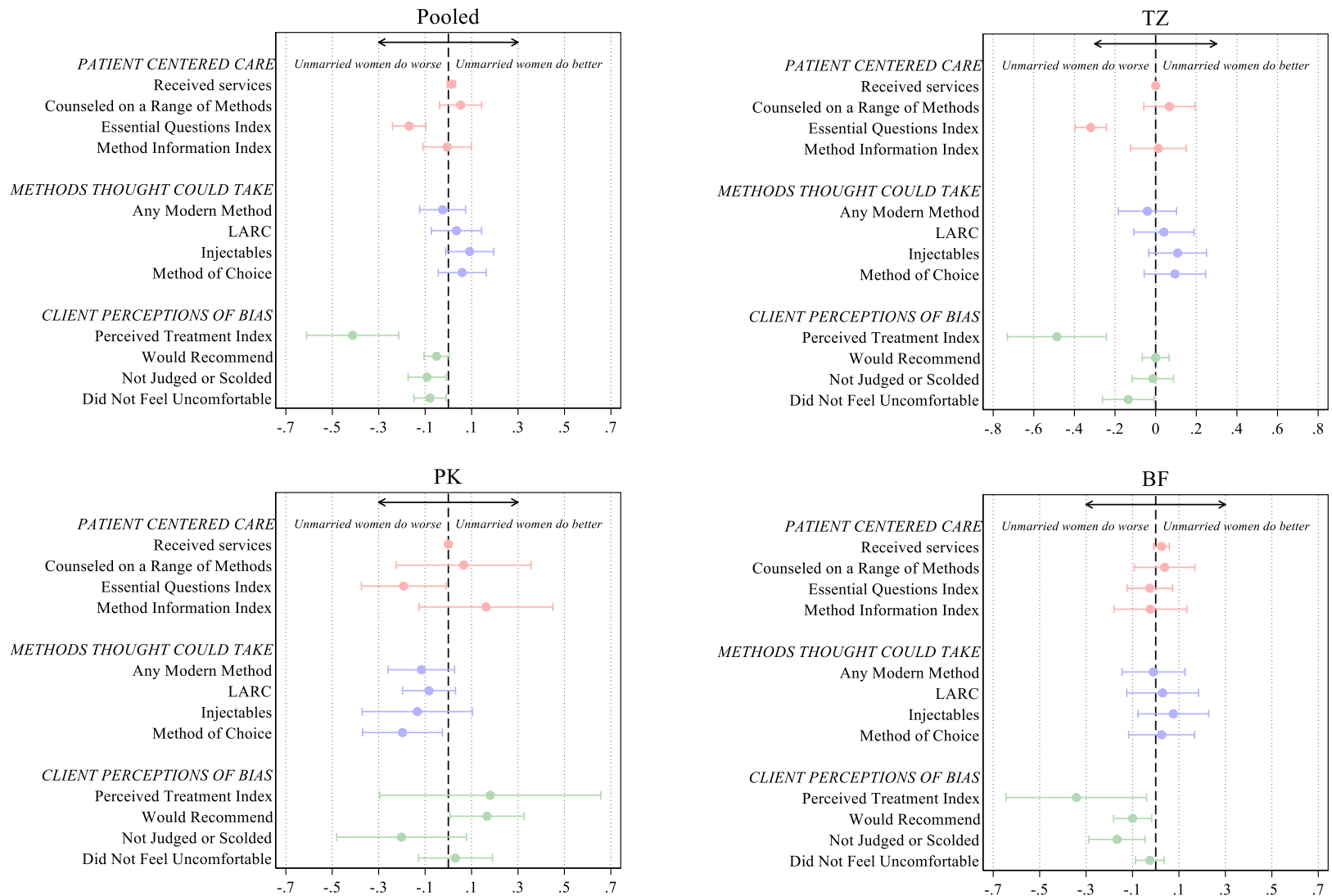
NOTES: Data are from endline provider survey. Estimates are from linear regressions that regress the outcome on a binary variable for whether the client is 20 (versus 25). A positive number means that the intervention improved the outcome more for younger women. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A20. Marital Status Disparities in the Control Group from Exit Survey (Unmarried vs. Married)



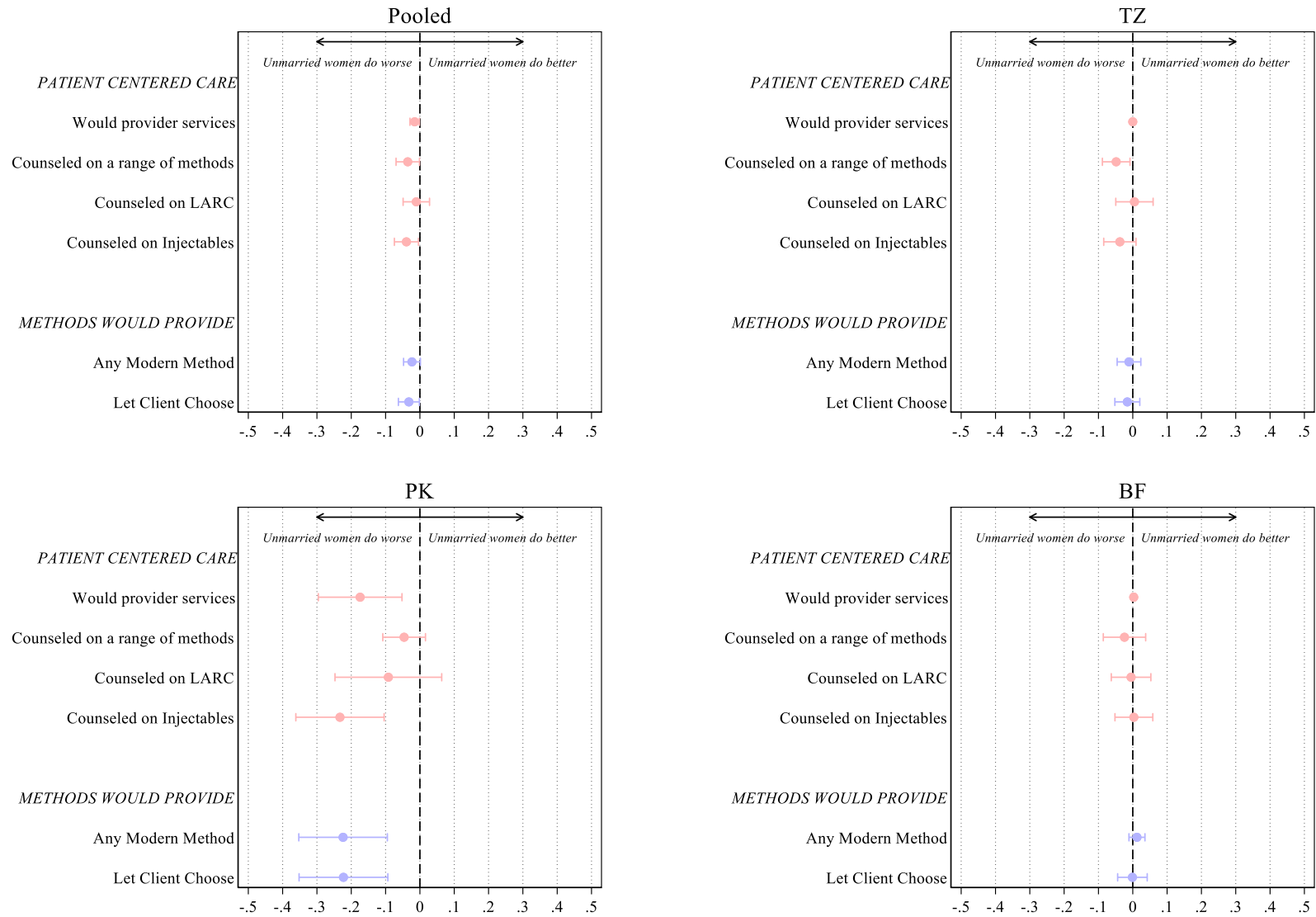
NOTES: Estimates are from linear regressions that regress the outcome on a binary variable indicating whether the client is unmarried. A positive number means that unmarried women do better. Client exit data includes data collected from September 2020 to August 2021. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A21. Marital Status Disparities in the Control Group from Mystery Clients (Unmarried vs. Married)



