Bring A Friend: Leveraging Financial and Peer Support to Improve Women's Reproductive Agency in India*

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Abstract

Women's agency in the domain of family planning and reproductive health is a fundamental determinant of their well-being. We experimentally evaluate two approaches aimed at improving women's reproductive agency in India. We offered treated women subsidized family planning services at a local clinic. Additionally, we enabled a subset of treated women to invite and incentivize others to visit the clinic with them. Although the subsidy increased women's clinic visits and contraceptive use and decreased their likelihood of pregnancy, combining the subsidy with the ability to leverage peer support was more effective in strengthening agency and peer engagement for women who faced greater intrahousehold opposition to contraception.

Keywords: Women's Agency; Family Planning; Contraception; India; Mother-in-law; Vouchers; Social Connections; Peers
JEL codes: J13, J16, O15, O33, I15, Z13.

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1 Introduction

Women's empowerment is a global priority and a key Sustainable Development Goal. Despite considerable social, political, and economic advances, women continue to have limited agency in many regions of the world (Chang et al., 2020; Donald et al., 2020; Kabeer, 2011). Improving women's agency is not only valuable in its own right but also offers instrumental returns for other dimensions of female empowerment and economic development (Duflo, 2012; Jayachandran, 2019). We focus on agency in the domain of contraceptive and reproductive decision-making, which is a fundamental determinant of women's well-being. The lack of control over the number and timing of births can negatively affect women's health, educational attainment, and labor market outcomes.[1] However, a large fraction of women globally lack reproductive agency[2] (UNFPA, 2021) and an estimated 270 million women have an unmet need for modern contraception (Kantorová et al., 2020).[3]

Our study is situated in rural India, specifically in India's most populous state, Uttar Pradesh (UP). In this setting, women have extremely low levels of reproductive agency, which is reflected both in direct indicators of agency, such as freedom to visit health facilities, and in more indirect measures, such as contraceptive use and social engagement related to family planning (FP). Less than half (43 percent) of currently married women of reproductive age in rural UP use modern contraception and only 23 percent use a modern method besides female sterilization (Government of India, 2022). Moreover, only 38 percent of surveyed women reported being allowed to visit a health facility alone and just 18 percent had visited a health care provider in the last 12 months. In fact, in our own sample at baseline, 65 percent of women had never visited a clinic for FP, and 36 percent had not engaged with anyone besides their husbands and mothers-in-law on FP-related issues (Anukriti et al., 2020).

Like many high-stakes choices, married women often make contraceptive decisions jointly with their husbands. However, in patrilocal societies where extended families are common, other household members such as mothers-in-law may also play a significant role in women's FP and reproductive decision-making. In fact, as the likely matriarch of the household, a woman's mother-in-law may play an even stronger role than her husband, especially during the early years of an arranged marriage.[4] However, the preferences of family members may differ from women's own preferences. For our study, what is especially relevant is the intrahousehold misalignment in preferences over women's fertility and mobility. Specifically, we note that family members may want women to have more children than the

[1] Refer to Bailey (2006); Bailey et al. (2012); Becker and Lewis (1973); Canning and Schultz (2012); Goldin and Katz (2002); Joshi and Schultz (2007, 2013); Miller (2010); Willis (1973), among others.

[2] Reproductive agency is defined as having the power to decide and control contraceptive use, pregnancy, and childbearing (Purdy, 2006; Upadhyay et al., 2014). According to the 2021 State of World Population Report, only 55 percent of women in 57 developing countries have a say in decisions about whether and when to seek health care for themselves (including sexual and reproductive health services), whether to use contraception, and whether and when to have sex with their partner or husband.

[3] Unmet need is calculated as the proportion of fecund women who are not using contraception but who wish to postpone the next birth or stop childbearing altogether (Bradley et al., 2012).

[4] Although nuclear families have been the predominant family type in many developed societies, patrilocal and extended family structures have been more common in the rest of the world. As Bau and Fernández (2021) describe, much of Asia and parts of Europe and Sub-Saharan Africa have traditionally been patrilocal. By the same token, the nuclear family is not the predominant ancestral family type in Africa or South Asia. Specifically, the importance of parents-in-law in Indian households is reflected in the fact that 32 percent of women and 31 percent of men surveyed in the 2019-2021 India National Family Health Survey (NFHS) agreed that a husband is justified in hitting or beating his wife if she shows disrespect for her in-laws.

women themselves want (Anukriti et al., 2022; Ashraf et al., 2014; Bankole and Singh, 1998). In our sample at baseline, 82 percent (67 percent) of mothers-in-law wanted their daughters-in-law to have more sons (children) than what their daughters-in-law wanted.[5] Similarly, women's family members may prefer that women not have access to places outside the home, such as FP clinics, either alone or with their friends, which may conflict with women's own preferences for access and mobility.[6] Women in our setting may also have a weak outside option and hence low intrahousehold bargaining power due to unequal control over resources and due to social norms such as those that stigmatize women who visit places outside their homes alone or dictate women's status within the household.[7] As a result, women's preferences may receive less weight in household decision-making over contraceptive access and use. In the joint optimum, a woman may therefore be unable to visit FP service providers, either alone or with her chosen peers, which may contribute to her unmet need for FP. These outcomes may significantly differ from her private optimum despite being Pareto efficient in the collective framework (Baland and Ziparo, 2018; Browning and Chiappori, 1998; Chiappori and Mazzocco, 2017).

With this collective bargaining framework in mind, we experimentally evaluate two approaches that seek to improve women's reproductive agency. Our first intervention enables women to more easily afford FP services, thereby reducing their financial dependence on their family in a setting where most women do not have access to independent income. Our second intervention additionally enables women to leverage the support of their peers to visit FP service providers, further reducing their dependence on their husbands and mothers-in-law, in a setting where women are unable to access places outside the home alone.[8]

More specifically, we randomly allocated our sample women to either a control group or one of two treatment groups. Women in the first treatment arm were provided a voucher package, in private, for subsidized FP services at a local clinic for their own use, including reimbursements for transportation to visit the clinic (the "Own" voucher group). We expect the voucher to implicitly improve the woman's outside option since it allows her to individually decide whether to use contraception and visit a FP provider. As a result, we expect that receipt of the voucher should increase the likelihood that women will visit FP service providers and use modern contraception. Additionally, for the same reason, we expect that voucher recipients should be more likely to visit the clinic in their preferred manner (e.g., alone or with their chosen companions, such as their friends, rather than with their mothers-in-law).

However, simply having access to a voucher may not be enough to overcome the mobility barriers faced by our sample women. First, visiting a clinic alone may not be women's preferred option due to concerns about safety, lack of confidence, and fear of social stigma or community disapproval of young

[5]Spousal misalignment is relatively small in our context (Anukriti et al., 2022).

[6]For instance, nearly one-third of women in rural UP reported that their husbands do not permit them to meet their female friends (Government of India, 2022). Similarly, at baseline, for a significant fraction of our sample women, their preferred companion for visiting FP providers was different from the most common companion (the mother-in-law) for women who had in fact visited a FP clinic. Intrahousehold misalignment in fertility preferences may doubly disadvantage women if their mobility and access to social connections itself are constrained by those very same discordant family members, such as their mothers-in-law.

[7]These norms, which are gender-based and hierarchically rooted, dictate both a woman's absolute position in the home based on her relationship to the household head as well as her status relative to other household members.

[8]Based on data from 52 developing countries, Klugman et al. (2014) document that physical mobility barriers are widespread, especially among younger adult women, and can have detrimental effects on women's opportunities and choices.

women seeking FP services alone. Only 6 percent of our sample women who had previously visited a FP provider at baseline reported doing so alone. Nearly 86 percent of women at baseline reported that they would be more likely to go to a health facility for FP services if a friend or a relative volunteered to come with them. Thus, in order to visit the clinic to utilize the FP voucher, interested women may need to seek the company of other women.[9] Second, it may be challenging for women in our setting to find the company of other women because they may lack friends or have limited engagement about FP with women besides their mothers-in-law due to social isolation (Andrew et al., 2020; Kandpal and Baylis, 2019; Prillaman, 2021).[10] Third, even if women have friends or peers who could accompany them to the clinic, those peers may face their own intrahousehold and financial barriers to visiting FP providers and accessing places outside the home, and may be unwilling or unable to accompany a voucher recipient without an incentive.

Therefore, to enable women to more effectively leverage the support of their female peers, women in the second treatment arm not only received the voucher package for their own use, they could also offer the same package to peers of their choice if these peers accompanied them to the clinic at least once (the "Bring-a-Friend (BAF)" voucher group). Because of this additional incentive or voucher for their accompanying peers, we expect the BAF voucher to be more effective than the Own voucher in enabling treated women who wanted to visit a FP provider with other women to in fact do so by forming new social connections and increasing their FP-related social engagement with other women.

We note that the relevance of peers in the context of FP is *a priori* unclear. A woman in our setting would likely need to carefully reflect on the benefits and costs while deciding: 1) whether to rely on peers as part of her FP decision-making; and 2) the type(s) of peers whom she may solicit for support. Even if we assume that a woman is able to effectively screen and select peers whom she believes are supportive, these choices are not straightforward in the context of FP which is a more private, sensitive, and often stigmatized matter relative to even other health decisions.

We estimate treatment effects of each intervention arm separately and also compare outcomes between the Own and BAF voucher groups to isolate the effect of inducing peer engagement and support by holding financial empowerment constant. In addition, we examine heterogeneity in the treatment effects by mother-in-law opposition to FP at baseline to examine the relative effectiveness of financial and peer support in overcoming intrahousehold discordance and improving women's agency.

Our analysis produces three key findings. First, both Own and BAF vouchers significantly increased women's likelihood of visiting a clinic for FP services overall as well as without their husbands or mothers-in-law (i.e., either alone or with female peers such as their sisters-in-law), relative to control women. Moreover, the BAF voucher was significantly more effective than the Own voucher—in

[9]Given the highly gendered nature of social interactions in our setting, and particularly around matters related to FP and reproductive health, we do not expect women to seek the company of men, other than their husbands. Moreover, even if spousal preferences were aligned, husbands are often unavailable due to work-related migration or relatively high opportunity costs of their time on the labor market. At baseline, more than half of our sampled women's husbands had been away from home for one month or more at a time and a third had been away for six months or more at a time during the last twelve months. In addition, women may prefer the company of women other than their mothers-in-law because they may feel more comfortable sharing a relatively private experience, such as talking to a FP service provider, with a female friend rather than with their mothers-in-law, particularly if their fertility and FP preferences are discordant.

[10]At baseline, an average woman in our sample reported interacting with less than one other individual besides her husband and mother-in-law in her village about issues related to FP and reproductive health.

increasing clinic visits overall and those without husbands or mothers-in-law—for women who faced greater opposition to FP use from their mothers-in-law at baseline. In fact, the Own voucher was ineffective in increasing clinic visits for women whose mothers-in-law were opposed to their FP use at baseline. This suggests that the peer support facilitated by BAF vouchers enabled women to overcome resistance from their mothers-in-law to FP use over and above the enabling effect of the Own voucher.

Second, modern contraceptive use during the intervention period increased significantly by 42 percent for the BAF group relative to the control group; the effect of the Own voucher was much smaller (7 percent) and statistically insignificant at conventional levels. Moreover, only the BAF voucher significantly increased modern method use for women who faced social barriers to FP use at baseline, including women who perceived their mothers-in-law to be opposed to FP and women who were embarrassed to use FP at baseline. Consistent with the results for contraceptive use, we find that the BAF voucher significantly decreased the likelihood of pregnancy during the intervention period by 21 percent; the effect of the Own voucher was smaller (9 percent) and insignificant. Crucially, we rule out any unintended backlash effects on treated women in response to increased FP use, even in households where husbands or mothers-in-law were opposed to FP (Ashraf et al., 2014).

Third, the BAF voucher increased a woman's number of social connections. Specifically, a woman's number of "close outside peers" in her village, i.e., individuals outside the household with whom she discusses FP-related issues, increased by 25 percent for the BAF group relative to the control group and significantly more so than the Own voucher group. In addition, the BAF voucher enhanced women's FP-related engagement with their close outside peers. Women in the BAF group were more likely to have at least one close outside peer in their village who had accompanied them to a health facility and who had advised them to use FP relative to women in both the control and Own voucher groups. Most notably, the effect on women's number of connections is driven by BAF women who potentially had a stronger "need" for new peers because none of their existing peers were FP users at baseline—the number of close outside peers in the village doubled for such women relative to the control group.

The reduction in women's social isolation that resulted from our interventions also generated additional benefits for treated women. The BAF voucher reduced women's fear of stigma related to FP use by 42 percent relative to control women; the Own voucher had no such impact. This finding is consistent with previous research showing that peer support can decrease stigma around health outcomes (Burke et al., 2019; Castro and Mang, 2022).[11]

Taken together, our results suggest that although offering women a voucher for their own use, a commonly used policy tool (Ashraf et al., 2014; Athey et al., 2021; Bellows et al., 2015; Karra and Zhang, 2021), may improve women's FP outcomes on average, such an intervention may be ineffective for women who are socially isolated, mobility constrained, and face intrahousehold opposition to FP use.[12] Indeed, such barriers can reduce the effectiveness of any intervention that requires women to "cross the boundary" in contexts where their physical mobility and access are constrained (Jayachandran, 2019). Only when we combine a voucher for a woman's own use with a voucher that encourages

[11]These peer-induced effects potentially may extend to other benefits that are beyond the scope of this study, including improvements in mental health and life satisfaction.

[12]Vouchers have also been used to improve women's outcomes in other domains, such as employment (Clark et al., 2019), experience of intimate partner violence (Hidrobo et al., 2016), land ownership (Ali et al., 2016), and skills training (Cheema et al., 2020).

a woman's peers to participate do we observe improvements in FP outcomes for socially constrained women. Moreover, enabling women to incentivize other women to accompany them to the clinic also expands the peer connections of socially isolated women.

Previous literature has established that individuals derive many benefits from their social connections (Breza et al., 2016; Munshi, 2014). The lack of social engagement around typically gendered subjects, such as FP, can limit women's access to information, sustain fear of stigma, and negatively impact women's health (Behrman et al., 2001). Recent studies have shown that female peers can empower women (Field et al., 2016; Kandpal and Baylis, 2019); however, little is known about what type of interventions can help women leverage their peers to increase their agency (Diaz-Martin et al., 2021). Although interventions, such as organizing women into groups (e.g., Kumar et al. (2019)), have been used to strengthen women's social connections, only 20 percent of Indian women are members of such groups (Desai and Vanneman, 2015). Moreover, as argued by Diaz-Martin et al. (2021), improving social connections is only a hypothesized benefit of women's groups that is insufficiently supported by quantitative evidence, highlighting the need for other innovative approaches. To our knowledge, no other study has tested whether the social engagement of relatively isolated women can be enhanced by enabling them to build new connections by offering other women financial incentives, especially in the context of FP-RH.[13]

Our work also contributes to the literatures on intrahousehold bargaining and on the interactions between culture and the family. Prior research based on collective models of the household (Chiappori and Mazzocco, 2017) has mainly focused on spousal interactions, particularly when examining fertility and FP decisions (e.g., Ashraf et al. (2014); McCarthy (2019)). However, a growing body of work in economics (Anukriti et al., 2020; Bau and Fernández, 2021; Gupta et al., 2021; Khanna et al., 2015; McKelway, 2021; Rossi, 2019) and a large literature in other disciplines (Gram et al., 2018; Rassam, 1980) has emphasized the importance of other household members in household decision-making. As our study highlights, family structures and coresidence patterns are key determinants of women's economic decision-making. Ignoring these features of the household can lead to policies and programs that are ineffective and potentially even harmful for recipients of these programs. Our study is also unique in showing that vouchers and peer connections can be leveraged to improve women's reproductive agency by overcoming the constraints imposed by mothers-in-law in patrilocal societies.

Finally, women across the globe continue to have limited access to economic opportunities, services, and public spaces due to restrictive gender norms, e.g., Bernhardt et al. (2018); Bursztyn and Jensen (2017); Jayachandran (2015); Olivetti and Petrongolo (2016). In our context, women's inability to access FP clinics is partly driven by social norms that prevent women from "crossing the boundary," which governs their (lack of) access to public spaces alone as well as their social interactions with individuals outside the household, similar to the Pakistani context examined in Cheema et al. (2020). Our BAF voucher intervention addresses these mobility barriers not by changing the social norm (although we observe a small but significant increase in women's ability to visit clinics alone), but by enabling women to "bypass" these confining normative conditions by visiting clinics with their female peers, who may be less likely to constrain their choices than husbands or mothers-in-law.

[13]Our paper is also related to the increasing number of studies that have documented peer effects in the use of health technologies, e.g., Godlonton and Thornton (2012); Goldberg et al. (2018); Miguel and Kremer (2003); Oster and Thornton (2012); Sato and Takasaki (2018)).

