2009

Improving the quality of family planning and reproductive tract infection services for urban slum populations: Demand-based reproductive health commodity project

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March 2009

ACKNOWLEDGEMENTS

Population Council would like to express sincere gratitude to Canadian International Development Agency (CIDA) for their interest, collaboration and financial contribution through United Nations Population Fund (UNFPA) in carrying out the study. We gratefully acknowledge the support, commitment and technical assistance of National Institute of Population Research and Training (NIPORT), CIDA and UNFPA. We express our sincere thanks to the project partners: RTM International, ICDDR,B, and JSI Deliver.

We are deeply indebted to the service providers and fieldworkers of the participating NGOs: Shimantik and Marie Stopes Clinic. We are also grateful to the slum populations living in wards 25, 26 and 47 of Dhaka City Corporation for their cooperation.

We sincerely thank Dr. Ahmed Al-Sabir, Director (Research), NIPORT for his guidance and continued support at every step of the study. Dr. Sabir's role as Coordinator of Demand-based Reproductive Health Commodity Project (DBRHCP) deserves special thanks. We are thankful to Mr. Aminul Arifeen, Program Manager-DBRHCP, UNFPA for his continuous support in implementing the project activities smoothly.

Finally, we are grateful to Population Council colleagues for technical, administrative and logistical support. Particularly, we appreciate the efforts of Ms. Tanjina Begum in supervising field activities.

ABBREVIATIONS

ANC	Antenatal Care
BCC	Behavior Change Communication
CIDA	Canadian International Development Agency
CRHCC	Comprehensive Reproductive Health Care Center
DBRHCP	Demand-based Reproductive Health Commodity Project
FP	Family Planning
ICDDR,B	International Center for Diarrheal Diseases Research, Bangladesh
IUD	Intra-uterine Device
NGO	Non-Governmental Organization
NIPORT	National Institute of Population Research and Training
PNC	Post-natal Care
RH	Reproductive Health
RTI	Reproductive Tract Infection
STI	Sexually Transmitted Infection
TT	Tetanus Toxoid
UNFPA	United Nations Population Fund

EXECUTIVE SUMMARY

Increasing the access to quality reproductive health and family planning (FP) services for the urban slum population is a major concern for both demographic and programmatic reasons. Several non-governmental organizations (NGOs) are providing health and FP services in selected areas in cities across the country. These urban health services aim at improving access to health care services, but the thrust of these NGO clinics has been on maternal and child health. Urban slum populations do not depend as much on NGO clinics for contraceptive methods as the private sector. A major concern is that NGO clinics have not considered the quality of their FP services as a priority despite the contraceptive prevalence rate of urban slums is higher than the national average. Effective programs are yet to be implemented to address the imbalance in contraceptive method mix as the majority of modern contraceptive method acceptors use pills even though more than half have already completed their desired family size and/or state that they want no more children. It is necessary to increase the use of more effective contraception, suggesting the need for improvement in the quality of services the clients receive from NGO providers.

Efforts were made through this operations research project to improve the quality of FP and reproductive tract infection (RTI) services provided by NGO clinics. Selected NGO clinics in slums of three wards in Dhaka city received interventions. Capacity of these NGO clinics to offer high quality services to slum neighborhoods was strengthened by training of service providers, strengthening service delivery points, and improving counseling services.

The key intervention was to provide high quality counseling to ensure client satisfaction. The service providers were trained to give particular attention to follow standard screening criteria and informed counseling so that the client can select an appropriate contraceptive method. They were also sensitized to counsel clients by using the 'life cycle approach' with emphasis on the long-term and permanent methods for women who have completed their family size.

Findings suggest that though there is improvement in counseling, some service providers do not follow the standard screening criteria for modern contraceptive methods. The interventions brought improvements in the providers' competence in client screening. Evidence suggests improvements in the proportion of the clients being asked about the number of children they had (from 77 to 89 percent) and the proportion of the clients who were asked whether they wanted more children (from 46 to 55 percent). Service providers were less likely to ask the clients' reproductive intentions compared with reproductive history, both are crucial for selecting long-term and permanent methods. It is yet to be a common practice for the service providers to ask clients' medical history or health condition – slightly more than half of the clients were asked about this by the service providers, with a little change over time.

Findings also suggest a remarkable improvement in the service providers' competence in screening related to clients' fears/misconceptions about contraceptive methods – almost all the clients (97 percent) were asked this information while it was only 34 percent before the interventions. There has been a three-fold increase in the number of clients who were asked previous symptoms/signs/treatment suggestive of RTIs, yet the increased proportion is still small (29 percent), which requires the service providers to pay more attention to it.

Clients visiting clinics were offered informed counseling. Findings suggest that most of the clients were provided with information on the effectiveness of the chosen method as commonly used, how to use the method, and possible side-effects and complications. In the pre-intervention period only 28 percent of the clients were given accurate and complete information on the methods they accepted, which increased to 81 percent after the interventions. There has been a 10 percentage point increase regarding the providers' competence in giving information on other methods, however, there is scope for further improvement.