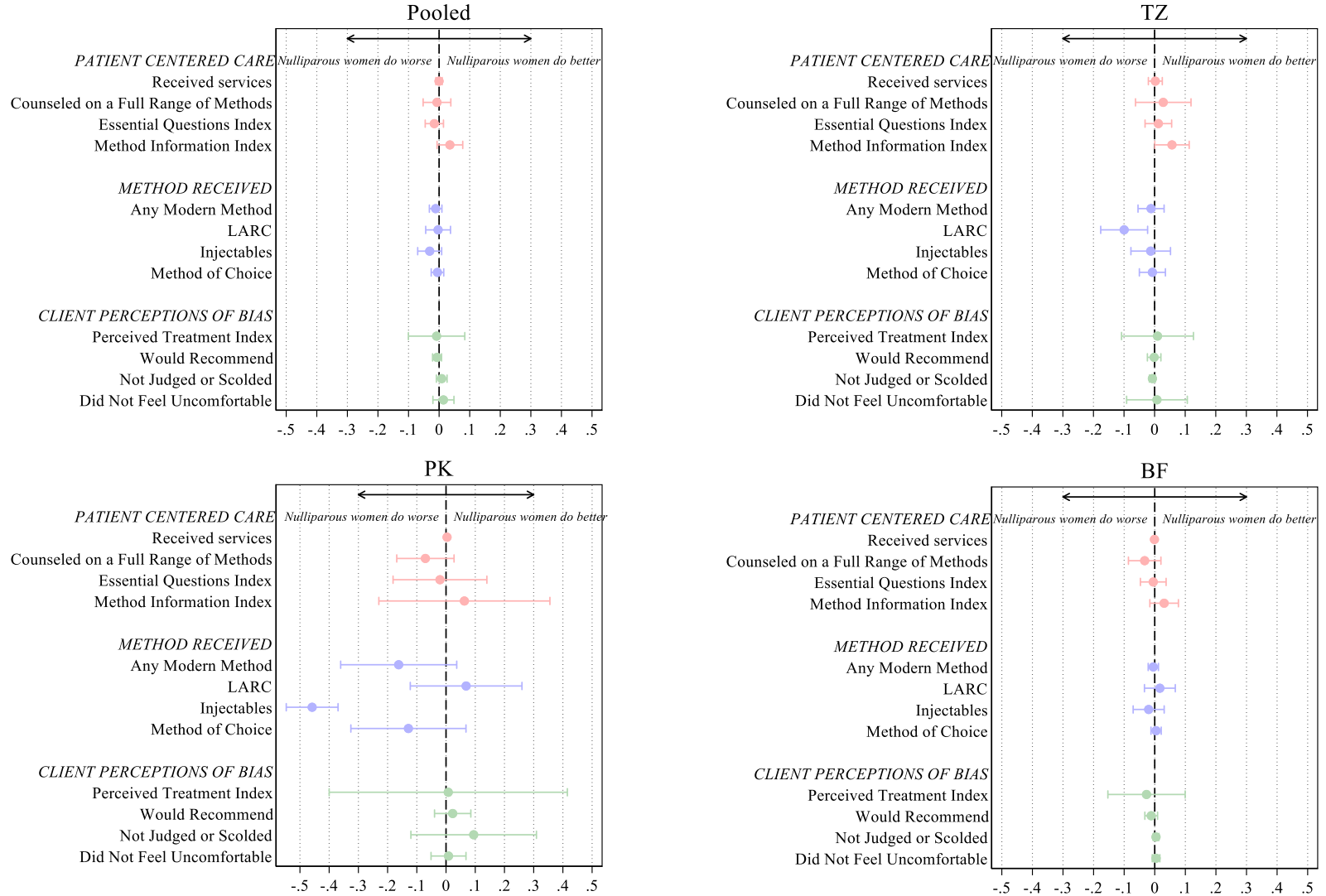
NOTES: NOTES: Estimates are from linear regressions that regress the outcome on a binary variable indicating whether the client is unmarried. A positive number means that unmarried women do better. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A22. Marital Status Disparities in the Control Group from DCE (Unmarried vs. Married)



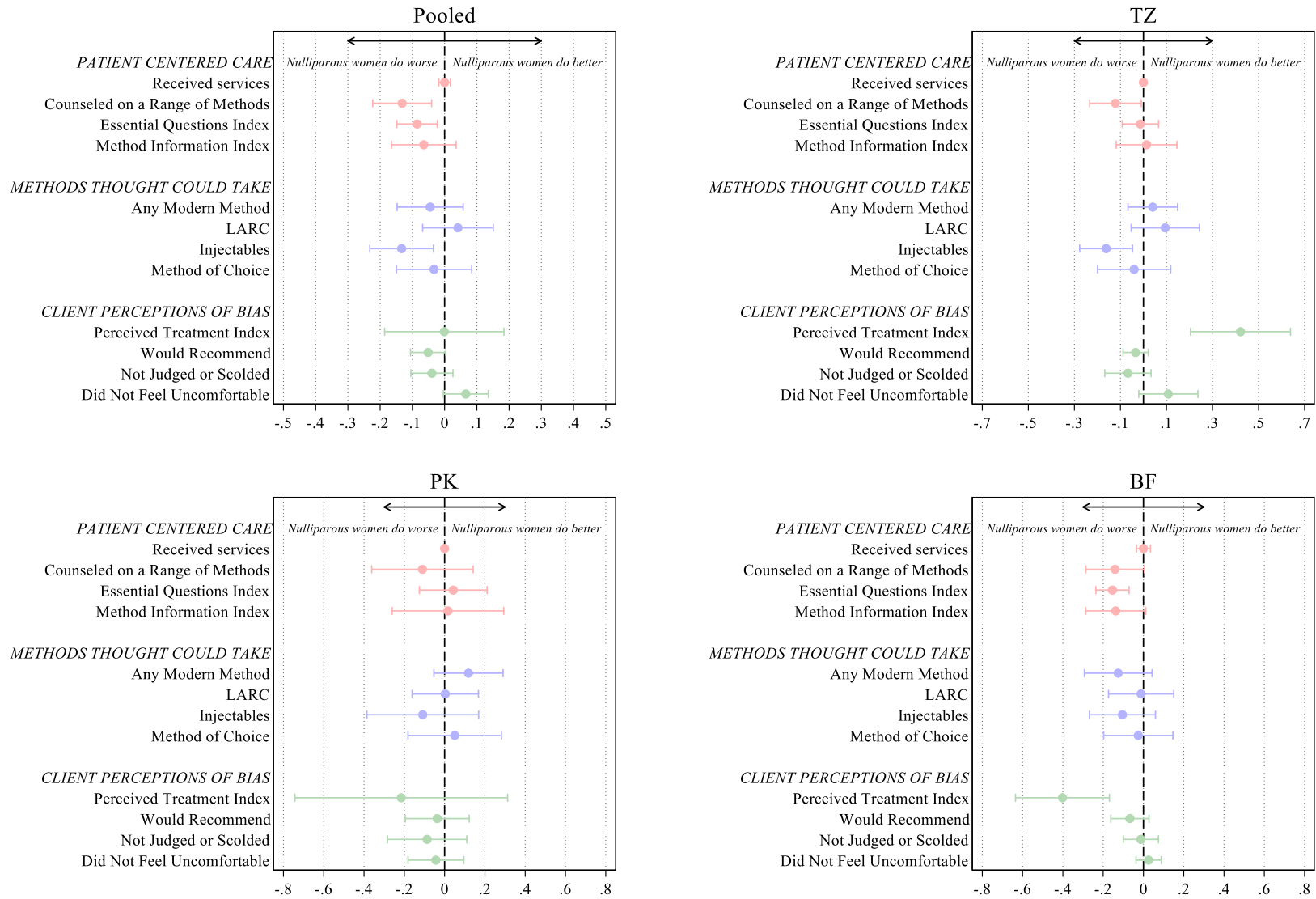
NOTES: Data are from endline provider survey. Estimates are from linear regressions that regress the outcome on a binary variable indicating whether the client is unmarried. A positive number means that unmarried women do better. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A23. Parity Disparities in the Control Group from Exit Survey (Nulliparous vs. Parous)