2 Experimental Design and Data

In this section, we describe our study sample, the experimental design, the interventions that were implemented as part of the randomized experiment, the data, and the landscape of FP service provision in our study area.

2.1 Sample

Our study is based in 28 villages of Jaunpur district in the state of UP (Figure A.1). Although total fertility rate has been declining in rural UP, the share of contraceptive demand satisfied by modern methods is only 58 percent in rural UP relative to 74 percent in India as a whole (Government of India, 2022), making our intervention highly relevant for this context.

Figure A.2 describes our sample selection process. We began by conducting a listing exercise for all households (N = 2,781) that were located within a 10-kilometer radius of our partner clinic, the Arogyaneer Diagnostic Clinic (ADC), situated in the village of Chandwak. The ADC was chosen based on its proximity to our sample women (many of whom lived in Chandwak), more reliable supply of a wide range of FP methods, and higher quality of service, relative to other clinics in the area. A total of 698 households were identified to have at least one eligible woman, i.e., a married woman aged 18-30 who (i) had at least one living child, (ii) was neither sterilized nor had undergone a hysterectomy, and (iii) was neither currently pregnant nor within six months postpartum. These inclusion criteria were selected to identify a sample of young married women of reproductive age with a potential unmet need of FP and for whom a FP intervention, such as ours, would likely be effective.[14] We enrolled no more than one woman per household. If multiple women from the same household were eligible, the youngest eligible woman from the household was chosen to participate. From 698 women who were invited to participate in the study, 671 consented and were recruited. Figure A.3 presents the map of our intervention site and study sample.

2.2 Experimental Design

Figure 1 presents our experimental design. The experiment consisted of a baseline survey, followed by randomization of women into one of three intervention arms, a 10-month-long intervention, and an endline survey. All communication with the study sample was conducted in Hindi, the local language. The baseline survey was administered by female enumerators during July and August 2018 to 671 women. To address information gaps on FP among our sample women, a brochure on modern FP methods and the benefits of healthy timing and spacing of births was given to all sample women at the conclusion of the baseline survey (Figure A.4).

Soon after completion of the baseline survey, women were individually randomized to either the control group (N = 350 women), the Own voucher group (N = 156 women), or the BAF voucher group (N = 165 women). Following Bruhn and McKenzie (2009), we implemented a stratified randomization protocol by balancing treatment assignment according to the following baseline characteristics of a woman: current use of FP (yes, no), years of schooling (0-8 years, 9+ years), desire for another child (yes or uncertain, no), and the number of peers mentioned by her as part of our social networks

[14] We excluded married women who had not begun childbearing from our study due to the presence of cultural norms that compel newly married couples to prove their fertility as soon as possible after marriage before considering FP (Jejeebhoy et al., 2014).

module (1 or fewer, 2 or more).[15] Tables 1 and A.1 show that treatment assignment was balanced for our estimation sample (N = 621)[16] across a range of baseline characteristics of the woman including her age, religion, number of children, whether she had at least one son, marital duration, co-residence with the mother-in-law, number of close peers in the village, contraceptive use, beliefs about her mother-in-law's opposition to FP use, household asset score,[17] and whether her last visit to a FP clinic was with her husband or her mother-in-law.[18] We observe some differences (at the 10 percent level of significance) across groups in the mobility score[19] and the proportion of women who worked at baseline, so we control for these variables in all regressions. Overall, we observe a significant difference in only 2 out of 54 comparisons in Table 1. Moreover, the joint F-statistics in Tables 1 and A.1 show that the pairwise differences between the three intervention groups are jointly insignificant. Note that the treatment assignment is similarly balanced for the full baseline sample of 671 women; these results are available upon request.

Following randomization, female enumerators revisited women who were assigned to the treatment groups. Enumerators were divided into two teams (one for each treatment group) to prevent an enumerator from either deliberately or mistakenly handing out an incorrect voucher to a woman who had been assigned to the other treatment group. During this second visit to the treatment women, the enumerators explained the terms and conditions of the intervention and confirmed women's consent to participate in the intervention.[20] No woman refused to accept the voucher; however, 14 treatment women (8 Own voucher and 6 BAF voucher) could not be re-contacted following baseline and therefore did not receive the voucher.[21]

2.3 Interventions

Women in both treatment groups were provided, in private, a voucher for INR 2,000 (USD 24) that could be used to obtain FP services at the ADC over a 10-month period from the date of voucher receipt. At the time of our study, a voucher worth INR 2,000 translated into different proportional discounts depending on the type of FP method that was procured. If a woman chose to purchase oral contraceptive pills or condoms, the voucher constituted a 100 percent discount on the total

[15] Stratification by these four binary variables yields a total of 16 strata within each of which observations are randomized, with the smallest stratum containing 18 observations.

[16] We were able to conduct the endline survey with 625 women from our baseline sample; however, we drop 4 women for whom we have missing baseline data on one of our regression controls, i.e., whether the woman wanted another child.

[17] We construct the household asset score using a principal component analysis with the following variables: source of drinking water, type of toilet facility, floor material, roof material, exterior wall material, type of fuel used for cooking, ownership of animals, number of rooms in the household used to sleep.

[18] Randomization was also balanced across several other variables, including household's Below Poverty Line (BPL) status and the amount of land owned by the household, whether the woman gave birth last year, her husband's migration status, the woman's decision-making ability, the distance from a woman's home to the ADC and to the closest clinic located in the study area.

[19] The composite mobility score is calculated as the sum of six indicator variables that captures whether a woman is allowed to visit the following places alone: 1) homes of relatives or friends; 2) health facilities; 3) grocery stores; 4) short distances by bus or train; 5) markets; or 6) outside their villages or communities.

[20] Women assigned to the intervention arms were told that they were free to withdraw their participation from any intervention activity at any time and also could rejoin at any time over the 10-month intervention period without any penalty.

[21] Out of these 14 women, 4 women were also unreachable at the time of endline data collection—thus, among the sub-sample that we did re-interview at endline, 10 treated women (6 Own and 4 BAF voucher women) did not receive the vouchers as intended.

cost for these methods over the 10-month period. The voucher could be used for any FP-related services that were offered by the ADC. The voucher was designed to resemble an identification card and was personalized for each woman with her name and photograph printed on it. In addition, the first consultation at the clinic, during which time a woman was evaluated to determine if she was medically fit to use FP, was provided for free to all voucher recipients. All voucher recipients were also informed that they would be provided with INR 40 (USD 0.48) as a reimbursement for any transportation expenses that they may incur to travel to the ADC. No receipts were required to receive this reimbursement. The transportation reimbursement was restricted to a maximum of three trips (for a total of INR 120 in reimbursement costs) for any woman over the course of the intervention period.

Women assigned to the BAF voucher group were additionally informed that if they were accompanied by peers to the ADC, these peers, during their first joint visit with them, would be provided with their own voucher package for FP services. BAF voucher women were allowed to bring anyone with them, but since the voucher could only be used for FP, they were encouraged to bring someone who could make use of FP services. BAF voucher women could bring up to two peers during any given visit, and they could either bring different peers or the same peers on subsequent visits. During their first visit to the clinic with a BAF voucher woman, a woman's peers were provided with their own vouchers and identification cards by one of the field managers who was stationed at the ADC to receive clients; thereafter, these peers could visit the clinic with or without the BAF voucher woman. There was no restriction on the total number of unique peers a BAF voucher woman could bring to the clinic over the 10-month period, as long as she did not bring more than two peers per visit. If a BAF woman came to the clinic with her husband, only one voucher could be used for the couple, and the clinic's existing FP operating procedure for couples was followed. The intervention team made it clear that women could not apply two vouchers at once to increase the total discount. This ensured that a BAF peer who herself also happened to be assigned to either the Own voucher or BAF voucher arms could not combine her own voucher with the peer discount.

Note that peers of a BAF woman were not entitled to receive additional vouchers for their other peers. Own voucher women were also free to bring peer(s) with them to the clinic if they chose; however, they were not actively encouraged to do so by the study team and any peers who accompanied them to the clinic were not provided a voucher unless they had their own voucher.

At the end of the 10-month intervention period, 625 women (93.2 percent of the initially recruited sample) were re-interviewed either in person or via phone for the endline survey.[22] Figure 1 provides details on the reasons for attrition. Table A.2 shows that there are no significant differences between attritors and non-attritors in our endline estimation sample in terms of treatment status and along a range of baseline characteristics that are relevant for the study. Although the joint F-statistic is also insignificant, we observe a few significant differences between attritors and non-attritors. Notably, non-attritors were significantly more likely at baseline to report that their mothers-in-law were opposed

[22]We conducted 18 percent of the endline surveys by phone mainly because some women could not be contacted at their recorded locations from baseline, either because they had moved or were visiting someone outside their homes. As per our protocol, we made up to three attempts to contact each woman at her home, after which we attempted to contact her by phone if she was not available in person.

to FP and were more likely to use a FP method than attritors.[23] The imbalance by mother-in-law opposition is less worrisome because it biases us against finding a positive effect on FP access and use. However, it is unclear whether the imbalance by baseline FP use is likely to bias our estimates upward or downward.[24]

The majority of treated women understood how the vouchers worked: at endline, 81 percent reported knowing about the transportation reimbursement; 67 percent knew about the free FP consultation; 76 percent knew about discounted FP services at the ADC; and only 4 percent of women incorrectly thought that child health services were covered by our intervention. To cross-check whether women understood the differences between vouchers, we asked treated women if the program enabled them to offer their friend(s) a voucher if they visited the ADC with them. While 74 percent of women in the BAF arm positively responded to this question, only 6 percent in the Own group did the same.[25]

2.4 Data

Our survey instruments collected data on household demographics and women's socioeconomic background, birth history, contraceptive use, marriage and sexual activity, fertility preferences, autonomy, social connections, and utilization of health services, including FP services. To measure the social connectedness of our sample women, we asked each woman to name up to five individuals in the study area, besides her husband and mother-in-law, with whom she converses most often about any issue (e.g., financial support, health, child health, and schooling) that is important to her; we call these individuals her "general peers". In addition, we asked each woman to name up to five individuals in the study area, besides her husband and mother-in-law, with whom she discusses issues related to FP and reproductive health; we denote these individuals as her "close peers".[26] We then collected socioeconomic, demographic, FP-related, and peer-group-related information (e.g., measures of trust and closeness) from the surveyed woman for each of her identified close peers. Since a woman's FP decisions may also be shaped by her husband, mother-in-law, and relatives outside the study area, we also asked about her interactions related to FP with these key individuals and documented her beliefs about their attitudes towards fertility and FP. In this manner, we sought to capture each respondent's immediate social neighborhood and the peer group characteristics through which attitudes about fertility and FP are most likely to be shaped and spread. In the module on health services utilization, we asked each woman about her access to FP clinics, such as whether she has visited a FP clinic and whether she goes to the FP clinic alone or with other individuals.

[23] We also observe differences by a woman's age, religion, and whether she wears a headcovering (*ghunghat*), but these differences are only significant at the 10 percent level.

[24] For instance, women who had previously used a FP method at baseline may be more likely to use our vouchers to switch from other providers to the ADC. However, such women may also be less likely to report an increase in contraceptive use if they were already using a FP method at baseline.

[25] All results in this paper are robust to the exclusion of treated women who did not understand how their voucher worked from the estimation sample. These results are available upon request.

[26] Specifically, close peers are individuals who are mentioned by the woman in response to the following question: "I would like to ask about the list of people, different from your husband and mother-in-law, with whom you talk about family planning, fertility, and reproductive matters and whose opinions are important to you. They are the people with whom you discuss your personal affairs or private concerns related to family planning, pregnancy, childbearing, and health." In both baseline and endline surveys, all participants reported fewer than five close peers. Thus, five appears to be an effective upper limit on a woman's number of social connections in our sample and is unlikely to introduce downward bias due to top-coding (Chandrasekhar and Lewis, 2012).

Tables 1 and A.3 provide context about the types of women who were included in our analysis. Our estimation sample is comprised of young married women who, on average, were 26 years old and had 10 years of schooling and 1.9 children at baseline. The sample is predominantly Hindu and comprises women from Scheduled Castes (SC), Other Backward Classes (OBC), and general or upper castes. Women have low mobility, financial autonomy, and reproductive agency. The mobility restrictions faced by the sample women are quite severe, as is reflected in their extremely low composite mobility scores that capture the number of places that a woman is allowed to visit alone. Only 14 percent of women worked in the last year and 89 percent reported wearing a headcovering (*ghunghat* or *purdah*). Nearly 44 percent of our sample women reported having no say in decisions about their health care and 56 percent of women reported not being allowed to visit a health facility alone at baseline. Although 49 percent of women reported not wanting to conceive another child, only 15 percent reported using modern contraception, reflecting significant unmet need.[27] Furthermore, our sample women are socially isolated. An average woman has 1.7 general peers in the study area and only 0.3 close peers in her village that are not household members. The proportion of women in our sample who have no close peers anywhere (inside or outside Jaunpur) is also substantial (22 percent). Women who live with their mother-in-law (68 percent of our sample) tend to have even lower mobility and fewer social connections outside the home (Anukriti et al., 2020).

In Table A.4, we compare our sample with 18-30-year old married women who were surveyed in the 2019-21 NFHS. Women in our sample are quite similar to those in the all-India sample and the UP and rural India subsamples in most respects. Notable exceptions include education, where our sample is slightly more educated, and mobility constraints, where our sample women face more severe constraints than those experienced by an average Indian woman (Government of India, 2022).

2.5 Landscape of Family Planning Service Provision

Almost 70 percent of women in India, and 63 percent of women in rural Uttar Pradesh, who use modern contraceptive methods obtain them from a public sector provider or facility (Government of India, 2017). The provision of FP services, including the procurement of contraceptive methods, in the public sector are subsidized by the national government, with the aim of achieving universal access to FP, particularly for rural and marginalized women (MOHFW, 2016).

In addition to the ADC, which was the only private facility in our study area, our sample women had access to 9 public facilities (3 primary health centers, 3 community health centers, and 3 hospitals) within a 10-kilometer radius of our enumeration areas. Our sample women, on average, lived 2.2 kilometers away from their nearest health facility at baseline, with 88 percent of women living within 5 kilometers from their nearest health facility. The ADC was the closest health facility for 46 percent of our sample, with the average distance being 2.4 kilometers. Among the 18 percent of our sample women that were using a modern method at baseline, 24 percent had obtained the method from a public health facility or provider; 11 percent had received it from a private provider, and the majority (54 percent) had received it from friends, relatives, or other local sources (pharmacies, drug stores). Male condoms were the most used modern method (60 percent of users), followed by the contraceptive

[27]The lack of contraceptive uptake is unlikely to be driven by a lack of awareness about FP or supply-side issues given that, at baseline, 96 percent of our sample women had heard about FP or birth spacing and in recent decades there have been significant improvements to FP service provision in India (Halli et al., 2019).

pill (14 percent), and IUDs (13 percent).[28]

3 Empirical Strategy

Our experimental set-up allows us to estimate treatment effects by comparing women in the two voucher groups with those in the control group. We estimate the following Ordinary Least Squares regression to estimate the effect of receiving an Own or a BAF voucher, with one endline observation per woman:

$$Y_{iv} = \alpha + \beta Own_{iv} + \theta BAF_{iv} + \mathbf{X}^0_{iv}\gamma + \mathbf{Z}^0_{iv}\phi + \delta_v + \epsilon_{iv} \quad (1)$$

Y_{iv} is an outcome variable measured at endline for woman i who lived in village v at baseline. Own_{iv} is an indicator variable that equals one if woman i randomly received a voucher only for herself, while BAF_{iv} is an indicator variable that equals one if the woman was randomized to receive a BAF voucher.

Although our randomization was balanced along a number of baseline characteristics, we include two sets of control variables in our main specification primarily to improve the precision of our estimates. The vector $\mathbf{X}^0_{iv}$ denotes the set of baseline variables that were used to balance treatment assignment—these include a woman's years of schooling, number of general peers, and indicators for current use of FP and desire for another child.[29] The vector $\mathbf{Z}^0_{iv}$ denotes a second set of baseline variables (i.e., a woman's composite mobility score and a dummy variable for working last year) that we control for in our regressions because we observe some imbalance in them in Table 1. We also control for the baseline values of two key outcomes, i.e., a dummy variable for having ever visited a FP clinic and for modern contraceptive use. We also control for survey modality at endline since women who were not reachable in person may differ from women who were surveyed in person. Finally, we include village fixed effects, δ_v, in our regressions to control for unobserved and time-invariant characteristics at the village level that may influence the outcomes of interest. However, as we show in the next section, our results are robust to the exclusion of baseline controls and village fixed effects.

We present estimates for intent-to-treat (ITT) effects. The treatment-on-the-treated (TOT) effects of our interventions for all outcomes are similar and are presented later in Online Appendix. The coefficients β and θ measure the impacts of receiving the Own voucher and the BAF voucher, respectively, on the outcome variable of interest. The difference between β and θ captures the additional effect of providing a woman vouchers for her companions, conditional on receiving a voucher for herself.