As a stepping stone to ensure an effective follow-up mechanism, increased numbers of the clients were requested to revisit the clinic if necessary and provided information on the management of side-effects of contraceptives and the opportunity for changing methods. Interventions helped service providers to use the opportunity to encourage clients to revisit the clinic for follow-up or if they experience complications/health problems. Findings show that in the pre-intervention period 46 percent of the clients were requested to revisit to get more contraceptive supplies or for stopping/changing methods, which increased to 74 percent over time. The proportion of the clients received information on the management of side-effects of contraceptives increased from 43 to 71 percent due to interventions. As a result of interventions, service providers were more likely to inform clients that they could change methods if they were not happy with the method (45 percent in the pre-intervention against 60 percent in the post-intervention).

To identify the unmet FP and RTI needs of the clients who attended the clinic for any services, a systematic screening checklist was introduced. As a result of the introduction of systematic screening, the provision of FP services during health care visit for general illnesses occurred systematically. Systematic screening was successful in identifying clients' unmet needs for FP and reproductive health services. Findings suggest that the service providers were able to provide services to the clients during the same visits they identified as unmet needs. Approximately, 80 percent of the clients were provided services immediately, given appointment and/or referred. This indicates that by using systematic screening the utilization of the clinics would be much higher and cost-effective.

Interventions improved providers' competence in using behavior change communication (BCC) materials during counseling and distribution of BCC materials. The proportion of the cases where service providers used BCC materials increased from 13 to 51 percent. While no client was given any BCC materials to take home in the pre-intervention period, 52 percent of the clients were given BCC materials to take home in the post-intervention period. Yet, there is much scope for improvement in using BCC materials during counseling among clients.

Findings also indicate improvements in the providers' interpersonal relations with clients, which is necessary to generate confidence among clients to adopt/continue contraceptive use as well as to create a positive impression of the service quality in the community. Analysis of the clients' opinions on the overall quality of services reveals that interventions brought improvements in terms of greeting clients properly, requesting to take a seat, treating clients with dignity and respect, and clients feeling comfortable. Regarding ethical issues, the improvements were remarkable. The proportion of the clients reporting privacy ensured during counseling increased from 68 to 88 percent. Sixty-five percent of the clients believed that the provider would keep their information confidential, which increased to 81 percent due to interventions, suggesting that service providers earned the trust and acceptability of the clients while providing services. Findings also suggest a 48 percentage point increase in the number of clients considering waiting time as reasonable, which

rose to 89 percent after interventions. Interventions also brought changes in the behavior of other staff, who became more client-friendly.

Improvement in the quality of FP and RTI services was expected to result in more rational use of FP methods. Attempts were made to address the FP needs of married women of reproductive age based on their life cycle. Since RTI problems could have a significant impact on the use of IUD, attention to the diagnosis and treatment of these problems was increased. Despite all these efforts, the use of long-term and permanent methods was low.

The most common reason for which people do not prefer long-term and permanent methods is fear of using these methods. Misconceptions constitute fear for these methods. Fears of losing potency and ability to work are the commonly described reasons for which people are not interested to accept sterilization. If women use pills or injectables for a long time without major complications, they think these are suitable for them and hence do not perceive the need to switch to IUD, Norplant or sterilization that requires medical interventions. Deficiency in the complete knowledge about methods is a barrier to accept long-term and permanent methods. Although the respondents know about IUD and Norplant, they do not have adequate knowledge about the process of insertion and removal/reversibility of these methods.

Most of the respondents explained that their husbands did not like long-term and permanent methods. On the other hand, women considered sterilization as a responsibility of being a wife. Male participation is important with regard to making decisions for a female client. Service providers hardly inform married women about male methods, and thus miss the opportunity to request their husbands to visit the clinic for FP and reproductive health services. In addition, there is a lack in service provision to encourage women to discuss about FP with their husbands.

Supply problem of contraceptive methods is one of the main barriers to ensure quality service. Supply always falls short of demand: the clinics get the contraceptive methods once a month, which are exhausted in two weeks. Shortage of temporary contraceptive methods limits clients' choice of methods. On the other hand, clients, who visit the clinic for contraceptive methods but fail to get their desired methods, may lose trust on the clinic.

Lessons learned

- Training of service providers is not synonymous with quality assurance. Training contributes to improvement of services, but for achieving expected level of quality in services effective supervision and encouragement from senior officials is necessary.
- Service providers need to screen FP clients based on their needs and life cycle considerations to exclude the client who is not eligible for a particular contraceptive method and to select an appropriate contraceptive method for the client. In particular, couples who have completed their desired family size or need long-term spacing should be motivated to use long-term and permanent methods. Stronger efforts are needed to sensitize service providers to the needs and cultural traditions of the slum people they serve.
- Clear, accurate and complete information about the range of FP methods not only helps clients make an informed choice but also decreases the discontinuation rate. Service providers should be sensitized and motivated to give complete information to clients.

