

RESEARCH ARTICLE

Effectiveness of community-based interpersonal communication for generating family planning demand in key groups

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Abstract

Objective: The study aimed to document the impact of interpersonal communication (IPC) activities on increasing volume of family planning clients, new users, long term contraceptive uptake, post-partum, and post abortion family planning uptake at the associated health facilities of the Sabz Sitara Network.

Methodology: A comparative secondary analysis of retrospective programme service delivery data from two groups of providers was performed. The exposure variable is defined as receipt of IPC. The six outcome variables are volume of: family planning (FP) clients, FP clients less < 25 years, intra-uterine device (IUD) insertions, post-partum FP clients (PPFP), users, and post-abortion FP (PAFP) clients.

Results: The increase in client volume in IPC supported providers is significant for all the FP outcomes when adjusted for provider qualification and location. The adjusted model shows a significant increase of 10 more FP clients, 2 more youth clients and IUD insertions each, 3 more new users, and 1 more client for post abortion services.

Conclusion: The IPC intervention has a positive and significant impact on increasing client volume for all related FP outcomes at the associated provider facilities. Location and qualification of providers seem to moderate the impact. Considering qualification, and geo-social demographics of the area to tweak intervention intensity and design will help amplify the associated beneficial outcomes and minimize underperformance. To maximize return on investment, subsequent evaluations should help determine the ideal time frame required to achieve and sustain the positive results.

Keywords: Interpersonal Counselling, Family Planning, Sitara Bajis, Sattar Bhai, Greenstar Social Marketing. (JPMA 71: S-45 [Suppl. 7]; 2021)

Introduction

Contraception is one of the most cost-effective investments in health to reduce maternal and child mortality.¹ For family planning interventions to maximize this, service delivery needs to be refined and made accessible to vulnerable groups during the periods it is needed most. Over the last two decades, increasing evidence has underscored the importance of youth friendly family planning,² and reducing inequalities of information and access to women in the post abortion³ and postpartum periods especially in low- and middle-income countries.⁴

Sixty-four percent of Pakistan is younger than 30 years, and the youth cohort, defined as those between 15-29 years of age, currently forms nearly a third of the country's total population.⁵ From this cohort, twenty-nine percent of women, and twenty-four percent of men are married by age 18 and 24 respectively.⁶ Sixty-four percent of women overall have unmet need of FP during first year postpartum⁷ — and the increasing incidence of abortion

is suggestive of it being progressively used as a method of birth control.⁸ Provision of integrated family planning services to these high impact sub-groups can effectively promote healthy timing and spacing of pregnancies in low- and middle-income countries, and can achieve significant reductions in maternal and child mortality.⁹

Progress towards eliminating disparities that limit the realization of full range of family planning services especially to youth and vulnerable groups has been slow.² Among other factors that drive disparities, social and cultural norms are one.¹⁰ Interpersonal communication interventions have been shown to significantly improve family planning knowledge and attitudes, increase family planning methods uptake, and result in an overall decline in fertility.¹¹ Interpersonal counselling through household visits by trained agents is a persuasive medium that generates inter-spousal communication and is able to influence both individual and community level norms (descriptive and injunctive) about benefits and consequences of using contraceptives.¹²

Programme Description: The social franchise programme is the flagship programme for family planning at Greenstar Social Marketing working with community based private sector providers and is

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implemented in approximately 50 districts of Pakistan.

Greenstar Social Marketing is not for profit that has been working consistently over the years to increase awareness and access to affordable quality modern contraceptives across Pakistan. It contributes 25 % to 30% of couple year protections generated nationally every year, and moves approximately 53% of all contraceptives distributed by the private sector; making it the largest private sector provider of reproductive health products in Pakistan. The primary aim of the programme is to improve maternal and reproductive health outcomes by expanding family planning access and uptake, and specifically strengthening delivery and access to post pregnancy and post abortion family planning, with an additional focus on young women. Greenstar achieves this through capacity building of the social franchise private sector providers, ensuring availability of affordable modern contraceptives at the clinics, and interpersonal communication activities in the communities in providers' catchment areas.