We use robust standard errors for inference. Although we randomize at the individual level, we confirm that our results are robust to clustering the standard errors by village to allow for correlated errors within village, reflecting, for instance, a common set of peers, access to the same set of clinics, or the similar timing of endline data collection. As we have 28 villages in our sample, we also verify that our main estimates are robust to inference based on wild-clustered bootstrapped errors, which account for the small number of clusters. Lastly, we check that our main findings are robust to multiple

[28] Kapoor et al. (2019) find substantial gender gaps in access to health care, with nearly 49 percent of the total female outpatient visits to a large referral public hospital in Delhi being "missing" from the states of Uttar Pradesh, Haryana, Delhi, and Bihar. Moreover, these gender gaps are larger for younger women in the reproductive age group.

[29] Kernan et al. (1999) and Bruhn and McKenzie (2009) show that the failure to control for stratification variables results in overly conservative standard errors. From the endline sample of 625 observations, we lose four observations when we include these controls due to missing data for desire for another child at baseline.

hypotheses testing correction. We present these robustness checks in Section 4.

If women in the treatment groups sought the company of or visited the ADC with women in the control group, our estimates of treatment effects would be biased downwards. This concern is especially relevant if BAF women offered a voucher to women in the control group. However, this is unlikely to be a significant concern because, at endline, only 4 women in the control group reported having received a voucher for FP services at the ADC. This is potentially due to the fact that we selected only one woman per household for our experiment and our sample women had relatively few connections with women outside their households at baseline. An average woman in our sample has only 0.55 close peers in her village (36 percent of the women have no close peers and the modal woman has only one close peer), roughly half of whom live in her household while the other half live outside her household. Moreover, social networks of women in our sample display substantial caste homophily: 94 percent of a woman's close peers in Jaunpur belong to the same caste group as her—this further reduces the possibility of interactions between treatment and control women from different caste categories. Lastly, to the extent that our intervention may have improved FP-related outcomes for women in the control group (e.g., by decreasing social stigma around FP or by increasing the salience of FP) through spillovers or anticipation effects, our estimated treatment effects would be biased in the downward direction, i.e., would underestimate the true effects.

4 Results

We begin by examining whether treated women invited others to accompany them to our partner clinic and subsequently visited the clinic with them, and who these companions were. We then analyze whether voucher receipt translated into an increase in modern contraceptive use and a decline in the likelihood of becoming pregnant. Next, we assess the impact of voucher receipt—especially the BAF voucher—on a woman's social interactions and her fear of stigma related to FP use.

We expect that the magnitude of the treatment effect will differ across the sets of outcomes that we examine, and will likely attenuate as we move from seeking companionship to visiting the ADC to contraceptive use. For example, it is plausible that after asking or inviting a peer, some treated women or their invited peers are subsequently prohibited or dissuaded from going to the FP clinic by their households. Similarly, not everyone who visits the ADC may be able to use a contraceptive method afterwards due to contraindications, health concerns, or pregnancy that may be identified during the first visit to the ADC, or if they are unable to meet the health care provider during their visit for some reason.

4.1 Clinic Visits for FP Services

Upon receiving either voucher, a woman in need of FP services can either choose to visit the ADC alone or invite someone to visit the ADC with her. We expect both vouchers to improve a woman's ability to visit the ADC alone equally; however, most women at baseline preferred to visit FP clinics with someone.[30] Consequently, we expect that most treated women who want to visit the ADC will also want to seek company from a relative or a friend rather than visit the clinic alone. Moreover, we

[30] Among women in our sample who usually do not visit health facilities alone, 59 percent mentioned concerns about safety, 28 percent cited lack of confidence, and 20 percent mentioned fear about community disapproval as the main reasons for not going alone at baseline.

expect the BAF voucher to be more effective than the Own voucher in enabling a woman to invite someone other than her husband and her mother-in-law to the clinic as only BAF women can offer their peers a voucher of their own as an incentive.

A. Seeking Company to Visit the ADC

Consistent with our expectations, in Column 1 of Table 2 we find that women in both treatment groups were significantly more likely than the control group to seek the company of another person to visit the ADC during the intervention period.[31] Moreover, women in the BAF group were significantly more likely to invite others compared to women in the Own voucher group; the impact of receiving a BAF voucher on seeking company (33 percentage points (p.p.)) is almost double the estimated impact of receiving an Own voucher (17 p.p.).[32] We find similar effects on the intensive margin (Panel A of Table A.6). Both vouchers increased the number of individuals that a woman asked to accompany her to the ADC, and the impact of the BAF voucher was significantly larger than that of the Own voucher. These findings also indicate that the treatment women understood the difference between the two types of vouchers and that this difference was salient in encouraging women to seek companionship.

Given that a primary objective of our study is to test if the interventions decreased women's dependence on their husbands and mothers-in-law to access FP, next we examine whether the vouchers enabled a woman to seek company from individuals other than her husband and her mother-in-law during the intervention period. Our interest in examining who was "asked" or "invited" by the woman to visit the clinic with her (which is distinct from who actually "visited" the clinic with the woman) stems from the fact that husbands and mothers-in-law exercise significant control over women's social interactions and freedom of movement in this setting. For instance, 72.4 percent of women in rural UP report that their husbands do not permit them to meet their female friends, insist on knowing their whereabouts at all times, or limit their contact with their families (Government of India, 2022). Therefore, it is not surprising that, at baseline, 79 percent of women who had visited a FP clinic reported being accompanied by their husbands (35 percent) or their mothers-in-law (44 percent). In such a context, simply seeking company from individuals other than husbands and mothers-in-law may, in itself, be an expression of women's agency and empowerment, irrespective of whether this intention translates into clinic visits and health care utilization.

Indeed, Columns 2-5 of Table 2 show that the vouchers, and particularly the BAF voucher, altered the types of companions who were sought by treatment women relative to the control group.[33] The likelihood of seeking the company of individuals other than husbands or mothers-in-law was 26 p.p.

[31] Ideally, we would compare treatment and control groups in terms of the likelihood that a woman sought company to visit *any* clinic. Unfortunately, we do not have data on whether a woman invited others to accompany her to visit clinics other than the ADC during the intervention period. Therefore, it is possible that the outcome means for control women in Table 2 are low not because they sought company to visit clinics at a lower rate than treatment women in general, but rather because control women might have sought company to visit *non-ADC* clinics, given that they had no incentive to visit the ADC. Nevertheless, this issue is not pertinent for the comparison that we are most interested in, i.e., between Own and BAF voucher groups, because both groups had a similar incentive to visit the ADC. Moreover, this issue does not arise for our analysis of visits since we collected data on visits to both the ADC and other clinics for FP services.

[32] Panel A of Table A.5 shows that these estimates are robust to the inclusion or exclusion of various control variables.

[33] These outcomes are not conditional on asking someone for company. For example, the indicator for whether a woman asked her sister-in-law for company is coded as zero both when she asked someone else as well as when she did not ask anyone.

higher for the BAF group and 10 p.p. higher for the Own voucher group relative to the control group. In contrast, the impacts of both vouchers on the likelihood of asking husbands and mothers-in-law were much smaller (3 p.p. for the BAF voucher and 3.5 p.p. for the Own voucher, respectively). Moreover, the BAF voucher was significantly more effective (by 16 p.p.) than the Own voucher in enabling women to invite individuals other than their husbands and mothers-in-law. In contrast, both vouchers had a statistically similar effect on women's likelihood of asking their husbands or mothers-in-law.

Notably, treated women were more likely to seek the company of their sisters-in-law and non-relatives (female friends or neighbors), and these effects are significantly larger for the BAF group relative to the Own voucher group. In Column 4 of Table 2, the BAF voucher increased a woman's likelihood of asking her sister-in-law by 17 p.p., while the effect for women who received an Own voucher was significantly smaller (6 p.p.). Similarly, Column 5 shows that the effect of receiving a BAF voucher on a woman's likelihood of asking non-relatives was more than double that of receiving an Own voucher. The larger effects for sisters-in-law than for non-relatives are consistent with our understanding of the study context, where women are less likely to be sanctioned by their husbands and mothers-in-law for interacting with other female relatives than for interacting with female friends. Given that our sample women have few pre-existing peer connections outside the home, it might also be easier for women to reach out to their sisters-in-law, some of whom maybe co-resident, than to form new connections with non-relatives.

B. Clinic Visits

In Table 3, we examine the treatment effects on clinic visits for FP services. Column 1 shows that both vouchers significantly increased the likelihood that treated women visited the ADC for FP services during the intervention period relative to control women. Women who received the Own and BAF vouchers were, respectively, 20 p.p. and 19 p.p. more likely than control women to have visited the ADC. However, the effect of the BAF voucher was not statistically different from the effect of the Own voucher.[34] We also note that the self-reported number of visits to the ADC according to our survey data are consistent with our clinic-based administrative data on voucher reimbursements.

Next, we examine the effect of both interventions on a woman's likelihood of visiting *any* clinic (either the ADC or a non-ADC clinic) for FP services during the intervention period. This analysis allows us to measure the extent to which the effects on visiting the ADC are driven by (i) substitution away from other clinics to the ADC and (ii) new clients. Column 2 of Table 3 shows that there was a sizable and significant increase in the likelihood of visiting any FP clinic among Own voucher (by 18 p.p.) and BAF voucher (by 13 p.p.) groups relative to the control group (control mean: 0.19).[35] The effect of the BAF voucher is statistically similar to that of the Own voucher. These results imply that our intervention effects are not exclusively driven by women substituting away from non-ADC clinics to the ADC, but also by an increase in new visitors to FP clinics.

Consistent with FP vouchers being more relevant for women who have a higher demand for FP, in Column 1 of Table A.9, we find that the effects on clinic visits are driven by women who did not want another child at baseline. Moreover, the effects are larger for women who had at least one son

[34] Appendix Table A.7 shows that these results are robust to the inclusion or exclusion of various control variables.

[35] Similarly, on the intensive margin (Table A.8), both vouchers increased the number of visits to the ADC and to any clinic for FP services during the intervention period.

at baseline (Column 2 of Table A.9), which is in line with the high prevalence of son preference and son-biased fertility stopping rules in our setting (Anukriti et al., 2021; Bhalotra and Soest, 2008; Clark, 2000; Jensen, 2012; Rosenblum, 2013). Column 3 of Table A.9 shows that even women who had never visited a FP clinic at baseline had a significant increase in the likelihood of visiting a clinic for FP due to the voucher, indicating that our interventions were effective in bringing in new clients.

In Columns 3-7 of Table 3, we test if the voucher-induced visits to the ADC were more likely to have taken place without women's husbands or their mothers-in-law, i.e., either alone or with individuals other than husbands and mothers-in-law.[36] Unsurprisingly, some women in the treatment groups who visited the ADC did so with their husbands and mothers-in-law (Column 4). Nevertheless, treatment women were also significantly more likely to visit the ADC alone relative to the control group. It is worth noting that, at baseline, only 6 percent of women who had previously visited a FP clinic had done so alone. In comparison, the Own voucher and the BAF voucher increased the likelihood of visiting the ADC alone by 7 p.p. and 8 p.p., respectively, during the 10-month intervention period (control mean: 0.01). These results suggest that the receipt of either the Own or the BAF voucher empowered a small but significant fraction of our sample women to "bypass" the social norm of visiting a FP clinic with somebody else. Moreover, in Column 5 of Table 3, we observe a significant (6 to 7 p.p.) increase in women's visits to the ADC with individuals besides their husbands and mothers-in-law for both treatment groups. Indeed, Column 6 shows that BAF women were 5 p.p. more likely to visit the ADC with their sisters-in-law than control women. This effect is significantly larger than the effect of Own voucher. We find no siginificant effect of the vouchers on the likelihood of visiting the ADC with non-relatives (Column 7).

In sum, Table 3 shows that both vouchers significantly increased women's visits to clinics for FP services. Although, on average, the Own and the BAF vouchers did not have a differential effect on the likelihood of a clinic visit, we do observe that the BAF voucher significantly increased women's ability to visit a clinic with their sisters-in-law, relative to the Own voucher.

Our results so far are based on an ITT analysis that captures the causal effect of being assigned to one of the two treatment groups. However, as previously mentioned, we were unable to deliver vouchers to 10 women who had been assigned to a treatment group at baseline. Although we do not observe any significant differences between compliers and non-compliers, in order to estimate the causal effect of treatment on the treated (TOT) women, which takes into account any potential non-random compliance, we use the random assignment of women into treatment and control groups as an instrumental variable for voucher receipt. Table A.10 shows that our TOT estimates are similar in magnitute and statistical signficance to the ITT estimates across all of our key outcomes.

C. Heterogeneity by Mother-in-Law Opposition to FP Use. Although we observe no significant differences in average treatment effects between the BAF and the Own voucher arms on visiting the ADC or any clinic for FP services (Table 3), we find that the BAF voucher was more effective than the Own voucher for women who, at baseline, were more likely to face intrahousehold constraints to FP access, as proxied by their mother-in-law's opposition to FP. We focus on the mother-in-law because, in our context, a woman's mother-in-law exerts a stronger influence over her FP decision-making and fertility outcomes than even her husband or other family members (Anukriti et al., 2022, 2020). This

[36]Note that the outcomes in Columns 3-7 of Table 3 are not conditional on visiting the ADC.

is likely because contraception and childbearing are often viewed as the responsibility of women and considered a "gendered sphere of activity" (Ashraf et al., 2022). Compared to their husbands, women and their mothers-in-law have greater levels of discordance in their overall fertility preferences as well as in their preferences for sons. This misalignment in fertility preferences, in turn, contributes to mothers-in-law expressing a stronger level of disapproval of FP than women's husbands.

In Table 4, we estimate a fully interacted model for each of our outcomes of interest by interacting whether the woman's mother-in-law was opposed to FP at baseline with each of the covariates that are included in our main specification, controlling for the main effect of mother-in-law opposition to FP. We find that the BAF voucher was significantly more effective than the Own voucher for women who faced greater opposition from their mothers-in-law at baseline in increasing: a) the likelihood of visiting the ADC (Column 4); b) their ability to visit the ADC with individuals other than their husbands and mothers-in-law (Column 6); and c) their overall likelihood of visiting any FP clinic (Column 7).[37] The p-value for the test evaluating the difference between the effects of BAF and Own vouchers by mother-in-law opposition (i.e., *Own × MIL opposed = BAF × MIL opposed*) is 0.043 for the likelihood of a woman visiting the ADC (Column 4), is 0.020 for the likelihood of her visiting the ADC with someone other than her husband or her mother-in-law (Column 6), and is 0.069 for her overall likelihood of visiting a clinic for FP (Column 7) during the intervention period. In fact, for women facing opposition to FP use from their mothers-in-law, the Own voucher was statistically ineffective—both in terms of seeking company and visiting the ADC—in lowering a woman's reliance on her husband and mother-in-law, as is reflected in the p-values for *Own + Own × MIL opposed = 0* in Columns 3 and 6.

Our estimates suggest that for women who perceived their mothers-in-law to be opposed to FP at baseline, the BAF voucher increased the likelihood of visiting the ADC by 32 p.p., a significantly larger effect than that of the Own voucher (11 p.p.).[38] In contrast, both vouchers had a statistically similar and significantly positive effect on clinic visits to the ADC for women who did not perceive opposition from their mothers-in-law. We observe a similar pattern for visits to any clinic for FP services (Column 7 of Table 4).[39]

Taken together, these findings suggest that the BAF voucher was more effective than the Own voucher in enabling women who perceived their mothers-in-law to be opposed to their FP use to seek company from other women, such as their sisters-in-law, who may have been more likely to support them in their health care-seeking than their mothers-in-law.[40]

This heterogeneity analysis also enables us to rule out other potential mechanisms underlying our results. For instance, it is possible that BAF women may have felt a greater sense of altruism towards

[37]Table A.11 presents this analysis for the impacts on inviting sisters-in-law or non-relatives to the ADC and visiting with them.

[38]In fact, the p-value for *Own + Own × MIL opposed = 0* in Column 4 equals 0.178, implying that the Own Voucher had an insignificant effect on visits to the ADC for women who perceived their mothers-in-law to be opposed to FP at baseline.

[39]One may be concerned that BAF women are over-reporting that they invited others to visit the ADC with them relative to the Own voucher group due to social desirability bias. However, the results in Table 4 are inconsistent with this proposition unless this bias is negatively correlated with mother-in-law opposition to FP use at baseline.

[40]It is unlikely that mothers-in-law would have been interested in visiting the clinic with their daughters-in-law to access FP services for themselves given that, on average, they were 50 years old at baseline and, hence, less likely to want or need FP services.

other women who could benefit from a FP voucher or may have been reciprocating or exchanging favors with other women whom they invited and with whom they visited the ADC. However, altruism or reciprocity are unlikely to be negatively correlated with mother-in-law opposition to FP, allowing us to interpret the heterogeneous effects in Table 4 as an enabling effect of the BAF voucher over and above the effect of the Own voucher, which in turn relaxes some of the intrahousehold constraints to FP access that women face in our setting.