- Introduction of systematic screening has been successful in identifying clients' unmet needs and subsequently providing services other than the service explicitly requested by the clients. However, experience with the systematic screening form was mixed. Service providers viewed screening as an additional work and did not complete the form regularly, suggesting the need for effective supervision while initiating this effort. Encouragement from senior officials of the clinic can also help strengthen compliance.
- Similarly, service provider's unwillingness in using BCC materials during counseling was identified, which needs special attention of the service providers and effective supervision.
- Although some women want to have long-term or permanent methods, their husbands do not allow them to do so. Moreover, women consider sterilization as a responsibility of being a wife. To increase the use of long-term and permanent methods, male participation should be ensured in FP and couple's reproductive health, which can be increased through couple counseling and targeted BCC activities.
- Fear and misconceptions are prevalent about IUD, Norplant and sterilization. Clients should get clear and complete information about these methods. Instructive counseling can reduce fear and increase the level of acceptance of long-term and permanent methods.
- Problems in supplying different types of modern contraceptives exist. Keeping a buffer stock of contraceptives can ensure continuous supply, enabling the service providers to offer an effective and uninterrupted service.
- Clinic services can further be improved if an adequate number of trained service providers is available. In the interim period, assignments can be redistributed among service providers to manage the client load.

CONTENTS

INTRODUCTION

Slum populations are the fastest growing segment of the urban population in Bangladesh. In Dhaka, the estimated slum population in 2006 was 3.4 million, which is more than twice the slum population estimated in 1996 (CUS, NIPORT, and MEASURE Evaluation 2006). Slums are characterized as predominately poor housing, high population density and room crowding, poor environmental services (especially water and sanitation), low economic status, and lack of security of tenure (CUS, NIPORT, and MEASURE Evaluation 2006). The health indicators of these urban poor are worse than those of the rural poor because of poorer living conditions, and limited access to health care services.

Increasing the access to quality reproductive health and family planning (FP) services for the urban slum population is a major concern for both demographic and programmatic reasons. Slum dwellers do not have easy and affordable access to health care facilities for two reasons: (i) the urban population does not fall under the purview of the government primary health care program; and (ii) the slum population has limited access to the private sector health care because of its high cost. To address the lack of health care services for the urban poor, several non-governmental organizations (NGOs) are providing health and FP services in selected areas, with the financial and technical assistance from development partners. These urban health services aim at improving access to health care services, but the thrust of these NGO clinics has been on maternal and child health. With the backup referral system of these NGO clinics, certain services such as FP and immunization have been brought to the community through satellite clinics. Community outreach services are also in place to publicize available services as well as to provide necessary information.

Bangladesh has made remarkable success in achieving quantitative targets in the FP program. The contraceptive prevalence rate is 56 percent. The majority of the acceptors rely on contraceptive pills followed by injectables. The use of long-term and permanent methods is low (NIPORT, Mitra and Associates, and Macro International 2009). A similar pattern of contraceptive use in urban slum areas was reported by the Urban Health Survey 2006. Half of the method acceptors used pills, one-fourth used injectables, and almost one in fifteen clients accepted sterilization (NIPORT, Measure Evaluation, ICDDR,B, and ACPR 2008). Findings from another survey conducted in the slum areas of Khilgaon and Rayerbazar in Dhaka city show that 59 percent of the married women of reproductive age were using contraceptive methods, with most popular method being pills (34 percent) followed by injectables (9 percent) (ICDDR,B 2007). Less than one percent of the eligible couples accepted permanent methods and nearly three percent were using long-term methods (ICDDR,B 2007). The dominance of few selected methods reflects the limited information that clients receive from providers in the way of method choice.

The key issue that emerged from this information is the emphasis of FP activities on the number of acceptors. There is little emphasis on the balance in the effective use of contraceptives according to the life cycle needs of clients. The low use of long-term and permanent methods can be attributed to poor service provision or to cultural norms (Rahman et al. 2006). For example, there is lack of attention of service providers on the management of reproductive tract infections (RTIs) while delivering Intra-uterine Device (IUD) to clients. Although service providers are knowledgeable about different contraceptive methods, how the method works, and their side-effects, they convey little of this information to their clients.

Quality of care has been a neglected dimension of FP services in Bangladesh. Implementation of the national FP program is reflected in the system of targets for workers as basic performance indicators, the emphasis of quantity over quality, and the corresponding low priority attached to the needs of individual clients. Similarly, in urban slum areas, a major concern is that NGO clinics have not considered the quality of their FP services as a priority. Furthermore, effective programs are yet to be implemented to address the imbalance in contraceptive method mix. Given that the urban slum population is not served by the Ministry of Health and Family Welfare and the contraceptive prevalence rate of urban slums is higher than the national average, there is a need to implement demand-based, client-centered FP interventions in slum areas through the existing NGO service delivery system.

Rationale

The issue of quality of care is yet to become a key program thrust in Bangladesh. With three decades of effort, the FP program remains characterized by substantial achievement but there are still some unfulfilled promises. Since independence, the government's population policies focused on the need to reduce population growth. Considerable attention and resources have been devoted to the structure, organization, and service delivery of the FP program. The intention was to achieve quantitative targets in terms of contraceptive prevalence and method mix. However, following the 1994 International Conference on Population and Development (ICPD), Government of Bangladesh has undertaken a process to reorient the FP program towards a client-centered approach, emphasizing the quality of care and the clients' broader reproductive health needs. Programs were redesigned to meet clients' needs rather than to achieve demographic targets (Rob, Talukder, and Ghafur 2006).