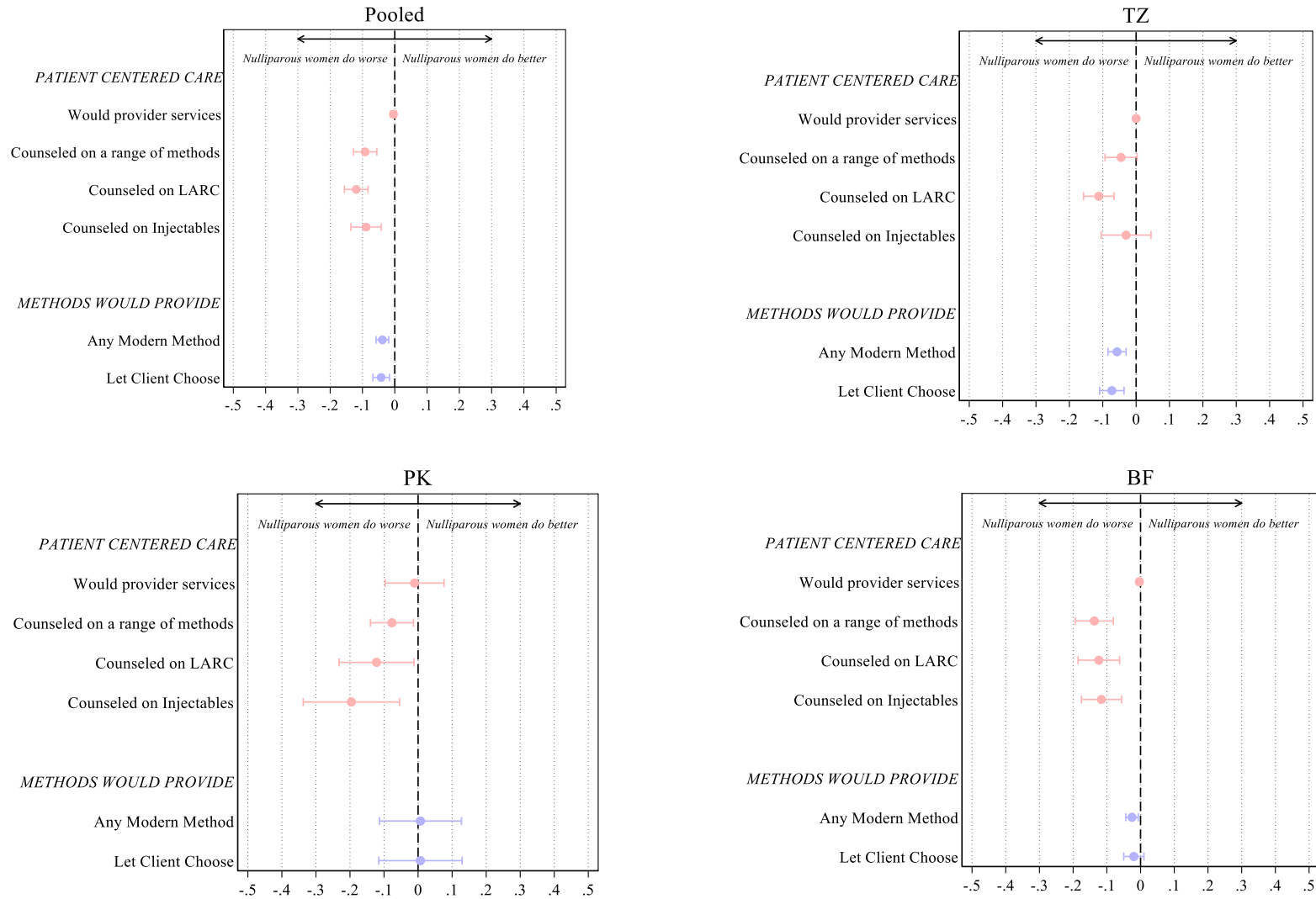
NOTES: Estimates are from linear regressions that regress the outcome on a binary variable indicating whether the client has at least one child. A positive number means that nulliparous women do better. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A24. Parity Disparities in the Control Group from Mystery Clients (Nulliparous vs. Parous)



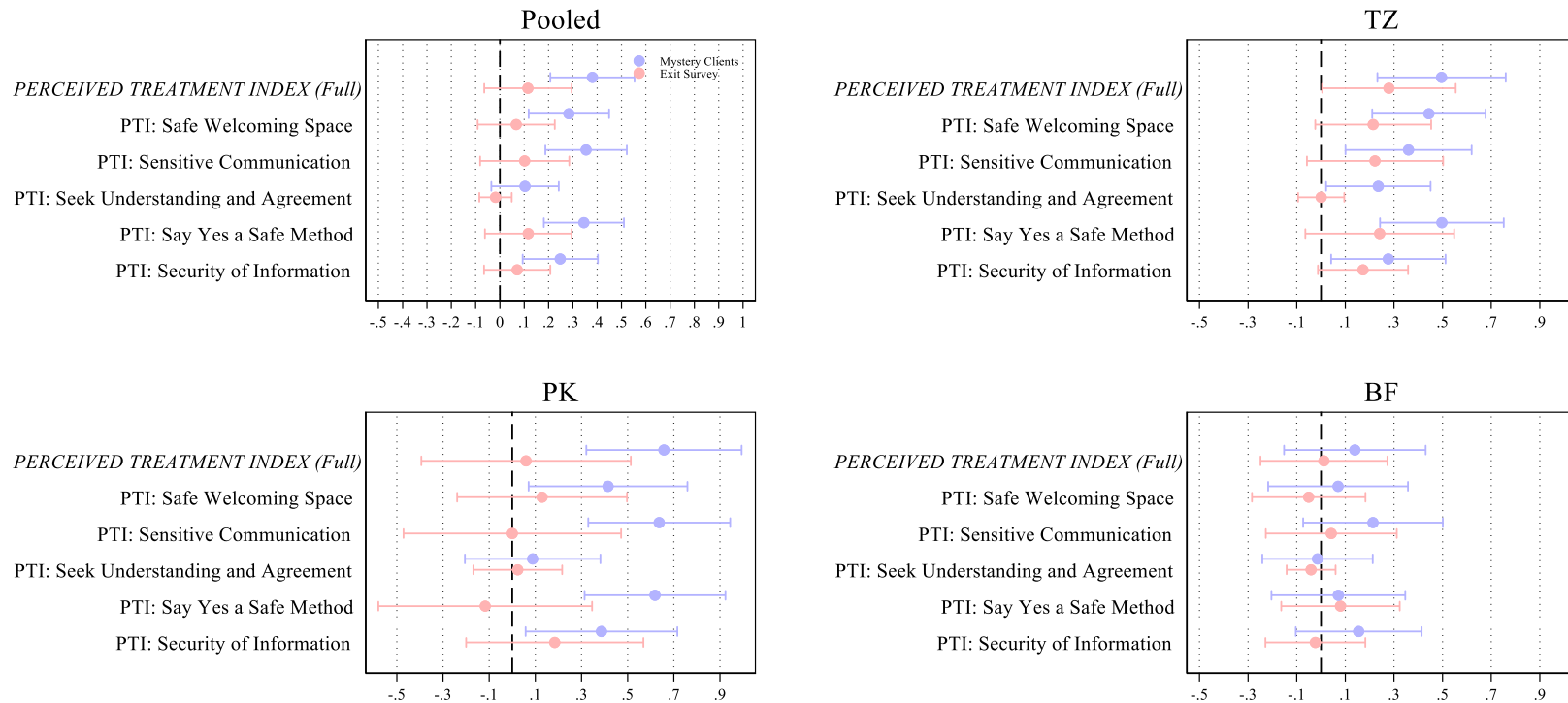
NOTES: Estimates are from linear regressions that regress the outcome on a binary variable indicating whether the client has at least one child. A positive number means that nulliparous women do better. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A25. Parity Disparities in the Control Group from DCE (Nulliparous vs. Parous)



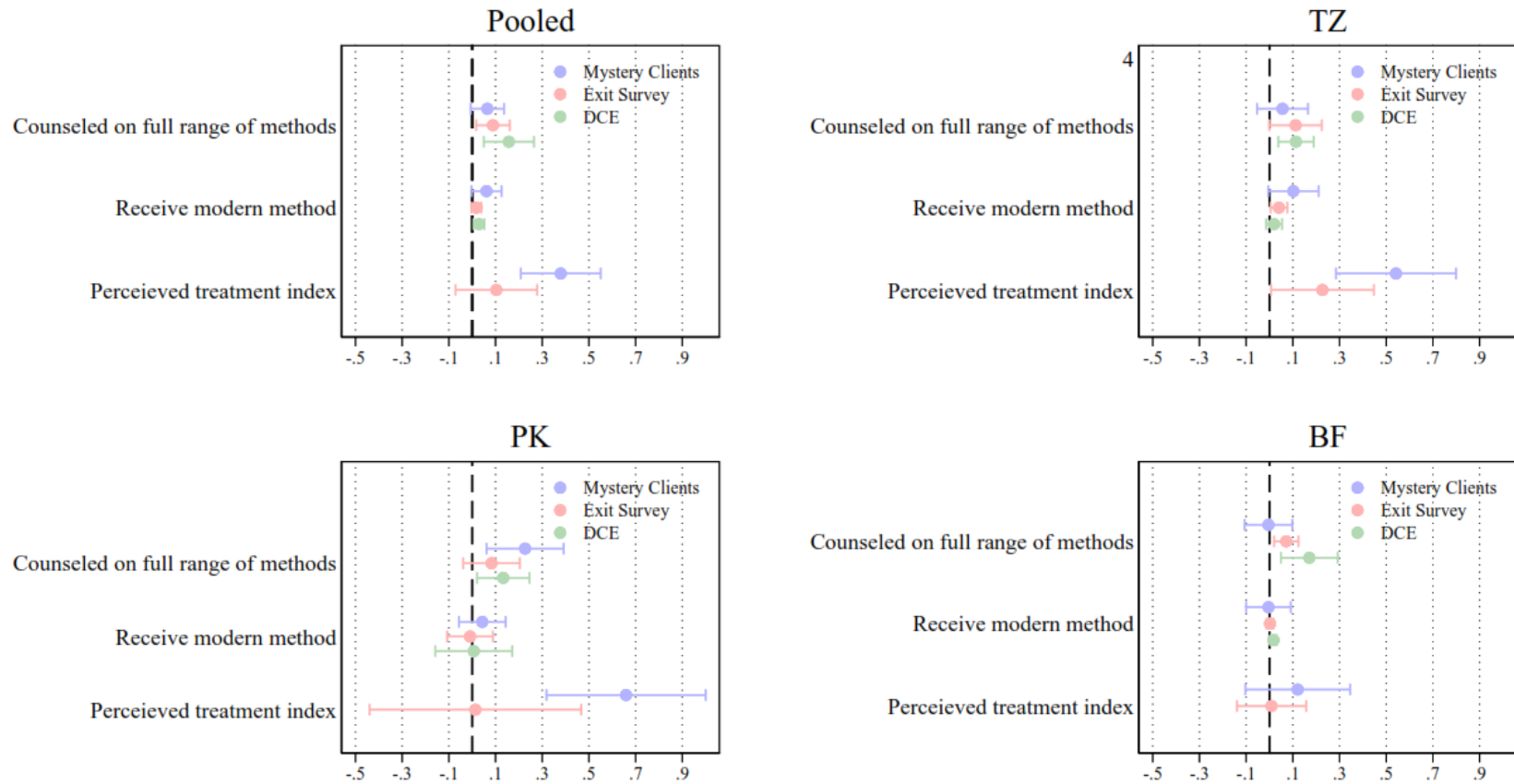
NOTES: Data are from the endline provider survey. Estimates are from linear regressions that regress the outcome on a binary variable indicating whether the client has at least one child. A positive number means that nulliparous women do better. Error bars are 95% confidence intervals estimated with standard errors clustered by clinic.