4.2 Modern Contraceptive Use

To examine if a woman's visits to the ADC due to our interventions changed her FP use, in Table 5 we estimate the reduced form effect of receiving the vouchers on a woman's modern contraceptive use at endline as well as on her contraceptive use since baseline (i.e., during the intervention period).[41]

Column (1) of Table 5 shows that the BAF voucher significantly increased modern contraceptive use at endline by 7.1 p.p. (i.e., 57 percent) relative to the control group (control mean: 0.125).[42] Moreover, Column 4 shows that the BAF voucher increased the likelihood of using modern contraception by 9.4 p.p. (i.e., 42 percent) during the intervention period. In comparison, the coefficient of the Own voucher is insignificant in both Columns (1) and (4). Moreover, the coefficient for the BAF voucher is respectively 1.7 times and 6 times larger than the coefficient of the Own voucher in Columns (1) and (4), with the p-value of the difference being 0.103 in Column (4). This implies that the BAF voucher was much more effective than the Own voucher in increasing sustained modern method use. Table A.10 shows that our TOT estimates are similar in magnitude and statistical signficance to the ITT estimates.

We observe no effects of either voucher intervention on the likelihood of a woman adopting *any* contraceptive method at endline or during the intervention period, which implies that any voucher effects on contraceptive use are mainly driven by women switching from traditional methods to modern methods of contraception (Tables A.12 and A.13).

Finally, Column (5) suggests that our positive results on women's modern contraceptive use translate into a lower risk of pregnancy. The BAF voucher decreased a woman's probability of becoming pregnant during the intervention period by 8 p.p., equivalent to a reduction of 21 percent with respect to the control mean. The coefficient of Own voucher is also negative in Column (5) but is insignificant. Consistent with the magnitudes of the treatment effects on modern method use during the intervention period, the treatment effect of the BAF voucher on pregnancy in Column (5) is 2.2 times larger than the effect of the Own voucher. However, we cannot argue that these coefficients are statistically different from each other. Given the timing of our endline data collection, we are unable to say whether this decrease in the likelihood of being pregnant translates into a decline in completed fertility or simply an increase in birth spacing.

Column (2) of Table 5 shows that the BAF voucher had a larger effect than the Own voucher

[41] Modern methods include female sterilization, male sterilization, IUDs, injectables, implants, pills, condoms, female condoms, emergency contraception, diaphragm, foam or jelly, or any other modern method. On average, treated women utilized a third of the voucher amount by spending INR 309 (USD 4.11) across a total of 94 visits to the clinic. Over the 10-month-long intervention period, women across both the BAF and the Own voucher groups spent a total of INR 28,824 (USD 318.86) on reimbursable FP services.

[42] The treatment impacts are entirely driven by short-acting modern methods for which our vouchers translated into a 100 percent subsidy over the intervention period. Short-acting methods include pills, condoms, female condoms, emergency contraception, diaphragm, and foam or jelly.

on modern method use for women who, at baseline, faced greater opposition to FP use from their mother-in-law; the p-value for the *Own × MIL opposed = BAF × MIL opposed* test equals 0.104. Furthermore, the overall effect of voucher receipt on women who faced mother-in-law opposition to FP at baseline is significant only for the BAF group.[43] Consistent with this pattern, Column (3) shows that the BAF voucher was more effective than the Own voucher in also helping women overcome other social constraints associated with their FP use. The BAF voucher more than tripled modern method use for women who found FP use embarrassing at baseline.[44] In contrast, the Own voucher had a smaller and statistically insignificant effect on modern method use for this group of women (p-value for *Own + Own × Covariate = 0* in Column 3 is 0.137 and the p-value for *Own × MIL opposed = BAF × MIL opposed = 0*, is 0.041.). This is potentially because the BAF voucher enabled women to seek FP services with the support of other women and through peer support they were able to overcome feelings of embarassment about FP.[45]

Taken together, our results suggest that enabling a woman to visit FP clinics with other women through a BAF voucher allows her to overcome opposition from influential family members and serves to alleviate her own embarrassment related to FP use. These results contribute to a limited evidence base on the impact of vouchers on FP use (Bellows et al., 2015). While a number of previous studies have been unable to identify causal impacts, our findings are in line with some recent studies that rigorously estimate treatment effects using randomized experiments (e.g., Athey et al. (2021); Karra and Zhang (2021); Tran et al. (2020)). In particular, Athey et al. (2021) find that offering long-acting reversible contraceptive methods for free or at a very small price increased adoption by 50 percent in Cameroon, which is similar to the 57 percent increase in method use due to the BAF voucher that we observe in Column (1) of Table 5. However, a crucial way in which our study differs from previous work is in our explicit recognition that financial barriers are only one of the many constraints that women in our context face to accessing and adopting FP services; in this manner, our paper more closely follows Ashraf et al. (2014). For women who experience social and intrahousehold barriers to FP use, such as those that are examined in Table 5, combining a voucher for a woman's own use with a similar voucher for her peers is much more effective in increasing their uptake of modern contraception as compared to just receiving a voucher for her use alone.

Finally, our findings on pregnancy are comparable to recent estimates from a study in Malawi, in which a FP intervention reduced the likelihood of pregnancy in the treatment group by 4 p.p. relative to the control group after two years of intervention exposure, equivalent to a 43 percent reduction in pregnancy risk (control mean: 0.093) (Karra et al., 2022). Similarly, findings from a long-term intervention study in Matlab, Bangladesh showed that women in intervention areas had 0.5 fewer total births than women in the control areas, equivalent to 11.6 percent fewer births (control mean: 4.3 births) (Barham et al., 2021).

[43]The p-value for *BAF + BAF × MIL opposed = 0* is 0.032, while the corresponding statistic for the Own voucher, *Own + Own × MIL opposed = 0*, is 0.777.

[44]The p-value for *BAF + BAF × Covariate = 0* is 0.000 in Column (3).

[45]The BAF voucher also significantly increased modern method use for women who considered concealability to be an important feature when selecting a FP method at baseline. These results are available upon request.

4.3 Women's Social Interactions

The results thus far have shown that the BAF voucher, more so than the Own voucher, enabled women to seek the company of and to visit the ADC with individuals other than their husbands and their mothers-in-law. These social interactions, prompted by the BAF voucher, could potentially have increased a woman's number of social connections if she formed new connections by offering the BAF voucher to other women who were not her peers at baseline. This is particularly likely to have happened if a woman's baseline peers were unwilling or unable to accompany her to the ADC or if she believed that her baseline peers either did not approve of or need FP. Additionally, through invitations and joint visits to the ADC, the BAF voucher could have strengthened women's FP-related engagement with their baseline peers as well as with any new connections that were formed as a result of the intervention. In this section, we provide evidence to support both of these possibilities. Moreover, we show that these changes in social interactions led to additional benefits for women, including a reduction in their fear of stigma related to FP use.

We focus on a woman's close peers that reside in the same village as her rather than all her close peers irrespective of where they live. To the extent that a woman's natal family lives in a different village, our outcomes in Table 6 exclude a woman's sisters and mother with whom she may also discuss issues related to FP. We do so because the relevant peers who can offer women physical company to utilize their vouchers are those who live in the same village. A woman's natal family often does not live close enough to her marital home; according to the 2011-12 India Human Development Survey, only 40 percent of married women in rural UP live close enough to their natal families to visit and return on the same day, and only 27 percent of married women report that their natal family members visit them at least monthly. Although women may feel more comfortable discussing private matters such as those related to FP with female members of their natal families relative to their marital families, our baseline data reveals that women's interactions with long-distance peers are, in fact, quite limited, making peers who live in the same village even more relevant.

Column (1) of Table 6 shows that, at endline, BAF women reported having a higher number of close peers outside their household within their village ("close outside peers") relative to control women and relative to women who received an Own voucher.[46] Relative to control women, who had an average of 0.36 close outside peers in their village at endline, women who received a BAF voucher increased their number of close outside peers in the village by 0.087 peers, or by 25 percent with respect to the control mean. The BAF effect on a woman's number of close peers in her village is also 12 p.p. larger (p-value of the difference = 0.137) than the null impact of the Own voucher, suggesting that the BAF voucher was more effective in connecting treated women with other women in their villages. Our previous results on seeking companionship to visit the ADC and visiting the ADC suggest that these new peers are likely to be women's non-co-resident sisters-in-law as well as female non-relatives.

In Columns (2) and (3) of Table 6, we examine the effects of the vouchers on peer engagement and communication. Specifically, conditional on having at least one close outside peer in her village at endline, we assess the impact of our vouchers on a woman's likelihood of having at least one close

[46]The number of observations in this table is lower than in previous tables because questions related to the outcome variables were not asked from women who were surveyed by phone at endline. Moreover, in Columns (2)-(3), the outcome is only defined for women who had at least one close outside peer in her village at endline, further reducing the number of observations.

outside peer in her village who: 1) has accompanied her to a health facility and 2) has ever advised her to use a FP method. Across both measures, BAF women were significantly more likely to have engaged with their close outside peers relative to control and Own voucher women. Moreover, the impact of the Own voucher on these measures of peer engagement was subtantially smaller and insignificant, highlighting that the BAF voucher allowed women to invite and offer a voucher to other women to visit the ADC with them and to subsequently visit the ADC together with them, which in turn fostered FP-related discussions with their peers. We note that these results on peer engagement may be driven both by greater engagement with pre-existing peers from baseline as well as with new peer connections that were formed as a result of the BAF voucher; however, our data do not allow us to disentangle these two channels.

The increased FP-related peer engagement that resulted from our BAF intervention may have generated additional benefits for treated women. One such potential benefit is a reduction in women's fear of stigma related to their FP use. Prior research suggests that a fear of stigma is an important barrier to women's modern contraceptive use (Ayehu et al., 2016; Bender and Fulbright, 2013; Jain et al., 2019; Nyblade et al., 2017; Sulemana Watara et al., 2020) and peer support can play a key role in decreasing fear of stigma around health issues, such as mental health (Burke et al., 2019) and take-up of health technologies (e.g., menstrual products) (Castro and Mang, 2022). In Column (4) of Table 6, we present treatment effects on women's fear of stigma, proxied by whether a woman would be afraid of being seen by someone she knew at a FP clinic. This variable captures a respondent's "anticipated stigma" or the belief that others will discriminate against her (Quinn and Chaudoir, 2009; Weiss, 2008). Indeed, anticipated stigma is significantly associated with unmet need for FP-RH services in the literature (Jain et al., 2019); in our sample too we observe a negative correlation between fear of stigma and FP use for control women. We find that women who received a BAF voucher are 10 p.p. less likely to fear stigma at endline than control women, 24 percent of whom fear such stigma at endline. This effect is statistically significant and sizable, representing a 42 percent reduction with respect to the control mean. In contrast, we find no impact of the Own voucher on this outcome. Table A.10 shows that our TOT estimates are similar in magnitude and statistical signficance to the ITT estimates.

In addition, in Table A.14 we analyze heterogeneity in treatment effects on a woman's social connections by the baseline availability of peers who could support her access to FP services. We expect that women who lacked suitable peers at baseline may have had a stronger incentive to form new connections during the intervention period. Indeed, Column (1) in Table A.14 shows that the larger effect of the BAF voucher on a woman's number of close outside peers in her village, relative to the effect of the Own voucher, is driven by women who, conditional on having at least one close peer at baseline, believed that none of their close outside peers were currently using FP, and hence may not have had a demand for these services. Indeed, BAF women in this sub-group substantially increased their number of close peers in the village by 0.33 peers ($BAF + BAF \times Covariate$), doubling their number of peers with respect to the control group. On the other hand, the coefficient of $Own + Own \times Covariate$ is insignificant. Moreover, the differential effect of the BAF voucher relative to the Own voucher is significantly larger for women who lacked close outside peers at baseline than for women who did not (p-value = 0.013). These patterns are consistent with: a) the hypothesis that the increase in a woman's number of social connections is being driven by a greater "need" to form new social

connections among women who believed that none of their baseline close village peers were FP-users; and b) the stronger ability of BAF women to form new connections than Own voucher women as a result of their voucher. We observe a similar pattern for peer engagement, measured by whether a woman had at least one close outside peer in her village who accompanied her to a health facility. Our results in Column (2) of Table A.14 indicate that BAF women who lacked suitable peers at baseline, i.e., peers with a perceived demand for FP, acquired more supportive peers at endline.

In sum, our results suggest that the BAF voucher, more so than the Own voucher, enabled women to seek out peer support, both by increasing women's number of FP peers as well as by increasing their engagement with their old and new peers. These results are important in their own right, given the high level of social isolation experienced by women not only in our sample, but also in other parts of rural India (Andrew et al., 2020; Kandpal and Baylis, 2019; Prillaman, 2021), which prevents them from directly and independently taking advantage of the numerous benefits that social and peer networks confer to their members. Evidence from Anukriti et al. (2020) shows that the benefits of having even a few close peers outside the household are substantial in terms of shaping women's health-seeking behavior. The magnitude of our treatment effect on a woman's number of close peers in her village is comparable to that in Prillaman (2021), who finds that access to a self-help group in Madhya Pradesh increased a woman's total number of friends in her village by 23 percent.

4.4 Additional Results

A. Backlash effects. Although the vouchers were delivered in private to the treatment group, one may be concerned that the increase in women's visits to a FP clinic and her use of modern contraception might have led to unintended "backlash" effects from husbands or mothers-in-law, especially in households with greater discordance in fertility preferences. In the context of Zambia, Ashraf et al. (2014) find that women given access to concealable methods of contraception had lower subjective well-being, reflecting greater marital tensions. Although we lack data on domestic violence and mental health, we have the following evidence to indicate that the vouchers did not negatively affect women's well-being.

First, treatment women did not conceal their receipt of the voucher or visits to the ADC from their husbands and mothers-in-law. Almost all treated women who visited the ADC during the intervention period reported that they had informed their husbands and mothers-in-law about receiving the voucher and visiting the ADC.[47] Second, in Anukriti et al. (2022), we show that vouchers increased mother-in-law approval of FP, and one potential mechanism for this effect is that treated women were more likely than control women to have initiated discussions about FP with their mothers-in-law. This evidence suggests that women did not try to "hide" their intentions to visit the ADC for FP from their mothers-in-law. Third, there was no significant endline difference between treatment and control women in the likelihood of ever facing any problems or negative experiences from discussing or accessing or using a method of FP.[48] Fourth, we do not find any significant effect of the vouchers on women's or their husbands' (as reported by the sample women) satisfaction with their sex life or overall satisfaction

[47] Overall, 94 (92) percent of treated women informed their husbands (mothers-in-law) about receiving the voucher and visiting the ADC.

[48] About 8 percent of our sample women at endline reported ever experiencing problems or negative experiences from discussing or accessing or using a method of FP and only 1 percent of the sample reported having a negative experience with their husbands or parents-in-law.

with their marriage. These results are available in Table A.15.

B. The Role of Financial Constraints. Our interventions also relax women's financial constraints to accessing and using FP by providing vouchers that lower the monetary costs of visiting FP clinics and adopting contraception. Key monetary costs that are alleviated by our intervention include fees for FP services and methods, transportation costs, and opportunity costs of visiting any FP clinic. Therefore, we expect that the observed positive treatment effects on clinic visits and contraceptive use will be more pronounced for women who belonged to poorer households at baseline. In Table A.16, we examine the heterogeneity in treatment effects by women's household poverty status at baseline using a fully interacted model. Ideally, we would like to use a woman's household income at baseline to capture her financial constraints; however, it is difficult to measure income in rural households like those in our sample (Meyer and Sullivan, 2003). Instead, we define a woman to be poor at baseline if her household is below the poverty line and is in the bottom two terciles of the asset index distribution in our sample. For this analysis, we pool the two treatment groups (BAF and Own vouchers) because (a) women in both groups received exactly the same voucher, and therefore the same monetary incentives, for their own use and (b) we do not expect that a woman's financial constraints are affected by her peers' access to vouchers for themselves since the vouchers are not transferable.[49]

Table A.16 shows that the positive effects of voucher receipt on a woman's likelihood of visiting the ADC or any clinic for FP services and on her modern contraceptive use during the intervention period were significantly larger for women who were poorer at baseline. For instance, poorer women experienced a 13 p.p. larger increase in the likelihood of visiting the ADC and a 27 p.p. larger increase in modern method use during the intervention period relative to less poor women. These effects are substantial given that the poorer women in the control group had almost never visited the ADC at baseline and suggest that the ADC, which is a private clinic, might have been out of reach for financially constrained women. Overall, these results are consistent with prior literature in showing that vouchers can overcome financial barriers and constraints to women's FP access and use (Bellows et al., 2016, 2015).