High quality services are considered to be integral to the overall reproductive health needs of individual clients. Over the past decade, work in this area has been guided by the Bruce (1990) framework, which outlines six elements of quality – choice of method, information to the client, technical competence, interpersonal relations, follow-up and continuity mechanisms, and constellation of services. Several countries have adopted variations of this theme. The Bruce framework assesses quality from the client's perspective. There is evidence that improvements in these various dimensions of care result in gains at the individual level. An improvement in the quality of services is expected to result in a greater and sustained use of contraceptive methods (Visaria 1999).

Choice is a fundamental element of providing quality services. A pattern of limited contraceptive choice to clients, with options limited to pills and injectables, and to a lesser extent sterilization was observed both at the national level and in urban slum areas in Bangladesh (NIPORT, Mitra and Associates, and Macro International 2009; NIPORT, ICDDR,B, Measure Evaluation, and ACPR 2008). Currently, the majority of modern contraceptive method acceptors use pills even though more than half have already completed their desired family size and/or state that they want no more children, which reflects the weakness in the FP program efforts (NIPORT, Mitra and Associates, and Macro International 2009). Encouraging clients to consider long-term or permanent methods for themselves and their spouses is a part of service provision that is currently lacking.

There is poor knowledge of proper use, risks, and benefits of contraceptives among method acceptors. Lack of information is a reason for discontinuing use, and belief in rumors may be a

deterrent to use contraceptives (Bruce 1990). Training and sensitization will enable service providers to provide accurate and detailed information on all modern contraceptive methods effectively at a level the clients can comprehend.

Persistent concerns related to side-effects of FP methods and negative perceptions related to long-term and permanent methods reflect the lack of quality in the services provided to clients. Data from a study conducted in selected slums of Dhaka city reveal women's concerns about side-effects of FP methods as well as fear and misconceptions about permanent methods (Population Council 2006). Concerns or negative perceptions can easily be refuted with facts. It will require careful listening and thoughtful counseling to overcome these fears.

Women frequently discontinue pills, injectables and IUDs because of side-effects and health concerns. Discontinuation is more pronounced in the case of IUD. National-level data indicate that 64 percent of IUD users discontinued because of side-effects or health concerns (NIPORT, Mitra and Associates, and ORC Macro 2005). Since many of the side-effects have to do with preexisting conditions caused by RTIs, it is critical to give treatment of these infections before prescribing a contraceptive method. It is to be noted that women are concerned about discharge problems which are symptomatic of RTIs (Rahman et al. 2006). The prevalence of infections may limit the acceptance of IUDs. Effective diagnosis and treatment of RTIs is an important reproductive health issue for which service providers need to be well trained.

Given method-related complications as well as associated reproductive morbidity, client follow-up represents an important component of high quality services. Post-acceptance complications appear to be common and to have serious implications for women's lives and well-being (Barge and Lakshmi 1999). Whether these problems are actual or perceived, when combined with low level of follow-up, they have serious implications for keeping the clients' trust in the services offered. Hence, in addition to counseling and providing a method, another major responsibility of service providers is to ensure follow-up care.

In urban areas, the absence of appropriate primary health care service facilities in the public sector is complemented by NGO clinics through providing reproductive health and FP services. As noted earlier, the emphasis of NGO clinics is on quantity rather than quality. The Urban Health Survey 2006 observed that the private sector is the major source of FP methods in slums in big cities. Half of the acceptors obtain FP methods from private sources followed by 22 percent from NGO providers (NIPORT, Measure Evaluation, ICDDR,B, and ACPR 2008). The quality of services provided by NGOs can be improved.

In view of the above observations, the Population Council conducted an operations research study to improve the quality of FP and RTI services provided by the urban health network in slums. This was one of the four operations research studies under the Demand-based Reproductive Health Commodity Project (DBRHCP), which was implemented by National Institute of Population Research and Training (NIPORT), with financial assistance from Canadian International Development Agency (CIDA) and technical assistance from United Nations Population Fund (UNFPA). DBRHCP was implemented through a partnership of implementing agencies. As an implementing partner, Population Council was responsible for identifying innovative and effective service delivery models for increased use of FP and reproductive health services through operations research in the selected project areas, while RTM International was responsible for capacity building of service providers, strengthening facilities, and behavior change communication (BCC)

interventions. JSI Deliver was responsible for strengthening reproductive health logistics management system and ICDDR,B for carrying out monitoring and evaluation activities to measure the impact of the project.

Objectives

The aim of this study was to test a service delivery model to deliver client-centered FP and RTI services in order to improve the reproductive health of couples living in urban slums. The specific objective was to improve the quality of FP and RTI services by:

- Improving the capacity of service providers,
- Strengthening service delivery points, and
- Improving counseling services.

METHODS

Study design

This study used a separate sample pretest-posttest design with selected NGO clinics providing services in slums of Dhaka city.

The experimental group had a six-month intervention, which has been represented by X (Box 1). Three interventions namely capacity building of service providers, strengthening the service delivery points, and quality counseling were implemented. O_1 represents the pre-intervention observation while O_2 represents the post-intervention observation. Any differences observed between O_1 and O_2 is attributed to the effect of interventions.