The core vision of the strategy of Greenstar's interpersonal communication programme is to create demand and bring sustainable behavioural changes. Trained Sitara Bajis and Sattar Bhais conduct interpersonal communication in house-hold visits to provide one-to-one counseling using job aids and information, education, and communication (IEC) material. The enabling environment is amplified by community support groups, and neighbourhood meetings for male community members. For each provider the intervention entails five orientation meetings with stakeholders to ensure consistent community ownership, registration of 700 household clients and an additional equal number of follow-up visits, issuance of 400 non-financial tokens for availing family planning contraceptives at the providers' facilities, 24 neighborhood meetings, and identification of two community volunteers to be associated with the providers in their catchment areas. The objective of this study is to evaluate and understand whether the impact of these strategies is uniform across different groups of interest. We assessed whether the increase in client volume translating to increased uptake was uniform in different target groups and/or periods, i.e. among youth, long term method uptake (intrauterine contraceptive devices), and post abortion and postpartum family planning. The study also aims to assess whether any effect on outcomes is moderated by co-variables such as location and qualification of the provider.

Methodology

The paper reports comparative secondary analysis of retrospective programme service delivery data from two

groups of providers. Only one group of providers referred to as IPC (interpersonal communication), facilitated providers to provide community level demand generation activities and interpersonal household visits in their catchment areas. All other programmatic exposure including (but not limited to) technical and non-technical trainings of providers, supply of contraceptives, etc. remained constant for every provider enrolled in the programme. The data was collected from the client record books maintained by each provider and submitted electronically as part of routine monthly visits conducted by community health officers to all the provider clinics. Three IPC rounds of six months each were implemented from October 2018 onwards till March 2020. Budgetary constraints limited provision of same level of support to all the providers in the social franchise network.

Both the groups have been analytically compared for associations between exposure and outcomes variables. The independent exposure variable is defined as receipt of IPC (was the provider facilitated by IPC or not). The six outcome variables are (1) family planning clients, i.e. the number of clients coming for FP services at the provider clinics, (2) FP clients less than 24 years i.e. youth clients, (3) IUD insertions, (4) post-partum FP clients i.e. the number of clients provided FP in the postpartum period, (5) new users, and (6) post-abortion family planning clients i.e. the number of clients provided with FP services post abortion. All outcome variables were reported by average services per provider. Qualification and location of providers were considered to be co-variables in the analysis.

The service delivery data is recorded by the providers in their client record books which was collected by trained data collectors and submitted electronically every month. The data was stored on servers maintained at the head office in Karachi and was exported in Excel for creating the database for additional analyses. The final data were analyzed on Stata SE version 11.2 using simple descriptive analyses, bivariate analyses to examine the association between independent and dependent variables, and linear regression to see the overall association of IPC with the outcome variables adjusted for the covariates (location and qualification). For bivariate analysis, t-test assuming unequal variances was conducted and mean differences were reported. Significance level was set at $p < 0.05$.

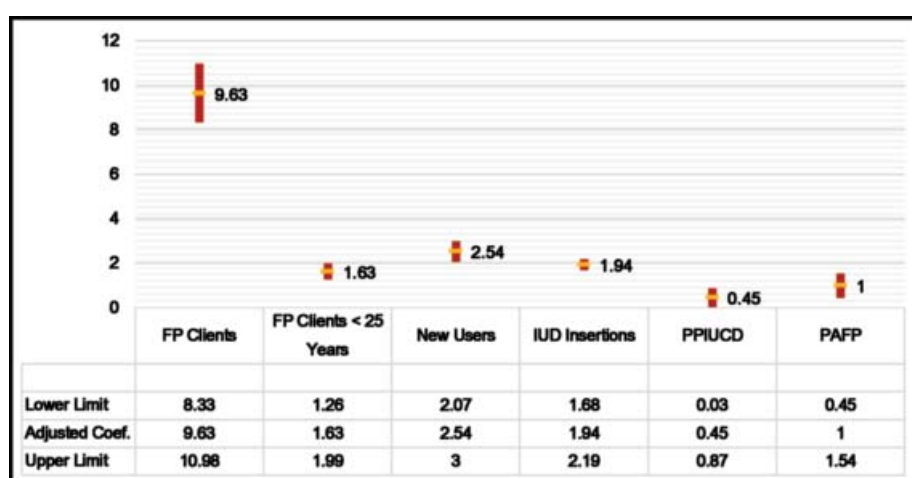
Results

A total of 2102 providers were active in the intervention districts out of which twenty three percent (n=486) were facilitated by IPC, and seventy seven percent (n=1616)

Table-1: Distribution of providers groups by location and qualification.