C. Robustness Checks. In Table A.17, we test the robustness of our findings to alternate modes of inference for our main outcomes. Our inferences from our primary specifications do not significantly change when we cluster standard errors by village or implement wild-clustered bootstrapped errors at the village level. In addition, our findings are robust to conducting a stepwise bootstrapped multiple hypothesis testing (MHT) correction across all outcomes presented in Table A.17 that controls for the familywise error rate (FWER) and also accounts for the joint dependence structure of the test statistics (Romano and Wolf, 2005a,b). We implement this approach, which corrects for false discovery rates under multiple outcomes and multiple treatments, to account for the fact that our outcomes (and their corresponding p-values when we test them) are likely to be on the same causal path and therefore be correlated.[50] We prefer the Romano and Wolf (2005a,b) adjustment over other MHT

[49]This would not be the case if BAF women, for instance, were able to extract transfers from their peers in exchange for inviting them to visit the ADC with them. However, treated women did not report doing so in our endline survey.

[50]Specifically, our outcomes may be direct functions of each other, where women who are assigned to a treatment group may: a) seek company as a result of the voucher; b) visit a facility conditional on having sought company; and c) receive services conditional on having visited a facility.

corrections because this approach calculates adjusted p-values that control for the FWER across all of our outcomes while also allowing for the inclusion of baseline control variables, other controls, and village fixed effects in our specifications.

5 Conclusions

Restrictive norms, resource constraints, and social isolation can limit women's access to and utilization of various public services and programs, especially in developing countries. These constraints are more pronounced in contexts like rural India, where women lack freedom of movement and are socioeconomically dependent on family members, and in critically sensitive domains such as fertility and FP. In this study, we evaluate an innovative approach to improve married women's access to FP that not only overcomes financial barriers but also social barriers to FP use, such as opposition from mothers-in-law and lack of peer support.

Although our study is based in one Indian district, its findings are relevant not only to other parts of India and South Asia, but also to a number of settings where women face significant socioeconomic and mobility barriers to access and where extended households are prevalent. Moreover, the relevance of our findings and interventions extends to areas beyond FP-RH (e.g., female education and labor force participation) where women's inability to access public spaces, combined with restrictions that are imposed by family members, are key barriers to their access (Bernhardt et al., 2018; Bursztyn and Jensen, 2017) and where peer support can make a substantive difference (Field et al., 2016; Kandpal and Baylis, 2019). We draw a number of lessons from this study that are relevant for policy and future research. First, our results highlight a need to move beyond dyadic models of household bargaining and decision-making that are based on nuclear family structures. In most household surveys and collective models of the household, a woman's decision-making ability within the household is benchmarked against that of her husband. As a result, programs and policies that are informed by these data and studies rely on strategies that seek to exclusively engage husbands as a means to improve women's bargaining power and outcomes.[51] In many low- and middle-income settings, however, extended families are common and comprise a broader range of kinship structures, such as joint, multi-generational, and polygamous relationships within the household (Kramer, 2020). Variations in kinship strength and relative bargaining power across extended household members make it necessary to understand the influence of, and potentially even target, household members other than the woman's husband on her well-being. More broadly, policy impacts on women's well-being can vary by household structure, particularly when extended families are prevalent (Heath et al., 2020).

Second, our findings underscore the role of the mother-in-law as a key "influencer" in patrilocal South Asian households. Well-intended interventions that exclusively target women or married couples may be ineffective if they naïvely fail to account for the status and position of mothers-in-law in the household, especially if preferences and incentives between women and their mothers-in-law are misaligned. In contrast, mothers-in-law who have an incentive to support their daughters-in-law can also exert a positive impact on outcomes related to childcare, employment, and health during pregnancy (Khanna and Pandey, 2020; Varghese and Roy, 2019). Future research can inform policy makers about

[51] Examples of such strategies include couples' counseling, "husbands' clubs" or the creation of partner-friendly spaces within the health sector (father-friendly clinics, couples-oriented child visits), among others (Bank, 2019; Davis et al., 2016; Hawkins et al., 2008; Sicouri et al., 2018; Tiedje and Darling-Fisher, 2003).

how to effectively engage mothers-in-law to improve women's outcomes.

Third, our findings motivate us to reflect on approaches that can expand women's social connections and thereby improve women's welfare. Forming women's collectives (e.g., microfinance and self-help groups) is a commonly used policy instrument that has been effective in strengthening women's social connections (e.g., Kumar et al. (2019)); however, women's participation in such groups is low (Diaz-Martin et al., 2021). Moreover, the potential role of women in impacting other women's lives extends well beyond such groups. In contexts such as ours, women often turn to other female family members, such as sisters-in-law, for support since familial interactions are less likely to be socially sanctioned. Our study suggests that enabling women to leverage support from their sisters-in-law or female friends may, therefore, be an effective way to lower women's reliance on more constraining members of their household.[52]

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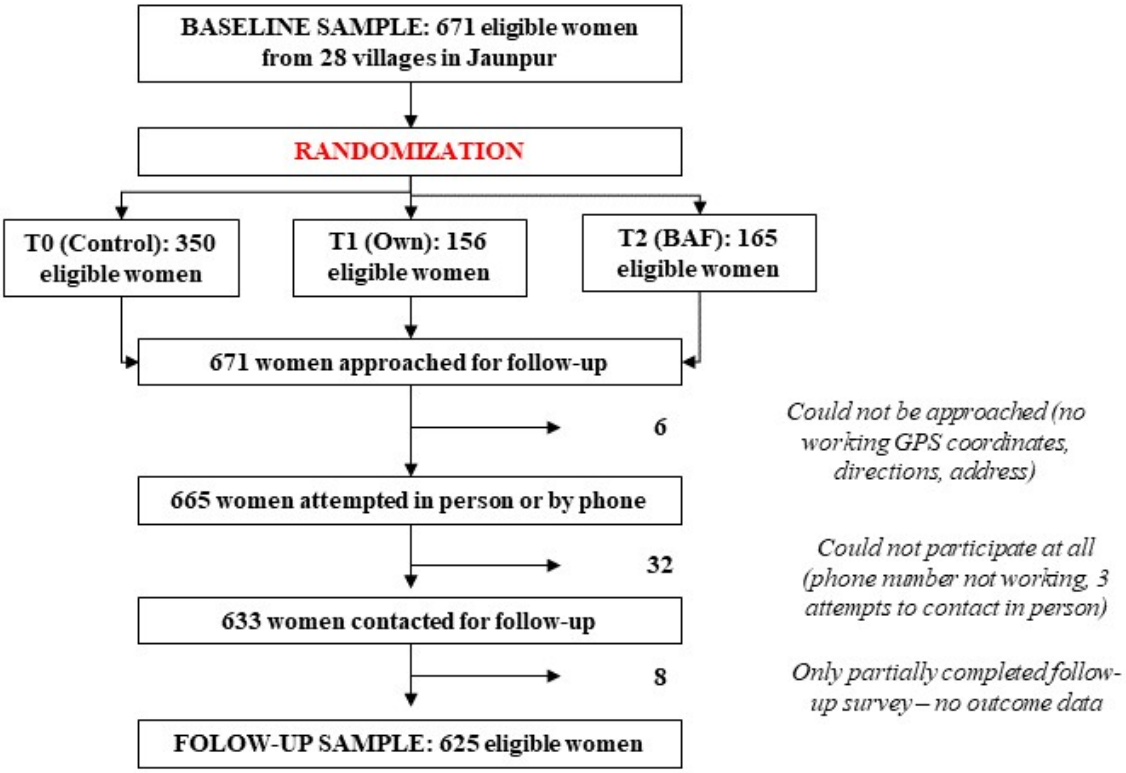
Figures and Tables

Figure 1: Experimental Design



Notes: BAF denotes the Bring-a-Friend voucher group.

Table 1: Balance at baseline for the estimation sample

	Control (C)		Own		BAF		C - Own	C - BAF	Own - BAF
	N	Mean/SD	N	Mean/SD	N	Mean/SD	Diff.	Diff.	Diff.
Woman's characteristics	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Age	319	25.687	146	25.582	156	25.936	0.104	-0.249	-0.354
		(2.670)		(2.769)		(2.554)			
Years of schooling	319	9.420	146	9.856	156	9.622	-0.436	-0.202	0.234
		(4.545)		(4.075)		(4.616)			
Hindu	319	0.947	146	0.904	156	0.923	0.043	0.024	-0.019
		(0.225)		(0.295)		(0.267)			
Scheduled Caste or Tribe	319	0.445	146	0.425	156	0.436	0.020	0.009	-0.011
		(0.498)		(0.496)		(0.497)			
Other Backward Class	319	0.458	146	0.466	156	0.397	-0.008	0.060	0.068
		(0.499)		(0.501)		(0.491)			
Wears ghunghat	319	0.878	146	0.904	156	0.904	-0.026	-0.026	0.000
		(0.328)		(0.295)		(0.296)			
Worked last year	319	0.166	146	0.103	156	0.115	0.063*	0.051	-0.013
		(0.373)		(0.305)		(0.321)			
Co-resides with MIL	319	0.687	146	0.719	156	0.647	-0.033	0.039	0.072
		(0.465)		(0.451)		(0.479)			
Mobility score	319	0.981	146	0.692	156	0.827	0.289*	0.154	-0.135
		(1.682)		(1.451)		(1.575)			
Asset score	319	-0.073	146	0.085	156	0.176	-0.158	-0.249	-0.091
		(1.591)		(1.547)		(1.783)			
Number of general peers	319	1.668	146	1.664	156	1.635	0.003	0.033	0.030
		(1.050)		(1.046)		(1.010)			
Number of close peers outside HH in village	319	0.270	146	0.226	156	0.282	0.044	-0.012	-0.056
		(0.498)		(0.451)		(0.518)			
Number of children	319	1.950	146	1.993	156	1.949	-0.043	0.001	0.044
		(0.903)		(0.943)		(0.956)			
Wants another child	319	0.495	146	0.486	156	0.494	0.009	0.002	-0.007
		(0.501)		(0.502)		(0.502)			
Currently using FP	319	0.486	146	0.486	156	0.481	-0.000	0.005	0.006
		(0.501)		(0.502)		(0.501)			
Using a modern FP method	319	0.179	146	0.219	156	0.173	-0.040	0.006	0.046
		(0.384)		(0.415)		(0.380)			
Ever visited a clinic for FP	319	0.373	146	0.329	156	0.365	0.044	0.008	-0.037
		(0.484)		(0.471)		(0.483)			
MIL opposed to FP	318	0.186	144	0.139	155	0.142	0.047	0.044	-0.003
		(0.389)		(0.347)		(0.350)			
F-test of joint significance: p-value							0.516	0.526	0.956
F-test: Number of observations							462	473	299

Notes: This table examines the baseline characteristics of our estimation sample (N = 621 women). Although we surveyed 625 women at endline, 4 women who had missing values at baseline for the variable "wants another child" are excluded from our estimation sample since we use this variable as a control in all our regressions. Standard deviations (SD) are presented in parentheses. BAF denotes Bring-a-Friend, FP denotes family planning, HH denotes household, and MIL denotes mother-in-law. The variable "MIL opposed to FP" has 4 missing observations in our estimation sample. Variable definitions are presented in the Online Appendix. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$

Table 2: Seeking company for clinic visits during the intervention period

	Sought company to visit the ADC from:				
	Someone	Husband/ MIL	Non-husband/ non-MIL	Sister-in-law	Non-relative
	(1)	(2)	(3)	(4)	(5)
Own Voucher	0.173***	0.035*	0.102***	0.056***	0.039**
	[0.035]	[0.021]	[0.028]	[0.019]	[0.018]
BAF Voucher	0.331***	0.030	0.258***	0.169***	0.086***
	[0.039]	[0.018]	[0.037]	[0.030]	[0.026]
Observations	618	601	601	601	601
Endline control mean	0.035	0.016	0.022	0.003	0.009
p-value: Own = BAF	0.001	0.833	0.000	0.001	0.103

Notes: Each column represents a separate regression. All regressions include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than 621 a) in Column (1) due to missing observations in the outcome variable and b) in Columns (2)-(5) because data on these outcomes was not collected for the phone surveys. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table 3: Clinic visits for family planning services during the intervention period

			Visited the ADC:				
	Visited the ADC	**Visited any clinic**	Alone	With husband/ MIL	With non-husband/ non-MIL	With SIL	With non-relative
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Own Voucher	0.201***	0.175***	0.068***	0.042*	0.060**	0.009	0.017
	[0.034]	[0.046]	[0.022]	[0.025]	[0.026]	[0.015]	[0.013]
BAF Voucher	0.186***	0.132***	0.080***	0.031	0.070***	0.053**	0.014
	[0.032]	[0.045]	[0.023]	[0.024]	[0.027]	[0.022]	[0.013]
Observations	621	614	621	528	528	528	528
Endline control mean	0.016	0.192	0.009	0.018	0.022	0.011	0.004
p-value: Own = BAF	0.728	0.438	0.691	0.716	0.752	0.074	0.839

Notes: Each column represents a separate regression. All regressions include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, SIL denotes sister-in-law, FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than 621 a) in Column (2) due to missing observations in the outcome variable and b) in Columns (4)-(7) because data on these outcomes was not collected for the phone surveys. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table 4: Heterogeneous treatment effects, by mother-in-law opposition to family planning at baseline

	Sought company to visit the ADC from:				**Visited the ADC with:**		
	Someone	Husband/ MIL	Non-Husband/ non-MIL	**Visited the ADC**	Husband/ MIL	Non-husband/ non-MIL	**Visited any clinic**
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Own Voucher	0.182***	0.045*	0.098***	0.205***	0.024	0.053*	0.163***
	[0.039]	[0.025]	[0.031]	[0.037]	[0.024]	[0.031]	[0.052]
BAF Voucher	0.315***	0.032	0.231***	0.150***	0.013	0.042	0.086*
	[0.043]	[0.021]	[0.040]	[0.032]	[0.023]	[0.027]	[0.049]
Own Voucher × MIL opposed to FP	-0.152**	-0.058*	-0.055	-0.096	0.113	-0.026	-0.042
	[0.070]	[0.032]	[0.064]	[0.089]	[0.074]	[0.039]	[0.134]
BAF Voucher × MIL opposed to FP	0.088	0.031	0.109	0.170	0.126	0.188**	0.270**
	[0.114]	[0.066]	[0.101]	[0.108]	[0.092]	[0.094]	[0.132]
Observations	614	597	597	617	524	524	611
Endline control mean	0.035	0.016	0.022	0.016	0.018	0.022	0.192
p-values:							
Own = BAF	0.014	0.642	0.006	0.235	0.714	0.764	0.199
Own × MIL opposed = BAF × MIL opposed	0.057	0.188	0.151	0.043	0.898	0.020	0.069
Own + Own × MIL opposed = 0	0.607	0.539	0.441	0.178	0.051	0.239	0.328
BAF + BAF × MIL opposed = 0	0.000	0.321	0.000	0.002	0.117	0.011	0.004

Notes: Each column represents a separate regression. All regressions are fully-interacted regressions, where all covariates are interacted with an indicator for whether the MIL was opposed to FP at baseline. The main effect of MIL opposition to FP at baseline is also included as a control variable. All specifications include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than the corresponding number of observations in Tables 2 and 3 due to missing values in the variable "MIL opposed to FP". Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table 5: Modern contraceptive use and pregnancy

		Heterogeneity in modern method use at endline by			
	Using a modern method at endline	MIL opposed to FP	Found FP embarrasing	**Has used a modern method since baseline**	**Pregnancy since baseline**
	(1)	(2)	(3)	(4)	(5)
Own Voucher	0.042	0.041	0.018	0.016	-0.036
	[0.036]	[0.041]	[0.049]	[0.041]	[0.047]
BAF Voucher	0.071**	0.029	-0.013	0.094**	-0.080*
	[0.035]	[0.037]	[0.043]	[0.042]	[0.045]
Own Voucher × Covariate		-0.012	0.064		
		[0.107]	[0.074]		
BAF Voucher × Covariate		0.221*	0.249***		
		[0.122]	[0.079]		
Observations	614	610	610	616	614
Endline control mean	0.125	0.125	0.125	0.222	0.386
p-values:					
Own = BAF	0.489	0.799	0.546	0.103	0.401
Own × Covariate = BAF × Covariate		0.104	0.041		
Own + Own × Covariate = 0		0.777	0.137		
BAF + BAF × Covariate = 0		0.032	0.000		

Notes: Each column represents a separate regression. Columns (2) and (3) are fully-interacted regressions where all controls are interacted with the covariate used for estimating heterogeneous effects, with the main effect of that variable also included as a regressor. All specifications include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than 621 a) in Columns (1), (4), and (5) due to missing observations in the outcome variable and b) in Columns (2) and (3) due to missing values in "MIL opposed to FP". Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table 6: Social connections at endline

		Peer engagement		
		Has close peers outside HH in village that:		**Stigma**
	Number of close peers outside HH in village	Accompanied to health facility	Advised woman to use FP	Afraid of being seen
	(1)	(2)	(3)	(4)
Own Voucher	-0.032	-0.020	-0.026	-0.001
	[0.062]	[0.059]	[0.051]	[0.047]
BAF Voucher	0.087	0.109*	0.112*	-0.098**
	[0.070]	[0.061]	[0.058]	[0.040]
Observations	528	350	349	517
Endline control mean	0.355	0.275	0.225	0.235
p-value: Own = BAF	0.137	0.060	0.027	0.044

Notes: Each column represents a separate regression. All regressions include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. FP denotes family planning, HH denotes household, and BAF denotes Bring-a-Friend, and HH denotes household. The number of observations is less than 621 a) because data on outcomes in this table was not collected for the phone surveys and b) in Columns (3) and (4) also because the outcomes are conditional on having a peer outside the household in the village. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1$,$^{**}p < 0.05$,$^{***}p < 0.01$

ONLINE APPENDIX

Bring A Friend: Leveraging Financial and Peer Support to Improve Women's Reproductive Agency in India

S Anukriti, Catalina Herrera-Almanza, and Mahesh Karra

A Variable Definitions

Outcomes:

1. Sought company to visit the ADC from someone: Indicator variable that equals one if a woman asked someone to accompany her to the ADC since September 2018. This variable is not conditional on visiting the ADC.