Figure A26. Intervention Effects for Each Element of the Perceived Treatment Index



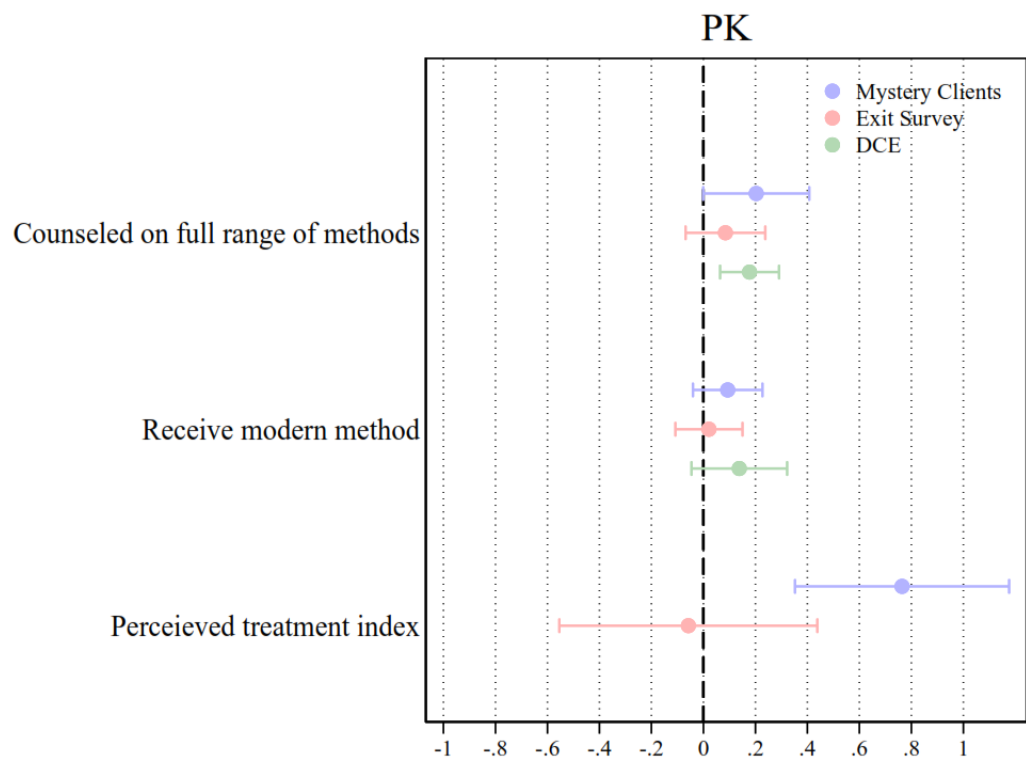
NOTES: Perceived treatment index is a standardized index. Items were standardized in relation to the control group by country. Variables phrased negatively were recoded so that higher scores on the index represent more positive treatment. Control and intervention group means and confidence intervals were estimated using linear regression with standard errors clustered at the facility. Client exit data includes data collected from September 2020 to August 2021. Client exit data includes clients 24 or younger and includes data collected from September 2020 to August 2021.

Figure A27. Primary Client Outcomes with Adjustments



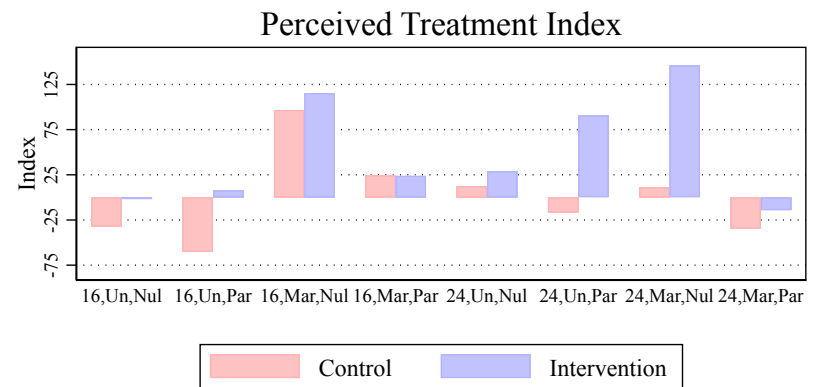
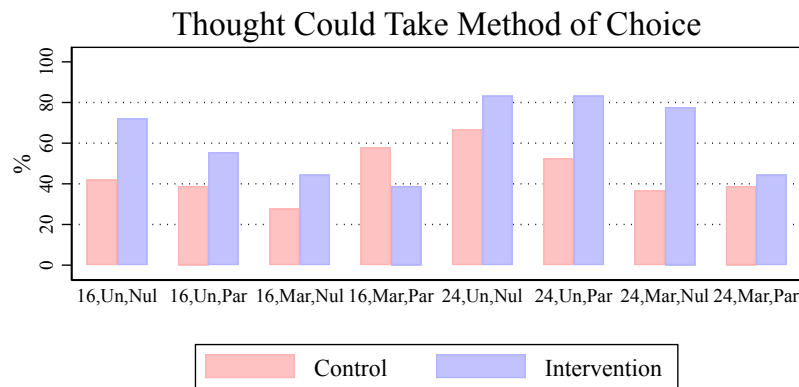
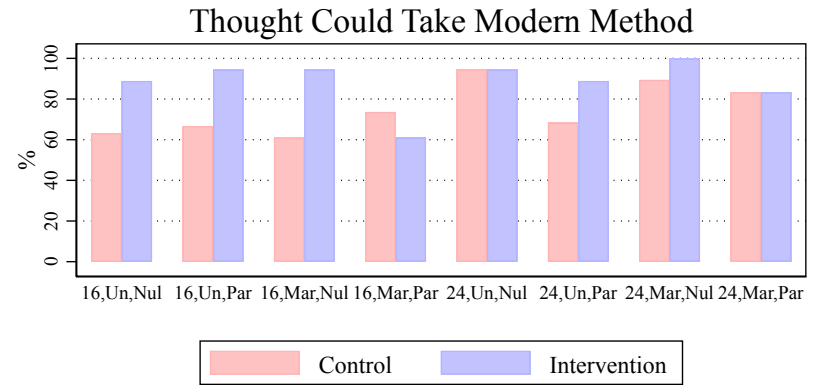
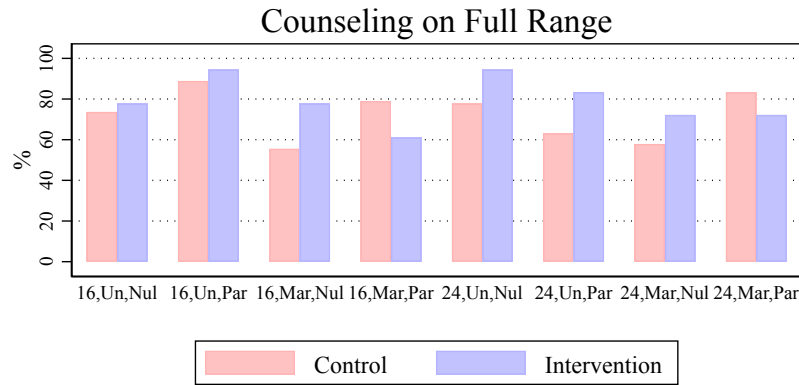
NOTES: Figure plots the difference between intervention and control group estimated from a multivariable linear regression with standard errors clustered at the facility. For Tanzania and Burkina Faso, we controlled for strata on which randomization was conducted regardless of the data source. In the client exit survey, client age, marital status, parity, education level, perceived social status, and an indicator of whether the client had ever used FP in the past were included. For the counseled on the full range of methods and perceived treatment index, we controlled for whether the client had a method in mind prior to visiting the facility. Client exit survey data included clients under 25 years old and data collected between September 2020 and August 2021. In both mystery client and client exit survey regressions in Tanzania and Burkina Faso, we controlled for the mean age of the surveyed providers at the facility, the proportion of the surveyed providers that were married, the proportion of providers that had ever used FP in the past, the proportion of providers with at least one child, the proportion of providers characterizing the majority of their clients as vulnerable or poor, the proportion of providers who reported working part time (1-2 days a week), and the proportion of providers with each of the qualifications. In pooled models using the client exit survey, we included client characteristics only. In the mystery client models, we included an indicator of the profile. In Pakistan, the 19/20 years old were grouped with the 24 years old from Tanzania and Burkina Faso. In the DCE country-specific and pooled models, we included provider age, marital status, past FP use, parity, whether the provider characterized the majority of their clients as poor, whether the provider reported working part time (1-2 days a week), and provider qualification (doctor/health officer, nurse/nurse-midwife, midwife, lady health visitor). We also controlled for the profile displayed to the provider (combination of age (15/20/25), marital status (married/unmarried), and parity (unmarried/married)).