Box 1 Study design

		Six Months	
Pretest group	O_1	X	
Posttest group			O_2

Selection of sites

Considering the concentration of slums with low threat of eviction and presence of NGO health service network, wards 25, 26 in Khilgaon and ward 47 in Mohammadpur in Dhaka city were selected for the study. Dhaka city is divided into 90 administrative units termed as 'ward'. Two sites (wards 25 and 26) are located in the east and the other (ward 47) in the west part of Dhaka city. These three sites have approximately 29,904 married women of reproductive age living in slums.

Shimantik clinic in Khilgaon and Marie Stopes clinic in Mohammadpur were selected as intervention clinics, because only these two clinic networks provide full range of FP services along with diagnosis and treatment of RTIs with functional referral system. Shimantik and Marie Stopes clinics have been in operation for several years in urban slums. Both are reputed NGOs and their services are valued by the community. Both the clinic networks have three levels of service delivery structure: Comprehensive Reproductive Health Care Center (CRHCC), static clinic, and satellite clinic. The

apex facility in both the networks is the CRHCC, which serves as the referral center for the static and satellite clinics.

In each ward of Khilgaon, Shimantik service delivery network includes a static clinic and 24 satellite clinics. One static clinic and four satellite clinics were selected from each of the selected wards of Khilgaon. Satellite clinics were selected considering the permanence of clinic site, location and client flow. On the other hand, in ward 47 of Mohammadpur, Marie Stopes service delivery network has 2 static clinics and 18 satellite clinics; 9 satellite clinics are attached to each static clinic. From this ward, one static clinic and four satellite clinics were selected. Thus, a total of 3 static clinics and 12 satellite clinics in the catchment area of wards 25, 26 and 47 were included in the study.

Sample size

The target population was married women aged 18-45 years who had received services from the selected static and satellite clinics and lived in the catchment slums of these static and satellite clinics. Exit interviews were conducted with women aged 18-45 years after they had received services from selected 3 static and 12 satellite clinics.

The sample size was estimated to be 600 married women aged 18-45 years who received FP or RTI services from the selected clinics. The total study sample was distributed by clinic type (static and satellite clinic). It was planned to conduct 100 exit client interviews per static clinic and 25 per satellite clinic. Thus, from 3 static clinics and 12 satellite clinics, a total of 600 married women aged 18-45 years were to be interviewed after they had received services at the clinics. In the pre-intervention assessment, 496 married women aged 18-45 years were successfully interviewed and 540 women were interviewed in the post-intervention assessment. The reason for shortage in the sample was the unavailability of respondents within the specified time. Both the surveys continued for one-and-a-half months each. Exit client interview was designed to collect information about the accessibility to and quality of FP services received from the facility. Information on accessibility to and quality of RTI services was also collected.

Data analysis

Bi-variate analysis was done for exit client interviews. The first set of analysis compares the characteristics of respondents by site and survey period. The second set of analysis compares baseline and endline level of self-report of opinion about different aspects of the quality of services. Client-provider interactions were observed for a week at each clinic to assess the quality of services. Ninety-six client-provider interactions were observed in the pre-intervention assessment compared to 93 in the post-intervention assessment. Bi-variate analysis was done for client-provider interactions, which compares baseline and endline level of observation of different aspects of the service and its quality.

Qualitative data were collected through in-depth interviews. To complement the quantitative survey, 20 in-depth interviews with married women of reproductive age were conducted to understand their attitudes towards long-term and permanent methods, who were selected from exit client respondents. The major topics covered in in-depth interviews were knowledge about long-term and permanent methods, misconceptions, and reasons for not opting for long-term and permanent methods.

PREPARATORY ACTIVITIES

The study was conducted in three phases – preparatory, intervention, and evaluation. Activities undertaken in the preparatory phase included conducting pre-intervention assessment on the training needs of the service providers and fieldworkers as well as on the facility readiness, and development of BCC materials and systematic screening form.

Identifying the gap in knowledge of service providers and fieldworkers

Nineteen service providers working at the NGO clinics in the study areas were interviewed to understand the types of training they received on FP and RTI services, the quality of care they were capable of providing, and how appropriate their training was (Box 2). Most of them have worked in the field of family planning for two years or more. It was observed that about half of the providers received training on contraceptive methods and management of their side-effects, and client selection criteria. Only four service providers had training on the use of BCC materials on FP, quality of care issues, interpersonal communications and client's rights. None had received any training on systematic screening. Majority of the service providers thought that the training was inadequate.

Box 2 Number of service providers

Category	Ward 25	Ward 26	Ward 47	Total
Doctor	1	1	1	3
Counselor	1	1	1	3
Paramedic	4	5	4	13
Total	**6**	**7**	**6**	**19**

Similarly, 26 fieldworkers were interviewed to assess their training needs (Box 3). More than half of them had less than two years of work experience. Among them, slightly more than half of the workers reported having training on contraceptive methods and management of their side-effects, client selection criteria, and use of BCC materials. None had any training on systematic screening, client's rights and quality of care issues. Almost all the fieldworkers reported the inadequacy of training.