2. Sought company to visit the ADC from husband or mother-in-law: Indicator variable that equals one if at least one of the individuals that the woman invited to accompany her to the ADC is her husband or her mother-in-law.

3. Sought company to visit ADC from someone other than husband or mother-in-law (non-husband/ non-mother-in-law): Indicator variable that equals one if at least one of the individuals that the woman invited to accompany her to the ADC is neither her husband nor her mother-in-law.

4. Sought company to visit ADC from sister-in-law: Indicator variable that equals one if at least one of the individuals that the woman invited to accompany her to the ADC is her sister-in-law.

5. Sought company to visit ADC from a non-relative: Indicator variable that equals if one of the individuals that the woman invited to accompany her to the ADC is a friend, neighbor, or any other peer that is not her relative.

6. Number of peers sought to visit the ADC: The number of people a woman asked to accompany her to the ADC since September 2018.

7. Visited the ADC for FP services: Indicator variable that equals one if a woman visited the ADC to obtain family planning services since September 2018.

8. Visited any clinic for FP services: Indicator variable that equals one if, since September 2018, the woman visited any health facility to obtain family planning services.

9. Visited the ADC alone: Indicator variable that equals one if a woman went alone to the ADC in all the visits she mentioned since September 2018. This variable equals zero either when the woman went with someone else in at least one FP visit or when she did not visit the ADC.[53]

10. Visited the ADC with husband or mother-in-law: Indicator variable that equals one if a woman went with her husband or mother-in-law in at least one of her visits to the ADC since September 2018. The variable equals zero when a woman i) visited the ADC alone, ii) visited the ADC with individuals different from her husband or her mother-in-law, or iii) did not visit the ADC.[54]

[53] Phone surveys are included in this variable.
[54] Phone surveys are excluded from this variable.

11. Visited the ADC with someone other than husband or mother-in-law (non-husband/non-mother-in-law): Indicator variable that equals one if a woman went with individuals other than her husband or her mother-in-law in at least one of her visits to the ADC since September 2018. The variable equals zero when a woman i) visited the ADC alone, ii) visited the ADC with her husband or her mother-in-law, or iii) did not visit the ADC.[55]

12. Using a modern FP method: Indicator variable that equals one if a woman is using a modern contraceptive method at the time of endline survey.[56]

13. Has used modern FP method since baseline: Indicator variable that equals one if a woman is using a modern contraceptive method since the baseline survey.

14. Using any FP method: Indicator variable that equals one if a woman is using either a traditional or a modern contraceptive method at the time of endline survey. [57]

15. Has used any FP method since baseline: Indicator variable that equals one if a woman has used either a traditional or a modern contraceptive method since the baseline survey.

16. Pregnancy since baseline: Indicator variable that equals one if a woman has been pregnant at any time since the baseline survey.

17. Number of close peers outside household in village: The number of individuals a woman reports, at endline, with whom she discusses relatively more private matters like reproductive health, fertility, and family planning, and who live in the same village as her but not in the same household.

18. Has close peers outside household in village that accompanied to health facility: Indicator variable that equals one if a woman reported, at endline, that she has at least one close peer outside her household in her village that accompanied her to the health facility. This variable is conditional on having at least one close peer outside her household in her village.

19. Has close peer outside household in village that advised to use FP: Indicator variable that equals one if a woman reported, at endline, that she has at least one close peer outsider her household in her village that had ever advised her to a use family planning method. This variable is conditional on having at least one close peer outside her household in her village.

20. Satisfaction with sex life: Indicates, on a scale from 1 to 10, the woman's satisfaction with her sex life at endline, with 1 being extremely dissatisfied and 10 being extremely satisfied.

21. Marital satisfaction: Indicates, on a scale from 1 to 10, the woman's satisfaction with her marriage overall at endline, with 1 being extremely dissatisfied and 10 being extremely satisfied.

22. Afraid of being seen: Indicator variable that equals one if a woman is afraid of being seen by someone she knows at the family planning facility. This is our "fear of stigma" variable, which is measured at endline.

23. Negative experience with FP: Indicator variable that equals one if a woman faced any problems or negative experiences from discussing, accessing, or using a method of family planning as reported at endline.

[55] Phone surveys are excluded from this variable.

[56] Modern methods include female sterilization, male sterilization, IUD/PPIUD, injectables, implants, pill, condom, female condom, emergency contraception, diaphragm, foam/jelly, standard day method, or any other modern method.

[57] Traditional methods include lactational amenorrhea method, rhythm method, withdrawal, and any other traditional method.

Covariates:

1. Age: a woman's completed age in years at baseline.
2. Years of schooling: a woman's completed years of school attainment at baseline.
3. Wants another child: Indicator variable that equals one if a woman wants another child at baseline.
4. Wants another son: Indicator variable that equals one if a woman wants another son at baseline.
5. Number of general peers: Number of individuals a woman reports with whom she discusses her personal affairs related to issues such as children's illness, schooling, health, work, and financial support at baseline.
6. Hindu: Indicator variable that equals one if a woman practices Hinduism at baseline.
7. SC or ST: Indicator variable that equals one if the woman belongs to a Scheduled Caste or a Scheduled Tribe at baseline.
8. OBC: Indicator variable that equals one if the woman belongs to an Other Backward Class at baseline.
9. Wears *ghunghat*: Indicator variable that equals one if a woman practices *ghunghat* at baseline.
10. Worked last year: Indicator variable that equals one if a woman worked last year at baseline.
11. Mobility Score: Calculated as the sum of six indicator variables for whether a woman is allowed to visit/go alone the following places at baseline: 1) homes of relatives or friends, 2) health facilities, 3) grocery stores, 4) short distances by bus or train, 5) markets, and 6) outside their villages or communities.
12. Ever visited a clinic for FP: Indicator variable that equals one if a woman has ever visited a health clinic or facility for reproductive health, fertility, or family planning services at baseline.
13. Asset Index: Household-level index constructed using principal component analysis using with the following household variables: source of drinking water, type of toilet facility, floor material, roof material, exterior wall material, type of fuel used for cooking, ownership of animals, and the number of rooms in the household used to sleep. This variable is constructed at baseline.
14. Number of children: Total number of alive children a woman had at the time of the baseline survey.
15. At least one son: Indicator variable that equals one if the woman had at least one son at the time of baseline survey.
16. Co-residence with mother-in-law: Indicator variable that equals one if a woman co-resides with her mother-in-law at the time of baseline survey.
17. Mother-in-law opposed to FP: Indicator variable that equals one if a woman expressed at baseline that one of the disadvantages of using FP is that her mother-in-law is opposed to it.
18. Valued concealability of FP method: Indicator variable that equals one if a woman expressed at baseline that one of the most important features of a contraceptive method is that it can be used without anyone else knowing.

19. Found FP embarrassing to use: Indicator variable that equals one if, at baseline, a woman expressed that one of the disadvantages of using family planning is that it is embarrassing to use.

20. Lack of close peers in village that use FP: Indicator variable that equals one if none of the woman's close peers in her village at baseline were using a family planning method at baseline. This variable is conditional on having at least one close peer in her village at baseline.

21. Poor: Indicator variable that equals one if, at baseline, a woman's household is below the poverty line and in the bottom two terciles of the asset index distribution, and is zero otherwise.

B Appendix Figures and Tables

Figure A.1: Study area

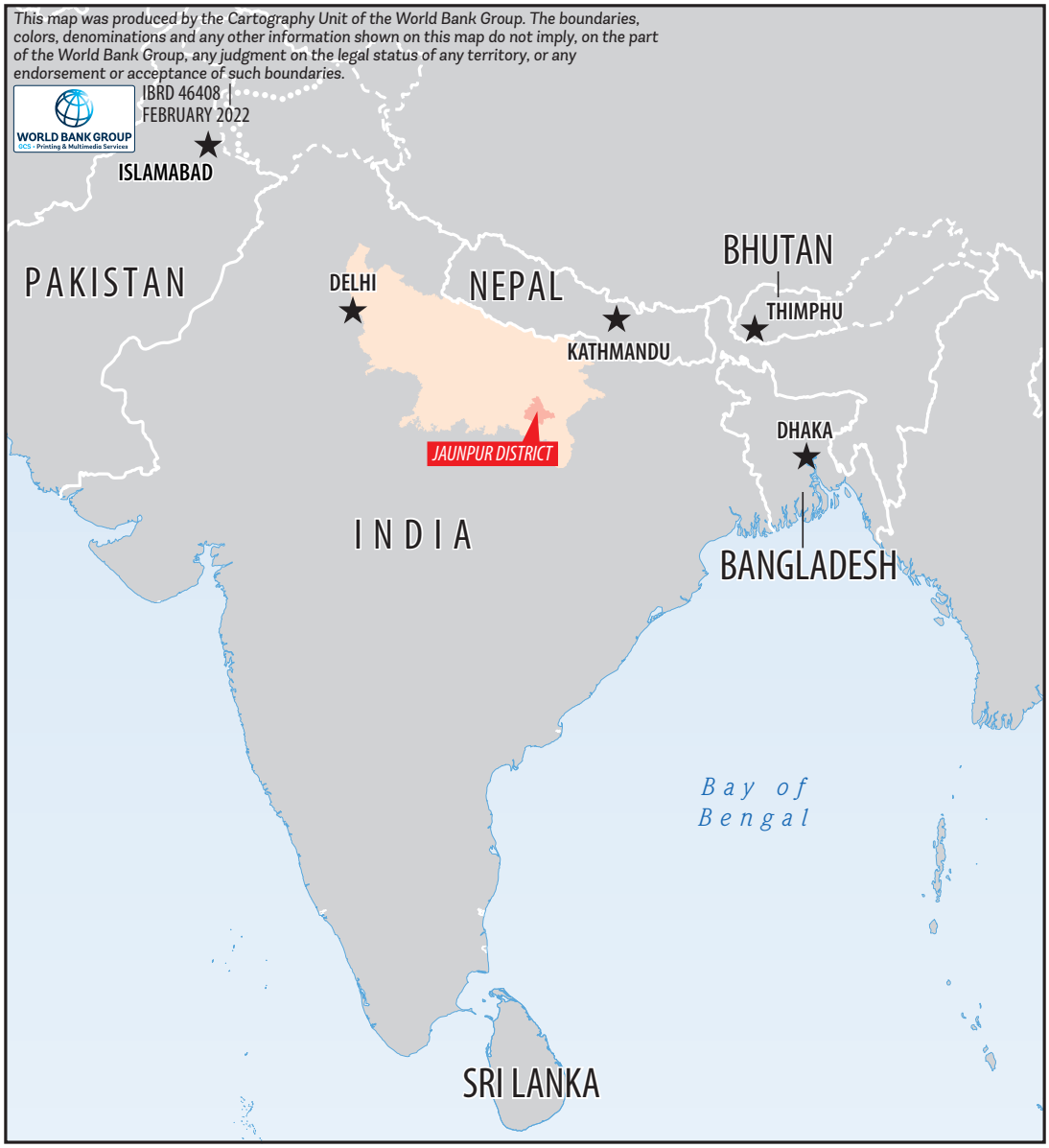


Figure A.2: Sample selection

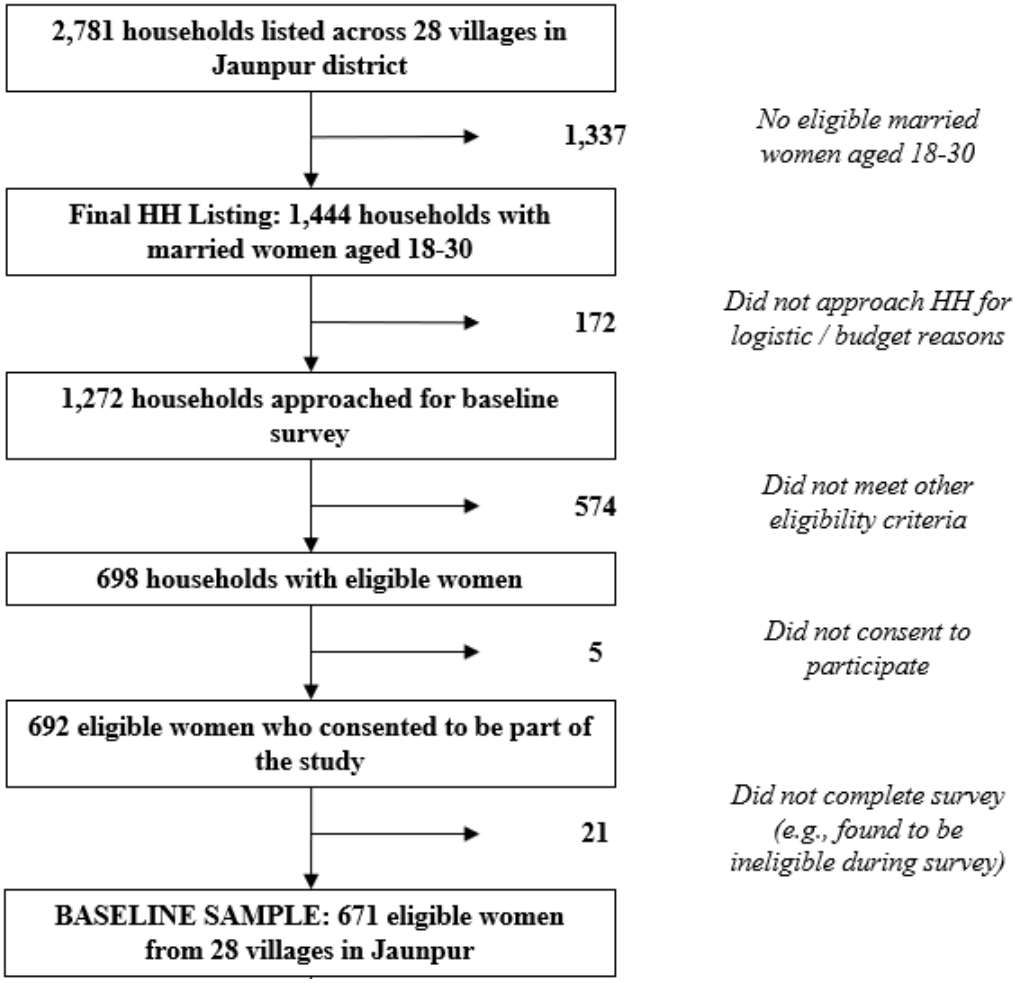
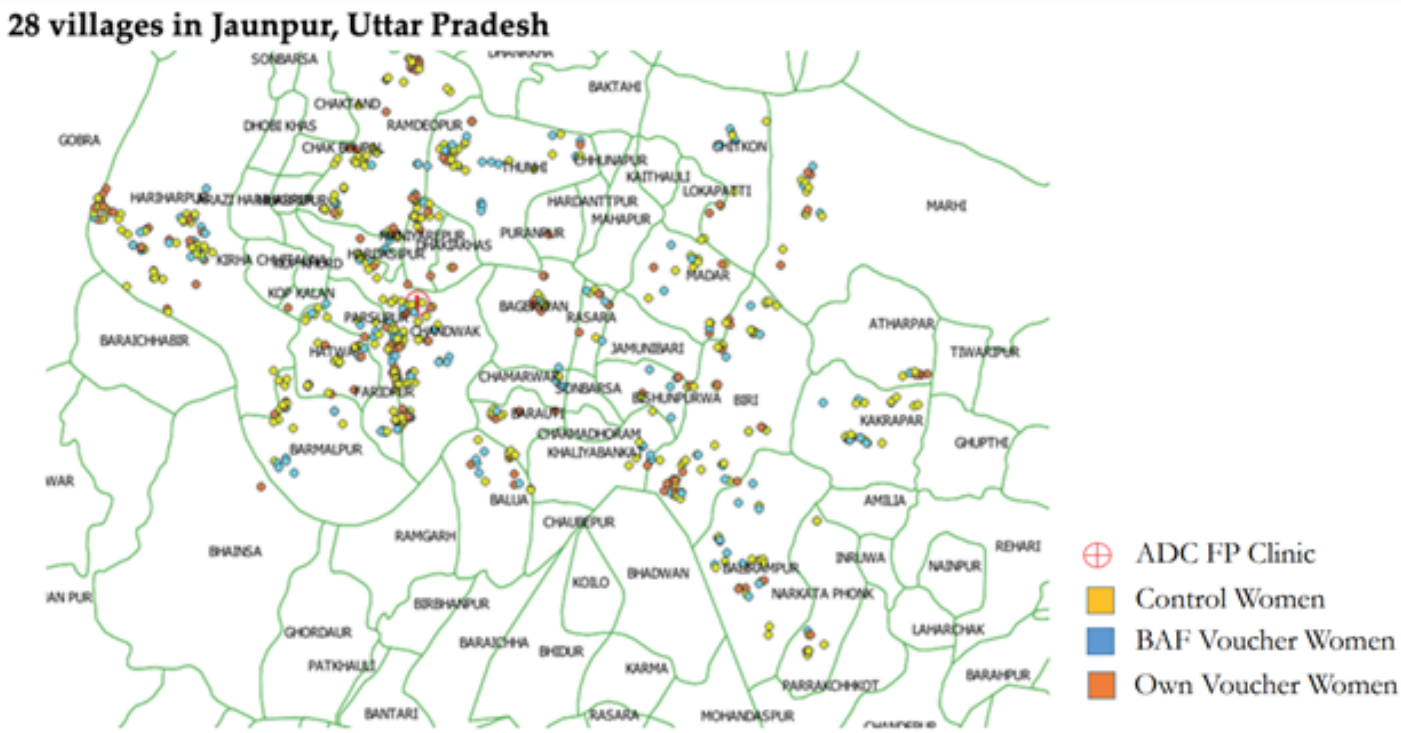


Figure A.3: Map of treatment and control women



Note: This figure shows the location of our partner clinic, the ADC, and of women in the three intervention arms in 28 villages of Jaunpur, Uttar Pradesh.