Figure A28. Main Outcomes in PK, Excluding Control Group Who Would not Participate in Summit



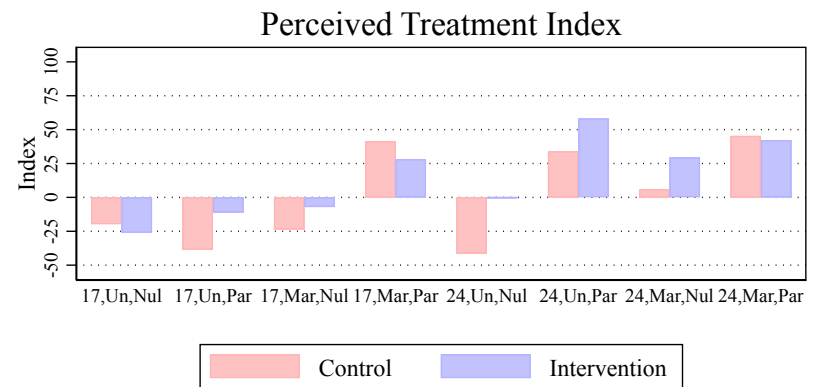
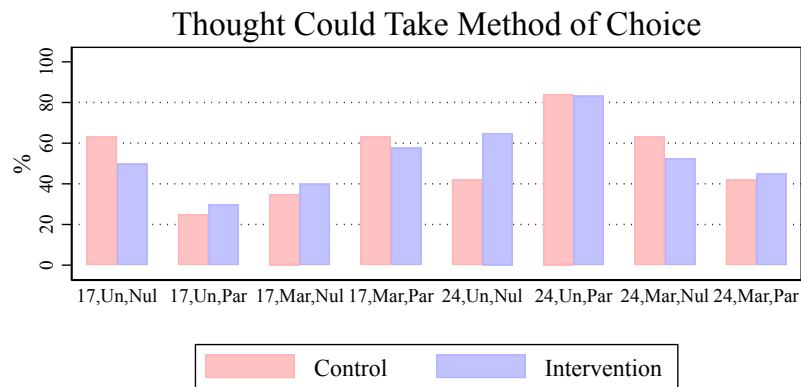
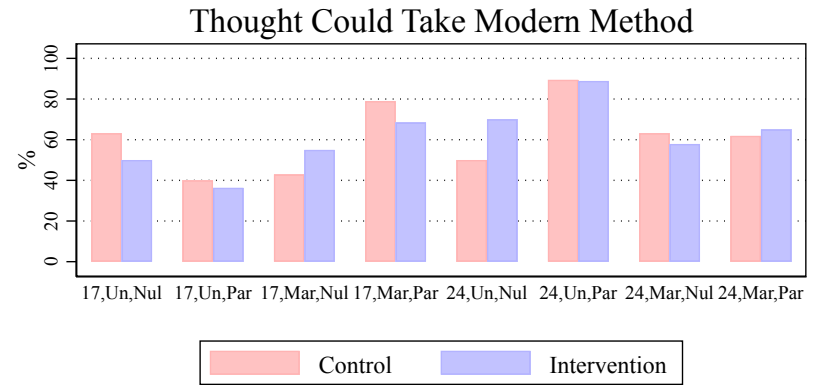
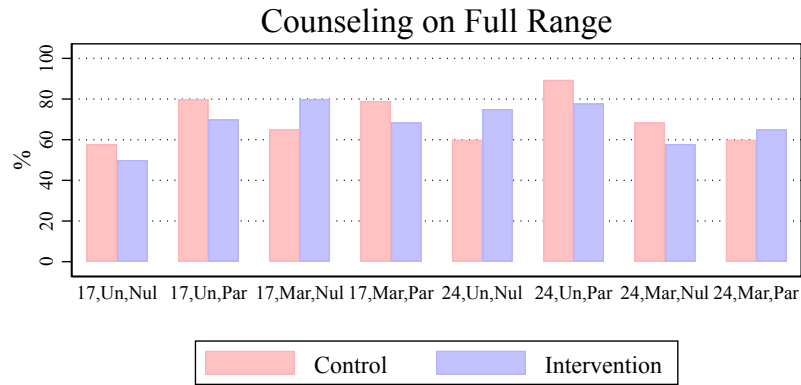
NOTES: Because some providers in the intervention group in Pakistan opted out of the study because they did not want to participate in the Summit and were replaced by facilities that did, we asked control facilities if they would participate in the Summit. To compare treatment facilities to those control facilities that would agree to participate in the Summit we ran a sensitivity analysis where we compared intervention facilities to control facilities that said they would participate in the Summit. We also compared including both those who said they would participate and those who were not sure and results were consistent (not shown).

Figure A29. Outcomes for Each Profile in Tanzania (Mystery Client)



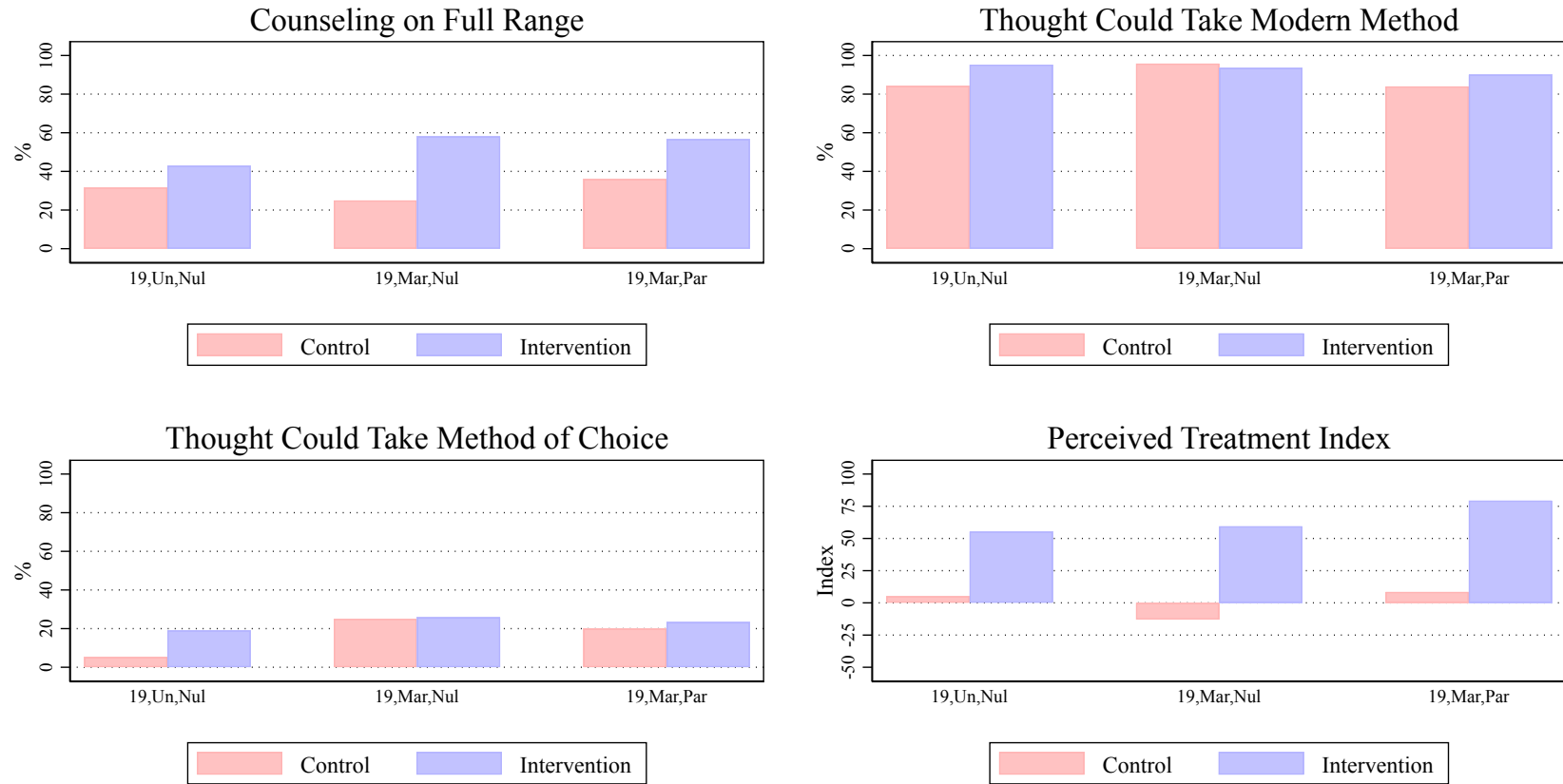
NOTES: Each bar represents the mean of the outcome for each mystery client profile separated out by whether the visit was at an intervention facility or control facility.