Box 3 Number of fieldworkers

Category	Ward 25	Ward 26	Ward 47	Total
Field supervisor	1	1	1	3
Service promoter	4	4	3	11
Outreach worker	4	4	4	12
Total	**9**	**9**	**8**	**26**

Assessment of the training needs on RTI management reveals that 11 out of 19 service providers received training on RTI after joining their current job. Among them, almost all providers received training on RTI issues, RTI counseling, and syndromic management. Five service providers received training on the use of BCC materials on RTI, although the training was inadequate as reported. Among 26 fieldworkers, only 3 (2 field supervisors and 1 service promoter) were provided RTI training after joining their current job. These above issues were considered in designing the training program and developing BCC materials under the study.

Identifying readiness of service delivery points

Information was collected from static and satellite clinics to assess the readiness of these service delivery points to provide quality FP and RTI services. The physical structure of all static clinics was found in good condition. To ensure privacy during services, all static clinics have separate rooms for

the counselor and the paramedic. Two out of three static clinics had a board in the waiting space, showing the location and days of the satellite clinics so that clients visiting the clinic could learn whether they had any satellite clinic near their residence. Signboard was present in all the static clinics, but it had no information on the opening or closing time. Moreover, one of the signboards did not even indicate that FP and RTI services were available at the clinic.

All satellite clinics hang a banner during session, but the services being offered and opening and closing time were not mentioned in the banner. Among the 12 satellite clinics, eight of them were held in someone's houses, two in community places, and the remaining two satellite clinics in open space. Majority of these clinics did not have the required furniture (e.g., chair and table).

The major problem reported by the service providers as well as observed in all the clinics is the shortage of contraceptives, and flipcharts and leaflets on FP and RTI. There was no mechanism in the service delivery system to identify clients' unmet needs for FP and RTI services. In addition, there was no mechanism to contact/request female clients' husbands to receive reproductive health services from the clinic.

Development of BCC materials and systematic screening form

It was observed that before interventions the NGO clinics hardly used any BCC materials for counseling and health education services either in clinic or for distribution among clients. A flipchart containing basic information of contraceptive methods was developed and distributed to all service delivery points for use during counseling. Another flipchart containing specific information about human reproductive system, symptoms, transmission and treatment of RTIs was developed and distributed. Method-specific leaflets were developed and provided to the service delivery points for distribution to potential clients to take home for further understanding and ready reference.

A systematic screening form was developed to identify clients' unmet needs for FP and RTI services, as well as to provide services during the same visit. In addition, a spouse/partner invitation slip was developed to request husbands of married women to seek FP and RTI services from the clinic on a specific date.

IMPLEMENTATION OF THE INTERVENTIONS

On the basis of the pre-intervention assessment for training needs of service providers and the readiness of the selected service delivery points to provide quality FP and RTI services, interventions were designed. Intervention activities included capacity building of service providers, strengthening service delivery points, and delivering improved services.

Capacity building of service providers and fieldworkers

a) Orientation and team building workshop: A one-day workshop was organized at each static clinic to orient the service providers and fieldworkers about the interventions and the programmatic issues. The workshop also focused on building team spirit and enabling staff members to appreciate and cooperate with each other to provide quality services to the clients.

b) Training on RTI management, FP and counseling for service providers: The doctors and paramedics of the study clinics received a five-day training on syndromic management of RTI/STI at the Skin and Venereal Disease Department of Dhaka Medical College Hospital. Professors and specialized doctors of this department conducted the training. The training was divided into two parts – theoretical and practical (hands-on). The training sessions included basic knowledge and syndromic management of RTIs, particularly the identification, counseling, treatment and referral of RTI problems. Among the various RTI problems, vaginal discharge, lower abdominal pain, genital ulcer, urethral discharge, scrotal swelling, inguinal bubo, and neonatal conjunctivitis were discussed elaborately and demonstrated in practical sessions. The comparison of the pre- and post-training tests shows that participants had some knowledge on most of the issues, which has been improved through the training.

In addition, the doctors, paramedics and counselors of the study clinics received training for two days on FP counseling. The training sessions included: comprehensive knowledge on modern contraceptive methods including effectiveness, advantages, disadvantages and side-effects; method selection criteria; counseling techniques; quality of care issues; client's rights; systematic screening; and use of BCC materials.

(c) Training on FP, RTI and counseling for fieldworkers: All the field supervisors, service promoters and outreach workers of the study clinics participated in a three-day training on FP and RTI issues. Basic issues of modern contraceptive methods including effectiveness, advantages, disadvantages and side-effects, method selection criteria, and emergency contraceptive pill were discussed elaborately in the training sessions. The training also included basic concept of RTIs and identification and referral of RTI problems. Importance of follow-up visits, referral, client's rights, counseling techniques, and use of BCC materials were also discussed.

Strengthening service delivery points

On the basis of the facility readiness assessment, specific improvements of the clinics have been made to ensure that an enabling environment exists for the service providers. The clinics were provided with newly printed BCC materials – flipcharts and leaflets on FP and RTIs. In addition, an RTI manual was given to the providers to reinforce their knowledge and for easy reference. Systematic screening form and spouse invitation slip were introduced in all clinics. Signboards of the

static clinics were modified with a list of services and opening and closing time. A list of satellite clinics with session days was prepared and displayed in the waiting room of static clinics. Furthermore, a list of referral points was also displayed.