Figure A.4: Information brochure

Long-Acting Methods

These family planning methods are typically effective for more than 6 months.

Implants (Jadelle)

Intrauterine Contraceptive Device (IUCD)

Talk to your health provider and visit your local family planning clinic today!

Effectively planning your family today may improve your health, your children's health, and your family's future tomorrow.

Visit your local family planning clinic today to learn more

This guide was developed as part of the
Janpur Social Networks Family Planning Study
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About Fertility, Healthy Birth Spacing, and Family Planning

A Guide for Couples

Your Return to Fertility

- A new mother can become pregnant again as soon as 3 weeks after her delivery!
- Family planning through breastfeeding can help prevent pregnancy for up to 6 months
- **Three** requirements for using breastfeeding as family planning correctly:
  1. Continuous, exclusive breastfeeding
  2. No return of menses (period)
  3. Up to 6 months postpartum only
- Mothers who are not breastfeeding are recommended to start a family planning method after 3 weeks from delivery.

If you just had a baby, when is a good time to get pregnant again?

- You should wait at least 2 years before trying to get pregnant again

Images for this guide were obtained from: alamy, iStock, shutterstock, and Google Image search

Why should you wait for 2 years?

- Mothers who wait for two years are less likely to die from childbirth.
- Children who are healthily spaced are:
  - Less likely to die during childbirth
  - Less likely to be born prematurely
  - Less likely to be underweight
  - More likely to grow up bigger and healthier

How can you healthily space and time your next birth?

Correctly and consistently use a family planning method of your choice

Short-Acting Methods

These family planning methods are typically effective at the point of use and for less than 6 months.

Condoms (Male or Female)

Oral Contraceptive Pills

Injectable Contracpetive (Depo-Provera)

Figure A.5: Voucher - English

Jaunpur Social Networks Study – Clinic Voucher

[INSERT CLIENT PHOTO HERE]

This voucher covers the cost of **family planning services** at the **ADC Clinic** for up to **Rs**. **2000**. The voucher can only be redeemed for family planning services at the ADC Clinic. For more information, refer to the JSNS Terms of Services. The date of expiration of this voucher is:

_____ / _____ / _____ (DD / MM / YY)

To redeem this voucher, or if you have any questions or concerns, please call Ms. Field Manager 1 or Ms. Field Manager 2 at:

Field Manager 1: +91 XXX **Field Manager 2: +91 XXX**

Client Name:

Client Program ID:

Client Phone Number:

Date: _____ / _____ / _____ (DD / MM / YY)

MANAGER USE ONLY

DATE RECEIVED	AMOUNT SPENT	VOUCHER VALUE LEFT	MANAGER SIGNATURE
	₹	₹	

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Table A.1: Balance at baseline for the estimation sample: Additional variables

	Control (C)		Own		BAF		C - Own	C - BAF	Own - BAF
	N	Mean/SD	N	Mean/SD	N	Mean/SD	Diff.	Diff.	Diff.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Poor	315	0.175	143	0.126	150	0.160	0.049	0.015	-0.034
		(0.380)		(0.333)		(0.368)			
Marital duration	314	7.261	144	7.347	151	7.570	-0.086	-0.308	-0.222
		(3.517)		(3.519)		(3.917)			
Has at least one son	319	0.746	146	0.747	156	0.679	-0.000	0.067	0.067
		(0.436)		(0.436)		(0.468)			
Valued concealability of FP	319	0.530	146	0.479	156	0.481	0.050	0.049	-0.001
		(0.500)		(0.501)		(0.501)			
Found FP embarrassing to use	318	0.377	144	0.368	155	0.290	0.009	0.087*	0.078
		(0.485)		(0.484)		(0.455)			
Lack of close peers in village that use FP[a]	206	0.738	93	0.720	98	0.684	0.017	0.054	0.037
		(0.441)		(0.451)		(0.467)			
Last visit to a FP clinic was with husband or MIL	307	0.274	145	0.276	153	0.294	-0.002	-0.021	-0.018
		(0.447)		(0.448)		(0.457)			
F-test of joint significance: p-value							0.619	0.244	0.495
F-test: Number of observations							289	294	189

Notes: This table examines the baseline characteristics of our estimation sample (N = 621 women). Although we surveyed 625 women at endline, 4 women who had missing values at baseline for the variable "wants another child" are excluded from our estimation sample since we use this variable as a control in all our regressions. BAF denotes Bring-a-Friend, FP denotes family planning, and MIL denotes mother-in-law. [a] indicates that the variable is conditional on having at least one close peer at baseline. Variable definitions are presented in the Online Appendix. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$

Table A.2: Balance at baseline, by endline attrition status

	Non-attritor		Attritor		Non-attritor – Attritor
	N	Mean/SD	N	Mean/SD	Difference
	(1)	(2)	(3)	(4)	(5)
Own Voucher	621	0.235	46	0.217	0.018
		(0.424)		(0.417)	
BAF Voucher	621	0.251	46	0.196	0.056
		(0.434)		(0.401)	
Age	621	25.725	46	25.043	0.681*
		(2.664)		(2.422)	
Years of schooling	621	9.573	46	8.913	0.660
		(4.454)		(4.760)	
Hindu	621	0.931	46	0.978	-0.048*
		(0.254)		(0.147)	
Scheduled Caste or Tribe	621	0.438	46	0.543	-0.105
		(0.497)		(0.504)	
Other Backward Class	621	0.444	46	0.326	0.118
		(0.497)		(0.474)	
Wears ghunghat	621	0.890	46	0.783	0.108*
		(0.313)		(0.417)	
Worked last year	621	0.138	46	0.174	-0.035
		(0.346)		(0.383)	
Co-residence with MIL	621	0.684	46	0.609	0.076
		(0.465)		(0.493)	
Mobility score	621	0.874	46	1.261	-0.386
		(1.606)		(2.134)	
Asset score	621	0.026	46	-0.356	0.382
		(1.632)		(1.556)	
Number of general peers	621	1.659	46	1.522	0.137
		(1.038)		(0.888)	
Number of close peers outside HH in village	621	0.262	46	0.261	0.002
		(0.492)		(0.535)	
Number of children	621	1.960	46	1.870	0.090
		(0.925)		(0.909)	
Wants another child	621	0.493	46	0.565	-0.072
		(0.500)		(0.501)	
Currently using FP	621	0.485	46	0.348	0.137*
		(0.500)		(0.482)	
Using modern FP method	621	0.187	46	0.087	0.100**
		(0.390)		(0.285)	
Ever visited a clinic for FP	621	0.361	46	0.261	0.100
		(0.481)		(0.444)	
MIL opposed to FP	617	0.164	46	0.043	0.120***
		(0.370)		(0.206)	
F-test of joint significance: p-value					0.184
F-test: number of observations					663

Notes: This table examines the baseline characteristics of our estimation sample (N = 621 women) in Columns (1)-(2) with those of the attritors (in Columns (3)-(4)). Although we surveyed 625 women at endline, 4 women who had missing values at baseline for the variable "wants another child" are excluded from our estimation sample since we use this variable as a control in all our regressions. Standard deviations (SD) are presented in parentheses. BAF denotes Bring-a-Friend, FP denotes family planning, and MIL denotes mother-in-law. The variable "MIL opposed to FP" has 4 missing observations in our estimation sample. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$

Table A.3: Descriptive statistics for the estimation sample

	N	Mean	SD	Min	Max
	(1)	(2)	(3)	(4)	(5)
Endline variables					
Number of peers sought company from to visit the ADC	618	0.22	0.63	0	6
Sought company to visit the ADC from:					
Someone	618	0.15	0.36	0	1
Husband or MIL[a]	601	0.03	0.17	0	1
Someone other than husband or MIL[a]	601	0.11	0.31	0	1
Sister-in-law[a]	601	0.06	0.23	0	1
Non-relative[a]	601	0.04	0.19	0	1
Number of close peers outisde HH in village[a]	528	0.36	0.60	0	3
Afraid of being seen at a health facility[a]	517	0.21	0.41	0	1
Visited the ADC for FP	621	0.11	0.31	0	1
Visited any clinic for FP	614	0.26	0.44	0	1
Visited the ADC:					
Alone	621	0.04	0.20	0	1
With husband or MIL[a]	528	0.04	0.19	0	1
With someone other than husband or MIL[a]	528	0.05	0.22	0	1
Currently using a modern method	614	0.15	0.36	0	1
Has used a modern method since baseline	616	0.25	0.44	0	1
Pregnancy since baseline	614	0.36	0.48	0	1
Baseline variables					
Years of schooling	621	9.57	4.45	0	15
Currently using FP	621	0.48	0.50	0	1
Wants another child	621	0.49	0.50	0	1
Number of general peers	621	1.66	1.04	0	7
Age	621	25.72	2.66	18	30
Hindu	621	0.93	0.25	0	1
Scheduled Caste or Tribe	621	0.44	0.50	0	1
Other Backward Class	621	0.44	0.50	0	1
Wears ghunghat	621	0.89	0.31	0	1
Worked last year	621	0.14	0.35	0	1
Mobility score	621	0.87	1.61	0	6
Ever visited a clinic for FP	621	0.36	0.48	0	1
Asset score	621	0.03	1.63	-4	4
MIL opposed to FP	617	0.16	0.37	0	1
Valued concealability of FP	621	0.51	0.50	0	1
Found FP embarrassing to use	617	0.35	0.48	0	1
No baseline close peers in village using FP[b]	397	0.72	0.45	0	1
Poor	608	0.16	0.37	0	1

Notes: The table presents summary statistics for the estimation sample of 621 women at endline. MIL denotes mother-in-law and FP denotes family planning. Variable definitions are presented in the Online Appendix. [a] indicates that the variable contains missing data because the woman was interviewed using the abbreviated phone survey, which did not record that variable; [b] indicates that the variable is conditional on having at least one close peer at baseline.

Table A.4: External validity: Comparing our endline sample with DHS data

	JSNS Baseline (1)	Rural UP (2)	UP (3)	Rural India (4)	India (5)
Years of schooling	9.57	7.74	7.98	7.65	8.11
Using any FP method	0.49	0.52	0.54	0.53	0.53
Wants another Child	0.49	0.47	0.48	0.46	0.46
Age	25.72	25.22	25.34	25.19	25.33
Hindu	0.93	0.87	0.84	0.79	0.77
Scheduled Caste or Tribe	0.44	0.29	0.28	0.43	0.41
Other Backward Class	0.45	0.55	0.55	0.41	0.42
Worked last year	0.14	0.15	0.15	0.27	0.25
Allowed to visit market alone	0.18	0.29	0.31	0.47	0.49
Allowed to visit health facility alone	0.14	0.28	0.30	0.42	0.44
Allowed to visit places outside community alone	0.19	0.28	0.30	0.42	0.42
N	625	23,708	28,215	163,712	206,659

Notes: Column (1) presents baseline descriptive statistics for the sample of women who were successfully re-contacted at endline. Columns (2) to (5) present descriptive statistics using data from the 2019-21 India National Family Health Survey (NFHS); the NFHS sample is restricted to 18-30-year old married women to allow for direct comparisons with our endline sample.

Table A.5: Sought company to visit the ADC during the intervention period

	(1)	(2)	(3)	(4)
A: Sought company from someone				
Own Voucher	0.165***	0.165***	0.162***	0.173***
	[0.035]	[0.035]	[0.034]	[0.035]
BAF Voucher	0.318***	0.319***	0.318***	0.331***
	[0.040]	[0.039]	[0.039]	[0.039]
Observations	618	618	618	618
Endline control mean	0.035	0.035	0.035	0.035
p-value: Own = BAF	0.003	0.002	0.002	0.001
B: Sought company from husband or mother-in-law				
Own Voucher	0.035*	0.036*	0.034*	0.035*
	[0.020]	[0.020]	[0.020]	[0.021]
BAF Voucher	0.025	0.026	0.024	0.030
	[0.018]	[0.018]	[0.018]	[0.018]
Observations	601	601	601	601
Endline control mean	0.016	0.016	0.016	0.016
p-value: Own = BAF	0.690	0.694	0.694	0.833
C: Sought company from someone other than husband or mother-in-law				
Own Voucher	0.094***	0.094***	0.094***	0.102***
	[0.029]	[0.028]	[0.028]	[0.028]
BAF Voucher	0.257***	0.259***	0.255***	0.258***
	[0.038]	[0.038]	[0.037]	[0.037]
Observations	601	601	601	601
p-value: Own = BAF	0.000	0.000	0.000	0.000
Endline control mean	0.022	0.022	0.022	0.022
Balancing controls	No	Yes	Yes	Yes
Other balancing covariates	No	No	Yes	Yes
Village FE	No	No	No	Yes

Notes: Each column represents a separate regression. Balancing controls include the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers. Other baseline covariates include whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method, and whether the endline interview was conducted over the phone. BAF denotes Bring-a-Friend. The number of observations is less than 621 a) in Panel A due to missing observations in the outcome variable and b) in Panels B and C because data on these outcomes was not collected for the phone surveys. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1$,$^{**}p < 0.05$,$^{***}p < 0.01$.

Table A.6: Number and composition of peers sought company from to visit the ADC

	(1)	(2)	(3)	(4)
A: Number of peers sought				
Own Voucher	0.191***	0.190***	0.186***	0.199***
	[0.048]	[0.047]	[0.046]	[0.046]
BAF Voucher	0.494***	0.496***	0.496***	0.511***
	[0.080]	[0.078]	[0.077]	[0.077]
Observations	618	618	618	618
Endline control mean	0.050	0.050	0.050	0.050
p-value: Own=BAF	0.001	0.000	0.000	0.000
B: Sought company from sister-in-law				
Own Voucher	0.055***	0.055***	0.053***	0.056***
	[0.020]	[0.020]	[0.020]	[0.019]
BAF Voucher	0.174***	0.175***	0.172***	0.169***
	[0.032]	[0.032]	[0.031]	[0.030]
Observations	601	601	601	601
Endline control mean	0.003	0.003	0.003	0.003
p-value: Own=BAF	0.002	0.001	0.001	0.001
C: Sought company from a non-relative				
Own Voucher	0.034*	0.033*	0.035*	0.039**
	[0.018]	[0.018]	[0.018]	[0.018]
BAF Voucher	0.086***	0.087***	0.086***	0.086***
	[0.025]	[0.025]	[0.025]	[0.026]
Observations	601	601	601	601
Endline control mean	0.009	0.009	0.009	0.009
p-value: Own=BAF	0.084	0.073	0.089	0.103
Balancing controls	No	Yes	Yes	Yes
Other balancing covariates	No	No	Yes	Yes
Village FE	No	No	No	Yes

Notes: Each column represents a separate regression. Balancing controls include the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers. Other baseline covariates include whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method, and whether the endline interview was conducted over the phone. BAF denotes Bring-a-Friend. The number of observations is less than 621 a) in Panel A due to missing observations in the outcome variable and b) in Panels B and C because data on these outcomes was not collected for the phone surveys. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1$,$^{**}p < 0.05$,$^{***}p < 0.01$.