Figure A30. Outcomes for Each Profile in Burkina Faso (Mystery Client)



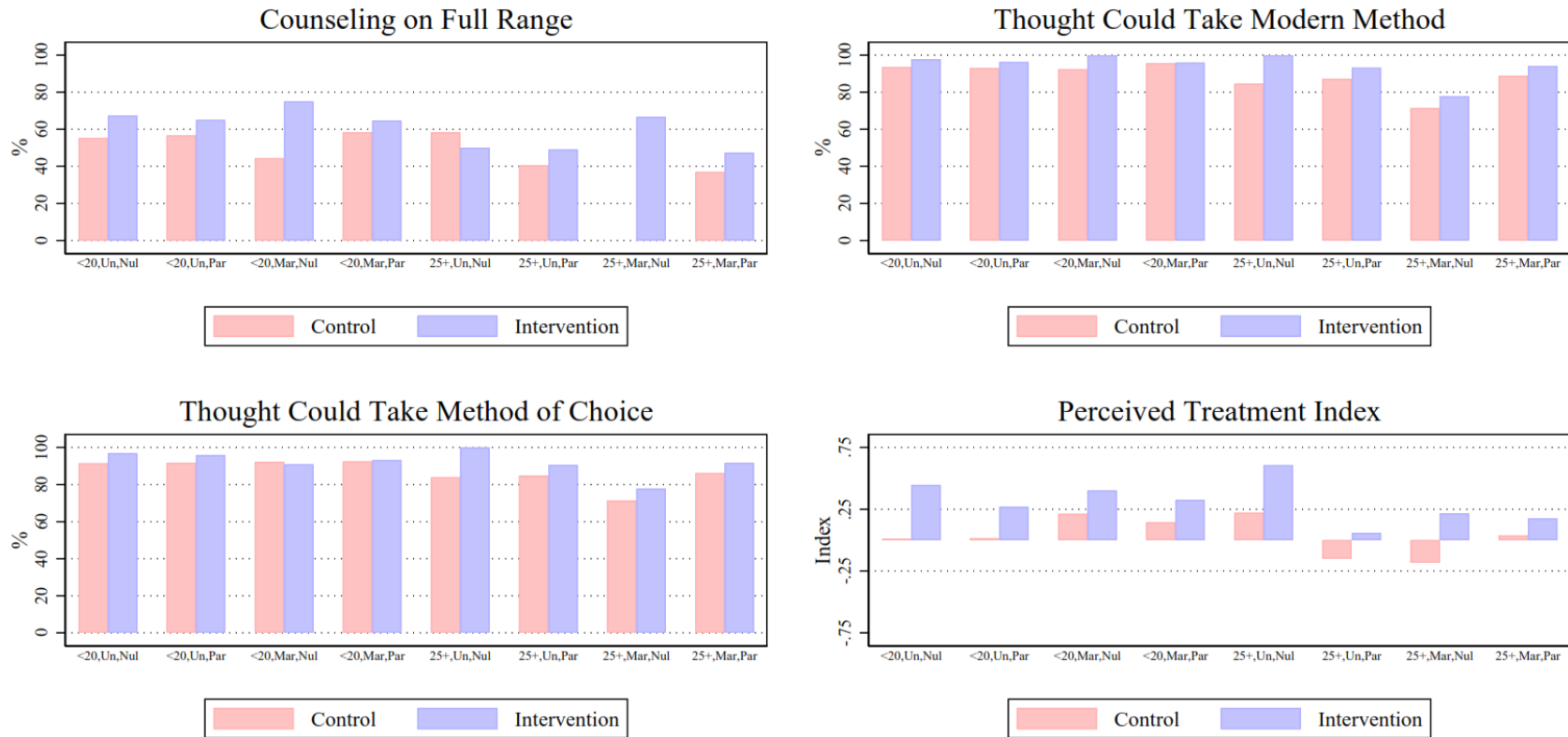
NOTES: Each bar represents the mean of the outcome for each mystery client profile separated out by whether the visit was at an intervention facility or control facility.

Figure A31. Outcomes for Each Profile in Pakistan (Mystery client)



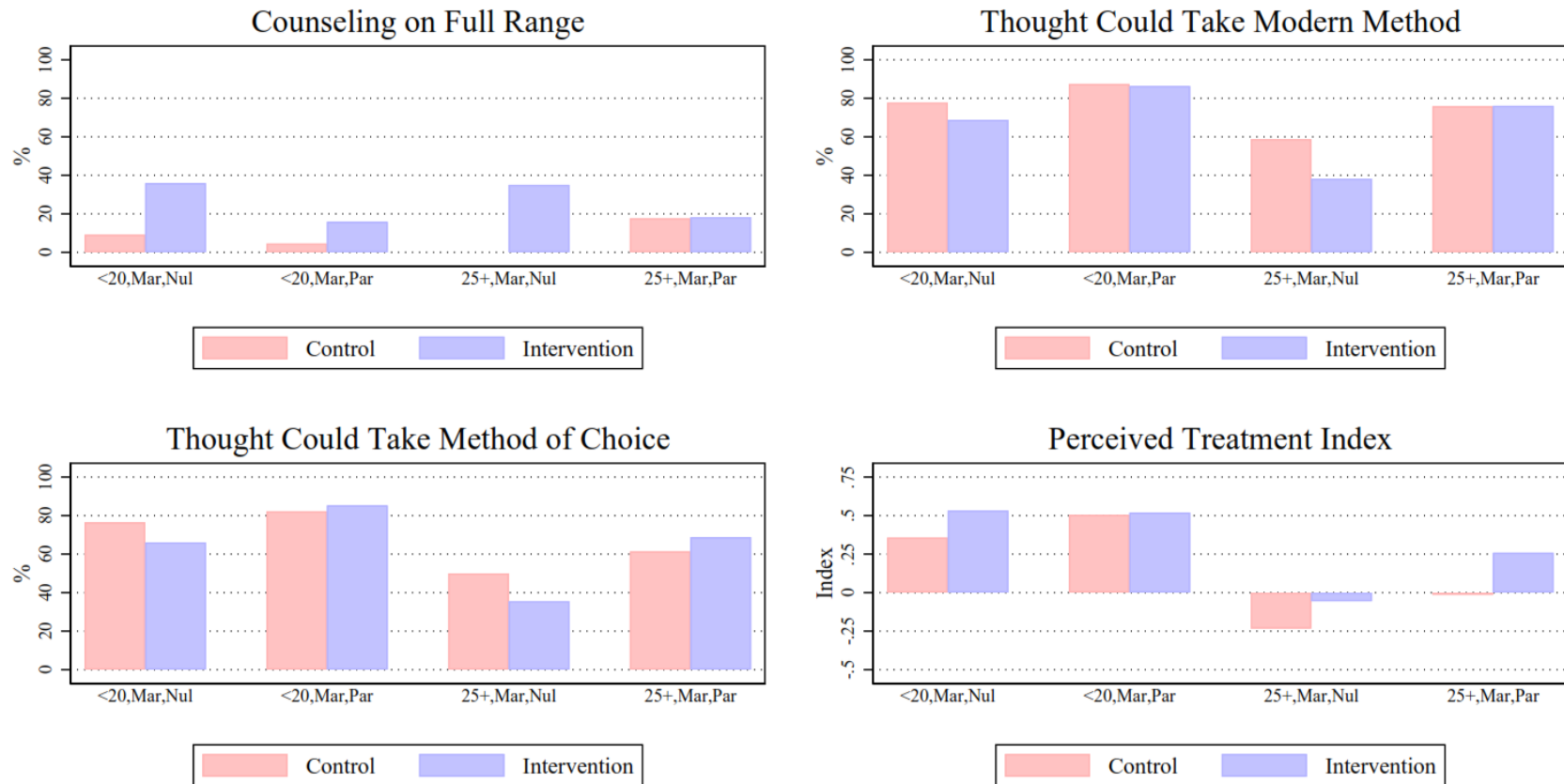
NOTES: Each bar represents the mean of the outcome for each mystery client profile separated out by whether the visit was at an intervention facility or control facility.