For satellite clinics, a new banner was developed with a list of key services and opening and closing time to capture the attention of the local population. Indication tinplates were attached in the poles in the busy and strategic location for attracting more clients as well as guiding them to the satellite clinics. Satellite clinics were strengthened with required equipment (e.g., weight machine, blood pressure machine, thermometer and stethoscope) and furniture (e.g., chair and table).

Attempts were made to resolve the problem of supplying contraceptives, yet the problem still persists. The clinics get the contraceptive methods once a month, which is not adequate to meet the demand of the FP clients.

Delivering improved services

When a new client visits a clinic for FP services, both standard screening and informed counseling are critical issues for providing quality services. Counseling of clients is one of the most important factors for acceptance, continuation and satisfaction with a modern contraceptive method. The service providers were trained to counsel clients properly. The trained providers were requested to give particular attention to informed counseling and to follow standard screening criteria to help client select an appropriate contraceptive method.

Screening clients properly. Side-effects often arise because standard screening criteria for modern contraceptive methods are not followed. Screening of a client is necessary to exclude the client who is not eligible for a particular contraceptive method. The providers were sensitized to strictly adhere to the FP screening criteria and to counsel clients by using the 'life cycle approach' with emphasis on the long-term or permanent methods for women who have completed their desired family size.

Counseling new clients. New clients visiting static and satellite clinics were offered counseling through the GATHER approach. This counseling approach has six elements or steps. Each letter in the word GATHER stands for one of these elements: Greet, Ask, Tell, Help, Explain, and Request for Follow-up. The steps of this approach are as follows:

- Treat each client with respect and courtesy, irrespective of their age, socioeconomic status, or sexual and reproductive health behavior.
- Ask the client questions, listen, and respond to her particular needs, concerns, and situation.
- Provide information important to both the client's decision and the client's own needs, which will help clients make informed choices and good decisions.
- Discuss with each client, her plans and family situations as well as the results of each possible choice.
- Explain effectiveness of the chosen method as commonly used, how to use the method, its advantages and disadvantages, and possible side-effects and complications. Help clients remember instructions.
- Request the client to revisit for routine follow-up or supplies, or for medical reasons, or if she has any problems.

Counseling by using the GATHER approach was expected to help clients make informed choices, which would ultimately result in longer and more effective use of FP methods.

Providing full information. Clients frequently receive limited information on side-effects of contraceptives, and providers deliberately withhold such information because of the fear of deterring them from accepting contraception (Levine et al. 1992). Service providers were trained to provide full information on a method and requested to make clear that the use of a contraceptive method has side-effects beyond simply regulating fertility.

Using BCC materials. Another major intervention of the study was to ensure that service providers used and distributed BCC materials among clients. Two types of BCC materials – flipcharts and leaflets – were used. Service providers used flipchart to educate clients about FP methods and services, and symptoms, transmission and treatment of RTIs. Each eligible woman, visiting a static or a satellite clinic, was given leaflets to take home. For those who cannot read, the provider explained what is written on the material.

Particular attention was given while counseling on long-term and permanent methods, since apprehensions and misconceptions are prevalent about IUD and sterilization. Women who intended to accept an IUD or sterilization was shown graphics about the entire process of IUD insertion and sterilization. Specific information (with visuals) about female anatomy was provided.

Emphasizing male involvement. Service providers were requested to distribute invitation slips for clients' husbands. As part of a process of involving men in FP and couple's reproductive health, service providers' capacity was enhanced: (i) to encourage women, who expressed reluctance to use a method themselves or who had negative experience with methods, to discuss FP with their husbands; and (ii) to inform married women about male methods and request their husbands to visit the clinic for services.

Identifying unmet needs. In the existing system, there is no opportunity to identify clients' unmet needs. The clients generally get the services they request, providers do not attempt to identify and meet clients' additional health care needs. Systematic screening method has been successfully used in many countries and has been shown to increase the use of clinic services. A systematic screening checklist was introduced to identify the unmet FP and RTI needs of the clients who attended the clinic for any services. Usually the service providers deliver only the service explicitly requested by the client. But with the introduction of systematic screening checklist, all the clients irrespective of primary purpose of visit were asked about their FP and RTI needs. A client who did not spontaneously express an interest in FP was asked if she had any FP need. On the basis of the screening, the clients were provided with necessary services or referred to other facilities for their needs or the problems identified.

UTILIZATION OF SERVICES AND QUALITY OF CARE

The effect of interventions was assessed by using pre-intervention and post-intervention data. The pre- and post-intervention data were collected through exit client interviews and observation of client-provider interactions.

Background characteristics of women

Table 1 shows age distribution of women according to areas and surveys. There was no substantial difference in women's age in the baseline and endline surveys. The mean ages of women in baseline and endline surveys were 27 and 28 years respectively. In particular, the proportion of women varied noticeably in the younger age groups between surveys, and variations tended to decline between surveys with the increase of age. In the endline survey 5 percent of the women were aged under 20 compared to 11 percent in the baseline. The proportions in the older age groups in both surveys were roughly equal.