Table A.7: Clinic visits for family planning services during the intervention period

	(1)	(2)	(3)	(4)
A: Visited the ADC				
Own Voucher	0.204***	0.202***	0.205***	0.201***
	[0.035]	[0.035]	[0.035]	[0.034]
BAF Voucher	0.170***	0.170***	0.170***	0.186***
	[0.032]	[0.032]	[0.032]	[0.032]
Observations	621	621	621	621
Endline control mean	0.016	0.016	0.016	0.016
p-value: Own = BAF	0.473	0.485	0.457	0.728
B: Visited any clinic				
Own Voucher	0.167***	0.166***	0.172***	0.175***
	[0.046]	[0.046]	[0.046]	[0.046]
BAF Voucher	0.111**	0.111**	0.111**	0.132***
	[0.043]	[0.043]	[0.043]	[0.045]
Observations	614	614	614	614
Endline control mean	0.192	0.192	0.192	0.192
p-value: Own = BAF	0.307	0.312	0.270	0.438
Balancing controls	No	Yes	Yes	Yes
Other balancing covariates	No	No	Yes	Yes
Village FE	No	No	No	Yes

Notes: Each column represents a separate regression. Balancing controls include the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers. Other baseline covariates include whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method, and whether the endline interview was conducted over the phone. FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than 621 in Panel B due to missing observations in the outcome variable. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1$,$^{**}p < 0.05$,$^{***}p < 0.01$.

Table A.8: Number of clinic visits for family planning services during the intervention period

	(1)	(2)	(3)	(4)
A: Number of visits to the ADC				
Own Voucher	0.315***	0.313***	0.334***	0.290***
	[0.096]	[0.097]	[0.106]	[0.075]
BAF Voucher	0.277***	0.277***	0.286***	0.287***
	[0.080]	[0.079]	[0.079]	[0.082]
Observations	621	621	621	621
Endline control mean	0.075	0.075	0.075	0.075
p-value: Own=BAF	0.749	0.760	0.688	0.980
B: Number of visits to any clinic				
Own Voucher	0.156*	0.153*	0.159*	0.176*
	[0.088]	[0.089]	[0.089]	[0.091]
BAF Voucher	0.133	0.131	0.130	0.158
	[0.112]	[0.112]	[0.116]	[0.121]
Observations	607	607	607	607
Endline control mean	0.341	0.341	0.341	0.341
p-value: Own = BAF	0.853	0.856	0.817	0.878
Balancing controls	No	Yes	Yes	Yes
Other balancing covariates	No	No	Yes	Yes
Village FE	No	No	No	Yes

Notes: Each column represents a separate regression. Balancing controls include the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers. Other baseline covariates include whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method, and whether the endline interview was conducted over the phone. FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than 621 in Panel B due to missing observations in the outcome variable. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1$,$^{**}p < 0.05$,$^{***}p < 0.01$.

Table A.9: Heterogeneous treatment effects on clinic visits for family planning services

	Covariate at baseline:		
Outcome:	Wanted another child	Had at least one son	Had ever visited a clinic for FP
Visited any clinic	(1)	(2)	(3)
Own Voucher	0.285***	0.024	0.122**
	[0.069]	[0.090]	[0.057]
BAF Voucher	0.188***	0.078	0.154***
	[0.065]	[0.086]	[0.057]
Own Voucher × Covariate	-0.188*	0.188*	0.136
	[0.096]	[0.107]	[0.111]
BAF Voucher × Covariate	-0.087	0.097	-0.033
	[0.093]	[0.103]	[0.095]
Observations	614	614	614
Endline control mean	0.192	0.192	0.192
p-values:			
Own = BAF	0.229	0.588	0.640
Own × Covariate = BAF × Covariate	0.362	0.454	0.171
Own + Own × Covariate = 0	0.149	0.000	0.007
BAF + BAF × Covariate = 0	0.127	0.002	0.110

Notes: Each column represents a separate regression. All regressions control for the main effect of the covariate used to test heterogeneous effects. All specifications include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. FP denotes family planning and BAF denotes Bring-a-Friend. The number of observations is less than 621 due to missing observations in the outcome variable. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table A.10: Treatment-on-treated estimates for the main outcomes

Panel A	**Sought company to visit the ADC from non-husband/non-MIL** (1)	**Visited the ADC with non-husband/non-MIL** (2)	**Visited the ADC** (3)	**Visited any clinic** (4)	
Own Voucher	0.106***	0.062**	0.210***	0.181***	
	[0.028]	[0.026]	[0.034]	[0.046]	
BAF Voucher	0.264***	0.072***	0.190***	0.135***	
	[0.036]	[0.026]	[0.032]	[0.044]	
Observations	601	528	621	614	
p-value: Own=BAF	0.000	0.769	0.653	0.399	
Endline control mean	0.022	0.022	0.016	0.192	
Panel B	**Has used a modern method since baseline** (5)	**Number of close peers outside HH in village** (6)	**Has close peers outside HH that accompanied to health facility** (7)	**Has close peers outside HH that advised to use FP** (8)	**Afraid of being seen** (9)
Own Voucher	0.017	-0.033	-0.021	-0.027	-0.001
	[0.041]	[0.063]	[0.060]	[0.051]	[0.047]
BAF Voucher	0.096**	0.089	0.113*	0.115**	-0.101**
	[0.041]	[0.069]	[0.059]	[0.057]	[0.039]
Observations	616	528	350	349	517
p-value: Own=BAF	0.096	0.123	0.048	0.019	0.038
Endline control mean	0.222	0.355	0.275	0.225	0.235

Notes: Treatment-on-treated estimates are obtained using two-stage least squares, in which treatment assignment is used as instrument to voucher reception. Of the 621 women in the estimation sample, 10 women who were assigned to one of the two voucher arms could not receive the voucher, corresponding to six from Own and four from BAF treatment groups, respectively. All specifications include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law and BAF denotes Bring-a-Friend. The number of observations is less than 621 a) in Columns (4) and (5) due to missing observations in the outcome variables and b) in Columns (1)-(2) and (6)-(9) because data on these outcomes was not collected in the phone surveys. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$

Table A.11: Heterogeneous treatment effects on type of peers sought and visit to ADC, by mother-in-law opposition to family planning

	Sought company to visit the ADC from:		**Visit ADC with:**	
	Sister-in-law	Non-relative	Sister-in-law	Non-relative
	(1)	(2)	(3)	(4)
Own Voucher	0.057**	0.029	0.007	0.015
	[0.022]	[0.020]	[0.019]	[0.015]
BAF Voucher	0.150***	0.084***	0.042*	-0.003
	[0.032]	[0.029]	[0.023]	[0.005]
Own Voucher × MIL opposed to FP	-0.017	-0.015	0.006	-0.000
	[0.052]	[0.026]	[0.023]	[0.023]
BAF Voucher × MIL opposed to FP	0.102	0.022	0.073	0.118*
	[0.096]	[0.069]	[0.082]	[0.066]
Observations	597	597	524	524
Endline control mean	0.003	0.009	0.011	0.004
p-values:				
Own = BAF	0.016	0.104	0.207	0.174
Own × MIL opposed = BAF × MIL opposed	0.265	0.577	0.382	0.050
Own + Own × MIL opposed = 0	0.394	0.381	0.321	0.398
BAF + BAF × MIL opposed = 0	0.005	0.090	0.143	0.080

Notes: Each column represents a separate regression. All columns are fully-interacted regressions, where all covariates are interacted with an indicator for whether the MIL was opposed to FP. The main effect of MIL opposition to FP at baseline is also included as control variable. All regressions include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, FP denotes family planning, and BAF denotes Bring-a-Friend. The number of observations is less than 621 because data on these outcomes was not collected for the phone surveys and due to missing observations in "MIL opposed to FP". Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table A.12: Contraceptive use at endline

	(1)	(2)	(3)	(4)
A: Using any FP method				
Own Voucher	0.000	-0.003	-0.019	-0.030
	[0.049]	[0.049]	[0.049]	[0.050]
BAF Voucher	0.004	0.001	-0.002	-0.008
	[0.048]	[0.047]	[0.046]	[0.047]
Observations	614	614	614	614
p-value: Own=BAF	0.950	0.939	0.755	0.693
Endline control mean	0.383	0.383	0.383	0.383
B: Using modern FP method				
Own Voucher	0.060	0.057	0.045	0.042
	[0.037]	[0.036]	[0.036]	[0.036]
BAF Voucher	0.062*	0.061*	0.060*	0.071**
	[0.037]	[0.036]	[0.034]	[0.035]
Observations	614	614	614	614
Endline control mean	0.125	0.125	0.125	0.125
p-value: Own = BAF	0.962	0.928	0.718	0.489
Balancing controls	No	Yes	Yes	Yes
Other balancing covariates	No	No	Yes	Yes
Village FE	No	No	No	Yes

Notes: Each column represents a separate regression. Balancing controls include the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers. Other baseline covariates include whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method, and whether the endline interview was conducted over the phone. FP denotes family planning and BAF denotes Bring-a-Friend. The number of observations is less than 621 due to missing observations in the outcome variable. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table A.13: Contraceptive use since baseline

	(1)	(2)	(3)	(4)
A: Has used a FP method since baseline				
Own Voucher=1	-0.040	-0.042	-0.045	-0.046
	[0.048]	[0.046]	[0.046]	[0.046]
BAF Voucher=1	0.001	-0.001	0.001	0.002
	[0.046]	[0.045]	[0.044]	[0.043]
Observations	616	616	616	616
p-value: Own=BAF	0.459	0.442	0.382	0.368
Endline control mean	0.670	0.670	0.670	0.670
B. Has used a modern method since baseline				
Own Voucher=1	0.038	0.034	0.018	0.016
	[0.043]	[0.042]	[0.040]	[0.041]
BAF Voucher=1	0.094**	0.092**	0.090**	0.094**
	[0.044]	[0.043]	[0.040]	[0.042]
Observations	616	616	616	616
Endline control mean	0.222	0.222	0.222	0.222
p-value: Own = BAF	0.285	0.249	0.128	0.103
C: Pregnancy since baseline				
Own Voucher=1	-0.053	-0.047	-0.046	-0.036
	[0.048]	[0.046]	[0.047]	[0.047]
BAF Voucher=1	-0.074	-0.072	-0.073*	-0.080*
	[0.046]	[0.044]	[0.044]	[0.045]
Observations	614	614	614	614
Endline control mean	0.386	0.386	0.386	0.386
p-value: Own = BAF	0.690	0.630	0.599	0.401
Balancing controls	No	Yes	Yes	Yes
Other balancing covariates	No	No	Yes	Yes
Village FE	No	No	No	Yes

Notes: Each column represents a separate regression. Balancing controls include the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers. Other baseline covariates include whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method, and whether the endline interview was conducted over the phone. FP denotes family planning and BAF denotes Bring-a-Friend. The number of observations is less than 621 due to missing observations in the outcome variable. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table A.14: Heterogeneous treatment effects on social connections at endline, by baseline social connections

	Covariate at baseline: Lack of close peers in village that use FP	
Outcomes:	**Number of close peers in village outside HH**	**Has peers in village outside HH that accompanied to health facility**
	(1)	(2)
Own Voucher	-0.079	0.292*
	[0.199]	[0.171]
BAF Voucher	-0.308	0.122
	[0.197]	[0.221]
Own Voucher × Covariate	0.040	-0.389*
	[0.226]	[0.198]
BAF Voucher × Covariate	0.641***	0.134
	[0.222]	[0.240]
Observations	329	224
Endline control mean	0.355	0.275
p-values:		
Own = BAF	0.262	0.394
Own × Covariate = BAF × Covariate	0.013	0.023
Own + Own × Covariate = 0	0.718	0.336
BAF + BAF × Covariate = 0	0.001	0.007

Notes: Each column represents a separate regression. All columns are fully-interacted regressions where all covariates are interacted with the covariate used for heterogeneous effects, the main effect of that variable is also included as a regressor. All regressions include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, FP denotes family planning, BAF denotes Bring-a-Friend, and HH denotes household. The number of observations is less than 621 because a) data on these outcomes was not collected for the phone surveys and b) the outcomes are conditional on having a peer outside the household in the village. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1$,$^{**}p < 0.05$,$^{***}p < 0.01$.

Table A.15: Backlash effects

	Negative experience with FP	**Satisfaction with sex life**	**Marital satisfaction**
	(1)	(2)	(3)
Own Voucher	-0.006	0.160	0.066
	[0.029]	[0.193]	[0.205]
BAF Voucher	0.026	0.313	0.243
	[0.032]	[0.210]	[0.195]
Observations	506	516	522
Endline control mean	0.074	8.207	8.759
p-value: Own = BAF	0.376	0.496	0.442

Notes: Each column represents a separate regression. All regressions include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. MIL denotes mother-in-law, and BAF denotes Bring-a-Friend. The number of observations is less than 621 because data on these outcomes was not collected for the phone surveys. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table A.16: Heterogeneous treatment effects of voucher receipt, by baseline financial constraints

	Visited the ADC clinic	**Visited any clinic**	**Has used a modern method since baseline**
	(1)	(2)	(3)
Any Voucher	0.186***	0.153***	0.020
	[0.028]	[0.042]	[0.040]
Any Voucher × Poor at baseline	0.129	0.094	0.265**
	[0.087]	[0.115]	[0.116]
Observations	608	601	603
Endline control mean	0.016	0.192	0.222
p-value:			
Any Voucher + Any Voucher × Poor = 0	0.000	0.021	0.009

Notes: Each column represents a separate regression. *Any Voucher* equals one if the woman received either an Own or a Bring-a-friend voucher, and zero otherwise. All specifications are fully-interacted regressions, where all covariates are interacted with Poor at baseline. The main effect of Poor at baseline is also included as control variable. All specifications include balancing controls (i.e., the baseline levels of whether a woman was using FP, her years of education, whether she wanted another child, and her number of general peers), other baseline covariates (i.e., whether the woman worked, whether she had ever visited a FP clinic, the woman's mobility score, and whether she was using a modern FP method), whether the endline interview was conducted over the phone, and village fixed effects. The number of observations is less than 621 a) in Columns (1) to (3) due to missing observations in the variable "Poor" and also b) in Columns (2) and (3) due to missing observations in the outcome variables. Variable definitions are presented in the Online Appendix. Robust standard errors are presented in brackets.. $^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$.

Table A.17: Robustness checks

Panel A	**Sought company to visit the ADC** (1)	**Visited the ADC** (2)	**Visited any clinic** (3)
Own Voucher	0.178	0.200	0.168
Robust (p-value)	(0.000)	(0.000)	(0.000)
Clustered (p-value)	(0.000)	(0.000)	(0.004)
WC Bootstrap (p-value)	(0.000)	(0.000)	(0.000)
Romano and Wolf (2005a,b) MHT Correction (p-value)	(0.000)	(0.000)	(0.003)
BAF Voucher	0.332	0.184	0.127
Robust (p-value)	(0.000)	(0.000)	(0.004)
Clustered (p-value)	(0.000)	(0.000)	(0.017)
WC Bootstrap (p-value)	(0.000)	(0.000)	(0.033)
Romano and Wolf (2005a,b) MHT Correction (p-value)	(0.000)	(0.000)	(0.024)
Panel B	**Has used a modern method since baseline** (4)	**Number of close peers outside HH in village** (5)	
Own Voucher	0.045	-0.054	
Robust (p-value)	(0.309)	(0.374)	
Clustered (p-value)	(0.305)	(0.392)	
WC Bootstrap (p-value)	(0.321)	(0.399)	
Romano and Wolf (2005a,b) MHT Correction (p-value)	(0.670)	(0.670)	
BAF Voucher	0.098	0.070	
Robust (p-value)	(0.030)	(0.324)	
Clustered (p-value)	(0.007)	(0.325)	
WC Bootstrap (p-value)	(0.009)	(0.351)	
Romano and Wolf (2005a,b) MHT Correction (p-value)	(0.116)	(0.670)	

Notes: p-values are presented in parentheses. *Robust* represents p-values from robust standard errors. *Clustered* represents p-values based on standard errors clustered at the village level. *WC Bootstrap* reports the p-values based on wild-clustered bootstrapped standard errors, obtained from the *boottest* command in Stata. *Romano and Wolf (2005a,b) MHT Correction* presents p-values that are computed using the Romano and Wolf (2005a,b) based *rwolf2* command in Stata with 3,000 bootstrap replications; this correction allows for the inclusion of covariates and village fixed effects in the model specifications. MIL denotes mother-in-law and FP denotes family planning. Variable definitions are presented in the Online Appendix.

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