Figure A32. Outcomes for Each Profile in Tanzania (Client Exit)



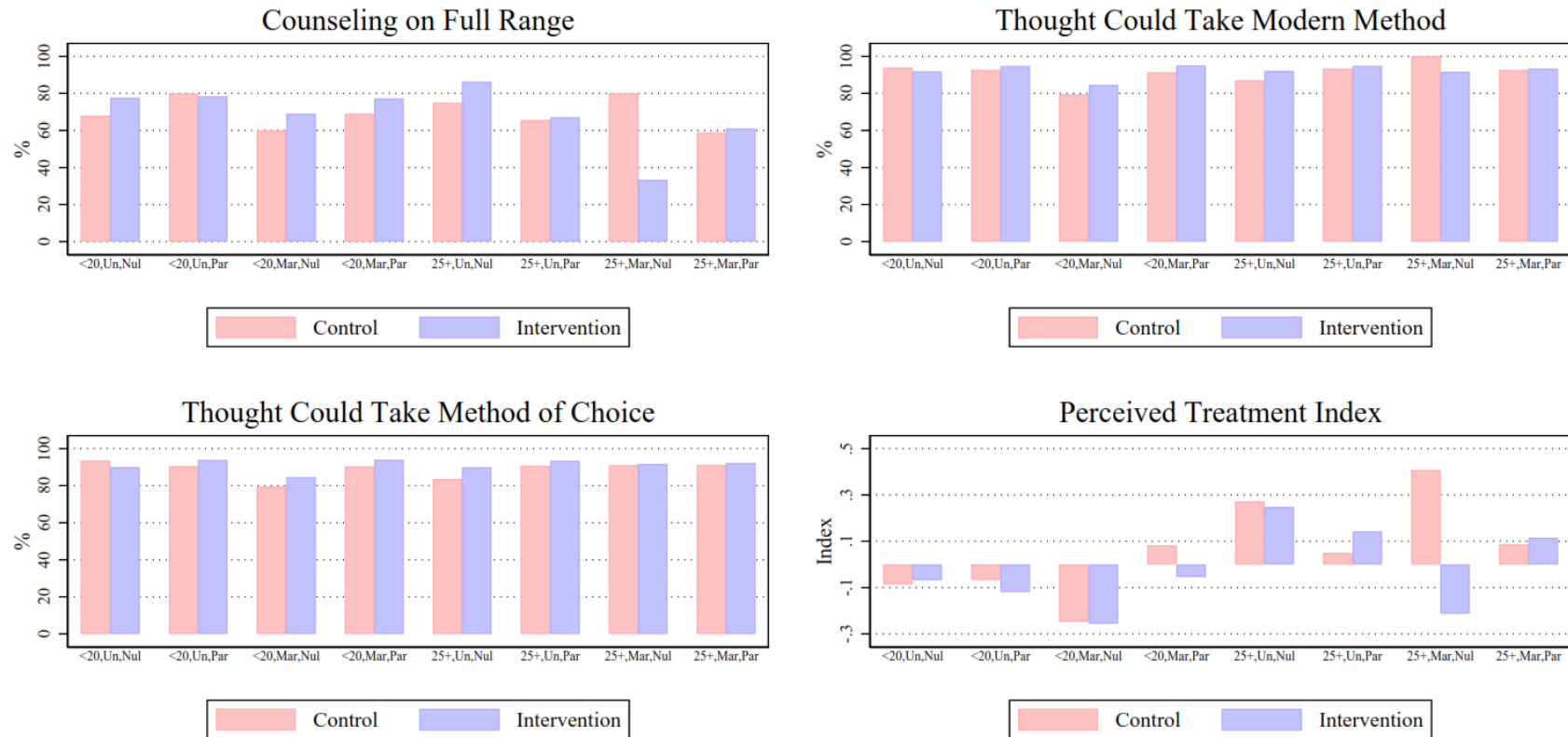
NOTES: Data drawn from the client exit survey collected between September 2020 to August 2021. Each bar represents the mean of the outcome for each client profile separated out by whether the visit was at an intervention facility or control facility.

Figure A33. Outcomes for Each Profile in Pakistan (Client Exit)



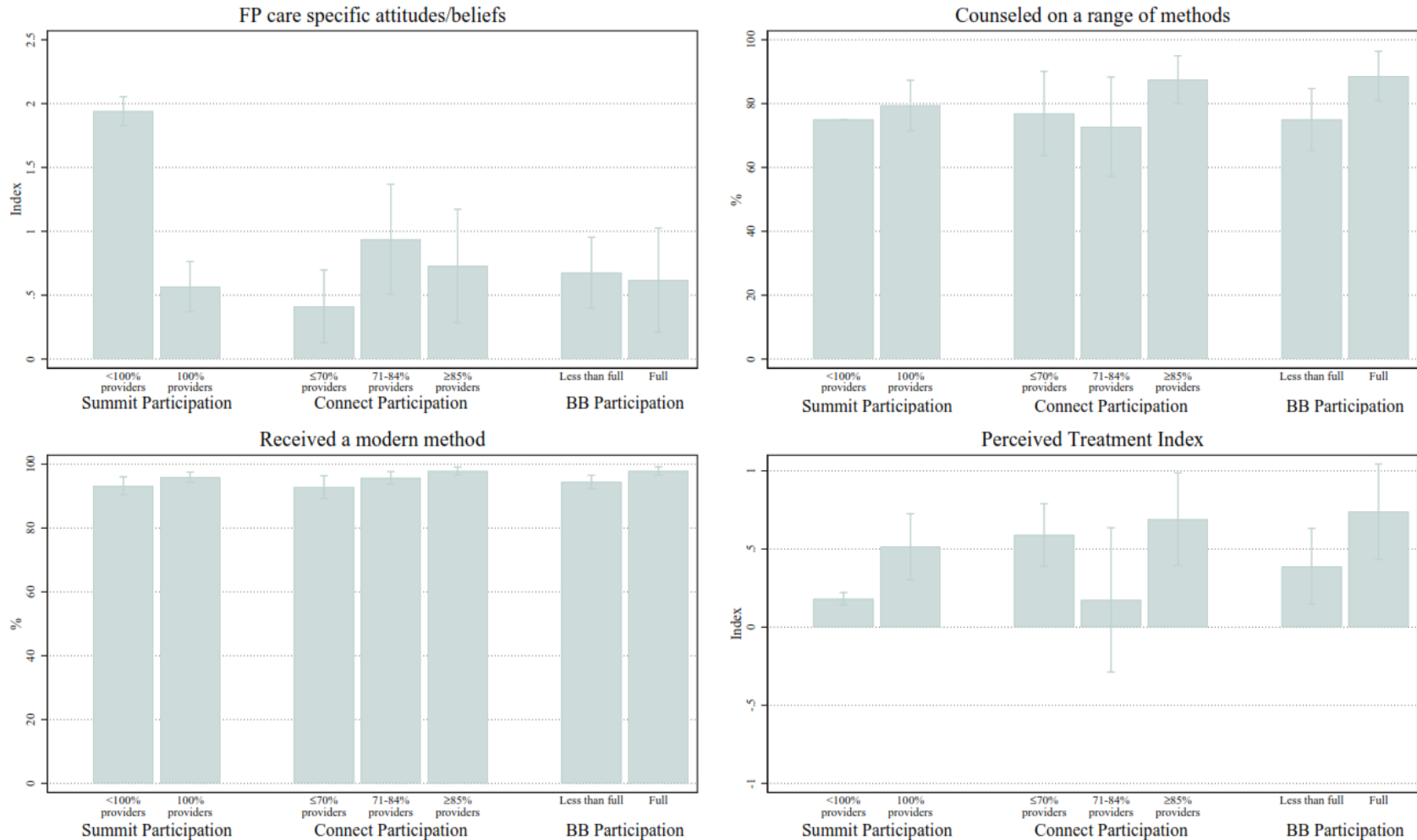
NOTES: Data drawn from the client exit survey collected between September 2020 to August 2021. Each bar represents the mean of the outcome for each client profile separated out by whether the visit was at an intervention facility or control facility.

Figure A34. Outcomes for Each Profile in Burkina Faso (Client Exit)