Co-variables	IPC		Non-IPC		Total	
Province						
Punjab	317	65%	1013	63%	1330	63%
Sindh	74	15%	242	15%	316	15%
KPK	95	20%	361	22%	456	22%
Total	486	100%	1616	100%	2102	100%
Qualification						
MBBS	91	19%	650	40%	741	35%
CMW	87	18%	210	13%	297	14%
LHV	308	63%	756	47%	1064	51%
Total	486	100%	1616	100%	2102	100%

*IPC: Interpersonal Communication.

**Figure-1:** Adjusted Coefficient with 95% Confidence Intervals.**Table-2:** Outcome Variables (Mean & Significance).

	FP Clients		FP Clients < 24 Years		New Users		IUD Insertions		PPFP		PAFP	
	IPC	Non-IPC	IPC	Non-IPC	IPC	Non-IPC	IPC	Non-IPC	IPC	Non-IPC	IPC	Non-IPC
District												
Punjab	31.6	20.5	6.0	4.3	8.4	6.0	7.1	4.9	4.1	3.5	6.5	5.3
p-value		0		0		0		0		0.0011		0.0003
Sindh	26.3	22.6	6.4	7.3	7.6	8.1	4.2	4.5	3.2	4.3	4.5	6.0
p-value		0.0757		0.1896		0.4765		0.3958		0.1358		0.052
KPK	29.9	22.7	8.5	5.4	13.8	8.9	7.4	4.6	5.1	4.5	5.3	4.7
p-value		0		0		0		0		0.3944		0.2265
Qualification												
MBBS	32.1	22.5	6.4	5.2	8.5	7	5.8	4.7	3.5	3.8	6.6	5.7
p-value		0		0.0082		0.0024		0.0002		0.3688		0.1666
CMW	26.0	18.4	6.14	4.7	9.2	6.5	6.7	4.7	5.4	3.8	5.9	4.7
p-value		0		0.003		0		0		0.0933		0.0735
LHV	31.2	21.1	6.7	4.8	9.7	7.0	7.0	4.8	4.2	3.9	6.2	5.1
p-value		0		0		0		0		0.2684		0.0001
Overall	30.4	21.3	6.5	5.0	9.4	6.9	6.7	4.8	4.9	5.2	6.0	7.0
p-value		0		0		0		0		0.4138		0.0502

FP: Family Planning, IUD: Intra-Uterine Device.

PPFP: Post-Partum Family Planning, PAFP: Post Abortion Family Planning, IPC: Interpersonal Communication, KPK: Khyber Pakhtunkhwa, MBBS: Bachelor of Medicine and Bachelor of Surgery.

CMW: Community Midwife, LHV: Lady Health Visitor.

comprised the comparative group. Table-1 shows the distribution disaggregated by geography and qualification.

Table-2 shows the non-adjusted comparative impact of IPC on client volume, disaggregated by covariates. A provider facilitated by IPC generated 9 more FP clients on average per month, and 2 more youth clients, new users, IUD insertions, each. For PPFP and PAFP there is a non-significant inverse association in the non-adjusted model.

Punjab had the highest impact for overall FP clients (mean difference of 9 FP clients/provider), as compared to KPK (7 clients), and Sindh (3 clients). KPK had the highest

impact for youth clients, new users, and IUD insertions as compared to Punjab and Sindh. All the programmatic outcomes reported were significant in Punjab. The same was evident in KPK, except for PAFP and PPFP clients which showed a non-significant inverse association. In Sindh all the outcome variables except for overall FP clients had a non-significant negative difference on client volume.

All three cadres of IPC providers had a significant positive impact on client volume for all outcomes under study with the exception of

PPFP and PAFP, for which the differences, although positive, were non-significant. Only lady health visitors (LHVs) had a significant positive difference for post abortion clients. Overall, the positive difference was most consistent for LHVs, followed by MBBS providers, and CMWs respectively.

When adjusted for location and qualification, an IPC provider generated 10 more FP clients, 2 more youth clients and IUD insertions each, 3 more new users, and 1 more client for postpartum and post abortion services. Figure-1 shows the adjusted co-efficient(s) with 95% confidence intervals.