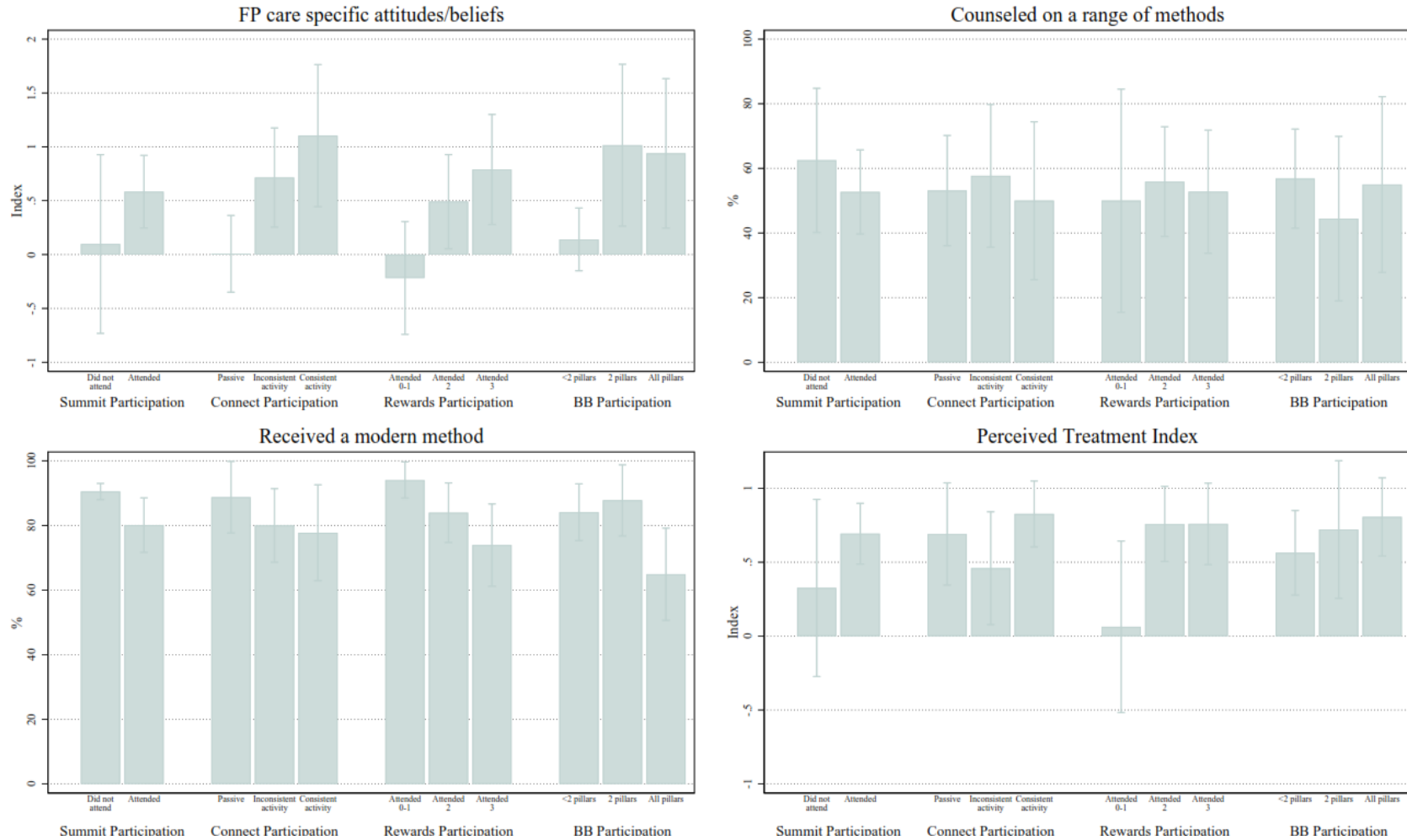
NOTES: Data drawn from the client exit survey collected between September 2020 to August 2021. Each bar represents the mean of the outcome for each client profile separated out by whether the visit was at an intervention facility or control facility.

Figure A35. Heterogeneity in Outcomes by Participation in BB Pillars (Tanzania)



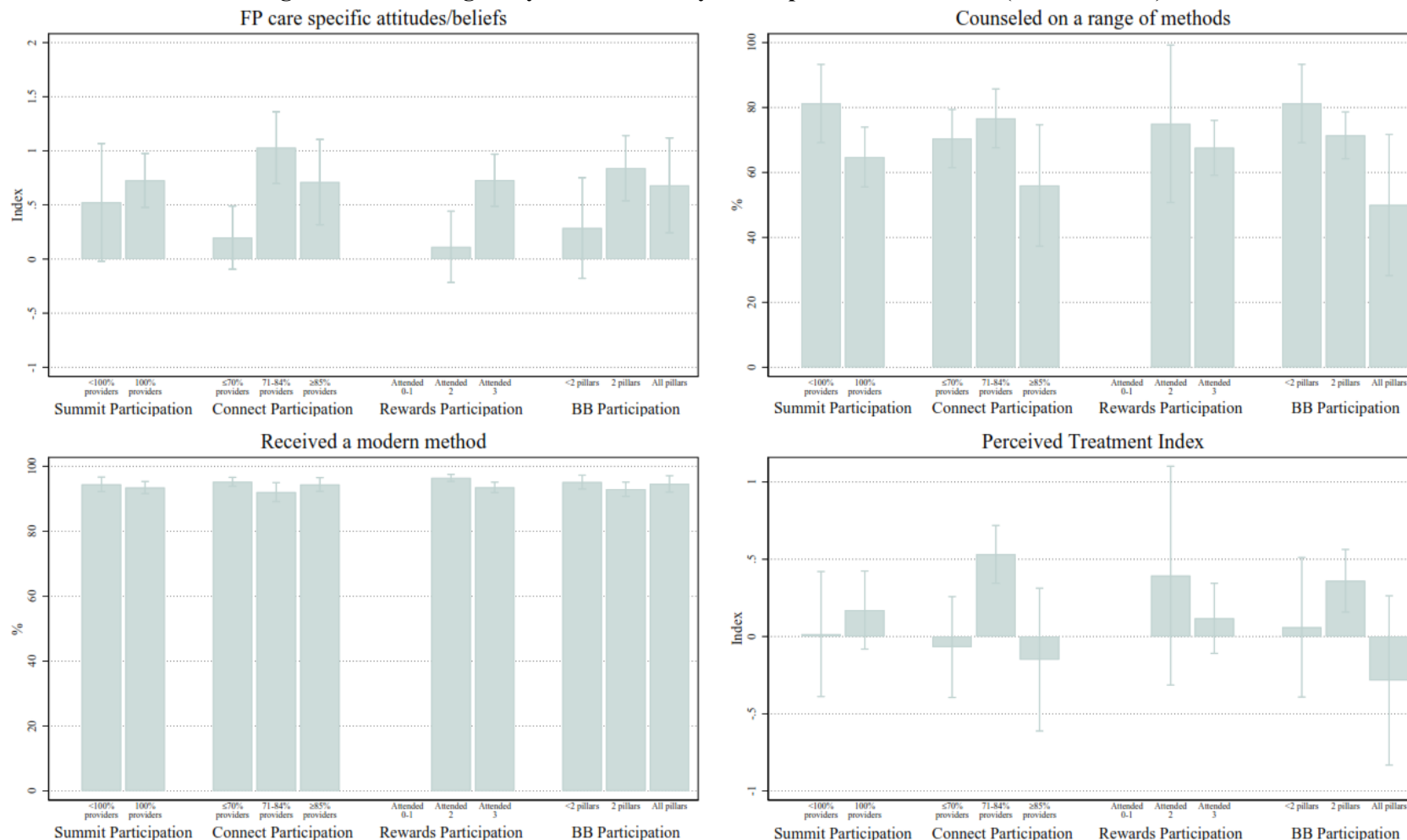
NOTES: Includes only intervention facilities. FP care specific attitudes or beliefs from provider survey. Counseled on range of methods and perceived treatment index from Mystery Client survey. Received a modern method from client exit survey. Client exit survey data includes only intervention facilities and clients < 25 and data collected between September 2020 and August 2021. Summit participation represents whether all FP providers employed at the facility at the time of the Summit attended a Summit (2 TZ facilities did not). Connect participation represents the average number of providers that attended in-person Connect sessions quarterly as a percentage of the total number of FP providers employed at the facility. All facilities attended all three connect sessions, so there is no heterogeneity in rewards participation to examine in TZ. BB Participation reflects participation across all three pillars. Facilities that had 100% Summit participation, had ≥85% of providers participate in Connect, and had full attendance at Rewards were included in the “Full” participation group. Mean and confidence intervals estimated from a regressing pillar participation on each outcome, with SEs clustered by facility.

Figure A36. Heterogeneity in Outcomes by Participation in BB Pillars (Pakistan)



NOTES: Includes only intervention facilities. FP care specific attitudes or beliefs from provider survey. Counseled on range of methods and perceived treatment index from Mystery Client survey. Received a modern method from client exit survey. Client exit survey data includes only intervention facilities, clients < 25, and data collected between September 2020 and August 2021. Summit participation represents whether each provider attended a Summit (4 providers did not). Connect participation represents WhatsApp Connect participation across three quarters. Passive activity represents 2+ quarters of passive activity. Inconsistent activity represents 2+ quarters of inconsistent activity (i.e., providers participating every other week or twice a month). Consistent activity represents 2+ quarters of consistent activity (i.e., participating in Connect activities every week). Rewards participation reflects the number of rewards sessions the provider attended. BB Participation captures the number of pillars with which facilities were categorized as having full (Summit and Rewards) or highest (Connect) engagement. Mean and confidence intervals estimated from a regressing pillar participation on each outcome, with SEs clustered by provider.

Figure A37. Heterogeneity in Outcomes by Participation in BB Pillars (Burkina Faso)



NOTES: Includes only intervention facilities. FP care specific attitudes or beliefs from provider survey. Counseled on range of methods and perceived treatment index from Mystery Client survey. Received a modern method from client exit survey. Client exit survey data includes only intervention facilities and clients < 25 and data collected between September 2020 and August 2021. Summit participation represents whether all FP providers employed at the facility at the time of the Summit attended a Summit (8 BF facilities did not). Connect participation represents the average number of providers that attended in-person Connect sessions quarterly as a percentage of the total number of FP providers employed at the facility. Only three facilities did not attend all three rewards session. BB Participation captures the number of pillars with which facilities were categorized as having full (Summit and Rewards) or highest (Connect) engagement. Mean and confidence intervals estimated from a regressing pillar participation on each outcome, with SEs clustered by facility.