Discussion

Behavioural change communication strategies provide an opportunity to empower and contribute as a potential motivator for contraceptive use. The present study assessed the uniformity of the impact of interpersonal household visits by measuring the subsequent uptake of family planning methods in different outcomes under study at the associated social franchise clinics. While variation is observable in the range of positive association, the study has demonstrated that that door-to-door interpersonal communication significantly increased client volume at the associated provider facilities, for all outcomes under study.

Geography, duration, quality, and capacity of service delivery are important moderating factors that may contribute to the variation observed. Furthermore the time frame of the IPC intervention, i.e. six months, may have been less to adequately influence the cultural and gender norms that inhibit family planning use in youth, or in postpartum and post abortion periods. Beyond the propagation of norms, perceived quality, and follow-ups to reinforce messages to men and women may impact behaviour, and repeat visits by frontline workers provide an ideal mode to reinforce the messages and increase the chances of adoption.¹³ Three or more reminders increase the odds of women adopting a method postpartum,¹⁴ still individual level myths and misconceptions may continue to inhibit use.¹² Interpersonal communication interventions should increase household visits efficiency by adopting specific understanding and message protocols for different population groups through proper training and capacity building of frontline workers.

Furthermore, family planning service delivery in the postpartum, and post abortion period requires trained providers and availability of delivery equipment at the associated health facilities. Although the intervention made sure that the requisite contraceptives and

equipment is made available to the referral sites, there is a need to evaluate what impact quality of clinical training and/or non-availability of specific equipment has on some FP programmatic outcomes. The intervention did not incorporate any financial incentive or subsidy strategies like vouchers etc. to encourage FP uptake linked to a particular facility. It can also be a possibility that the clients counselled could have availed family planning methods through nearby outlets, and/or from public sector facilities.

A majority (sixty-five percent) of the providers in both groups were LHVs and CMWs, the rest being MBBS. LHVs and CMWs usually have small but embedded and more accessible practices within the communities, especially in urban slums and rural areas, which were the geographic foci of the intervention. This translates to increased familiarity, respect, and trust with the population.¹⁵ These providers are also often the first stop of poor women for their reproductive health problems due to factors of easy access, low expenses and perceived quality of care.¹⁶ Selection of providers and areas may have a larger role to play for intervention area, intensity and design in order to amplify the associated beneficial outcomes and minimize underperformance.

Demand-led family planning interventions such as interpersonal counselling household visits, in which demand generation is the driving force, are more suitable as compared to the conventional service-delivery oriented approach in underserved areas where expressed demand is low and unmet need high.¹⁷ However, behaviour change communication strategies are most effective when combined with provision of high quality and client centered service delivery through service providers in the intervention catchment areas.¹⁸ Parallel investments to increase the quality and capacity of service providers, and ensuring availability of full range of contraceptives, provides a sustainable way to increase family planning use; as compared to community mobilization interventions that facilitates clientele at clinics through financial vouchers or other financial subsidies for service delivery.

Conclusion

The study concludes that the IPC intervention has a positive and significant impact on increasing client volume for all FP related outcomes at the index health facilities. The findings underline the importance of discontinuing the one-strategy-fits-all approach for increasing impact on specific FP outcomes and in key target groups. Analysis also reveals that the impact of IPC strategies is not homogeneous across all study groups that are youth, long term method uptake, new users,

post-partum and post-abortion uptake and particularly across geographic locations such as Punjab, KPK and Sindh. Considering this, IPC intervention design needs to be tweaked according to the geographic location and user/target groups. Additionally, it is concluded that the household interpersonal communication visits and community mobilization strategies (neighbourhood meetings, community support groups etc.), although effective but are expensive. To maximize return on investment, subsequent evaluations should help determine the ideal intervention time frame required to sustain impact post-intervention.

Limitations

The study report on intervention specific secondary programme data, and the finding may not be generalized to other populations and limits our ability to make causal inferences. Absence of selection randomisation among the two groups could also have led to biases in the study.

Disclaimer: The social franchise programme and the associated interpersonal communication intervention is implemented in fifty-three districts of Pakistan by Greenstar Social Marketing through the support of the different large and small donors, and in six districts by the Bill and Melinda Gates Foundation under their flagship Naya Qadam project. General details regarding the donor programmes can be accessed through the Greenstar website, and specific queries could be addressed to the corresponding author.

Conflicts of Interest: None.

Funding Disclosure: None.

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