Table 1 Age of women and husbands according to area and survey (in percent)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Age of women (years)								
<20	7.6	2.3	11.8	7.4	12.7	5.0	10.7	5.0
20-24	31.2	30.5	36.1	20.3	36.9	35.4	34.7	28.1
25-29	25.9	32.2	29.0	29.7	22.5	32.3	25.8	31.3
30-34	20.0	17.5	10.6	23.8	14.0	13.0	14.9	18.6
35-39	8.8	11.8	8.3	12.4	10.8	10.6	9.3	11.7
≥40	6.5	5.7	4.2	6.4	3.1	3.7	4.6	5.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**
Mean	**27.5**	**27.6**	**26.0**	**28.1**	**26.1**	**26.5**	**26.5**	**27.5**
SD	6.4	5.8	6.3	6.4	6.3	6.0	6.4	6.1
Husbands' age (years)								
20-24	5.3	2.3	4.7	4.5	3.8	2.5	4.6	3.1
25-29	17.0	10.7	24.9	15.2	26.2	23.0	22.6	16.1
30-34	24.7	31.1	24.3	22.3	24.8	26.7	24.6	26.6
35-39	21.2	25.4	18.9	22.8	19.1	18.0	19.8	22.2
40-44	14.7	14.1	14.8	13.4	14.0	12.4	14.5	13.3
≥45	17.1	16.4	12.4	21.8	12.1	17.4	13.9	18.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**
Mean	**35.4**	**36.3**	**34.0**	**36.2**	**34.0**	**35.7**	**34.5**	**36.1**
SD	7.6	9.7	8.1	8.9	7.6	11.6	7.8	10.0

Similarly, the age of women's husbands did not vary between surveys (35 vs. 36 years). The difference of mean ages between women and their husbands was about 8 years during both the survey periods. Findings indicate no remarkable variations in the distribution of women's husbands across study areas according to age groups except the little difference observed for the 25-29 and 45 and above age groups (Table 1).

Table 2 shows the distribution of women of reproductive age according to education, husband's education, occupation and husband's occupation. Educational status of women reflected that 40 percent had no education, 33 percent had primary education and 8 percent had secondary or higher education. A comparison between areas indicates that the proportion never attended school is lower in ward 25. Education level of husbands was higher than their wives. For example, the proportion having completed secondary and higher level of education was more among husbands than their wives (18 vs. 8 percent). In addition, the proportion of husbands having no education was lower than their wives. No substantial difference in the educational level of women's husbands was observed between the surveys.

Table 2 also suggests that one-sixth of women were gainfully employed in service, skilled labor including garments, and unskilled labor. Both the survey findings reveal that three-fourths of women were housewife, followed by housemaid. However, data reveal some disparities between areas according to the nature of occupation.

Table 2 Socioeconomic characteristics of women and husbands (in percent)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Years of schooling (women)								
Illiterate	34.7	31.6	42.0	46.5	44.6	38.5	40.3	39.3
Primary incomplete	22.4	14.2	16.0	17.3	22.2	24.9	20.2	18.5
Primary complete	32.9	42.9	35.5	30.7	26.8	29.2	31.9	34.2
SSC	5.9	4.5	5.3	3.0	4.5	3.1	5.2	3.5
HSC and higher	4.1	6.8	1.2	2.5	1.9	4.3	2.4	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**
Years of schooling (husbands)								
Illiterate	28.9	24.9	35.5	38.6	34.4	34.8	32.9	33.0
Primary incomplete	7.6	11.9	15.4	11.4	15.9	11.2	12.9	11.5
Primary complete	43.5	38.4	34.3	30.2	33.8	41.0	37.3	36.1
SSC	8.2	10.7	10.7	9.9	8.3	6.8	9.1	9.3
HSC and higher	11.8	14.1	4.1	9.9	7.6	6.2	7.8	10.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**

(Table continues on the following page.)

Table 2 (Continued)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Occupation of women								
Housewife	70.0	79.7	81.1	71.7	77.1	70.8	76.0	74.1
Housemaid	13.5	7.9	8.3	8.4	10.8	11.2	10.9	9.1
Garment worker	5.3	4.5	5.3	9.4	2.6	3.1	4.5	5.9
Handicrafts	2.4	2.3	-	4.5	1.3	1.9	1.2	3.0
Service	2.4	0.6	0.6	0.5	4.5	5.0	2.4	1.9
Others*	6.4	5.0	4.7	5.5	3.7	8.0	5.0	6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**
Husbands' occupation								
Rickshaw puller	17.1	20.3	18.3	23.8	25.5	28.0	20.2	23.9
Small business	20.0	25.4	23.1	20.8	23.6	16.8	22.2	21.1
Service	25.9	20.9	19.5	11.9	15.9	14.9	20.6	15.7
Driver	11.8	16.4	13.0	12.9	17.2	14.3	13.9	14.4
Skilled laborer	11.2	6.8	11.8	13.4	2.5	9.9	8.7	10.2
Day laborer	4.1	2.3	5.9	4.5	8.3	8.1	6.0	4.8
Garment worker	3.5	4.0	3.0	5.9	1.9	2.5	2.8	4.3
Others**	6.4	3.9	5.4	6.8	5.1	5.5	5.6	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**

* Others include: Tailor, tutor, vendor, small business, day laborer, cleaner, and cook
** Others include: Unemployed, retired, hawker, broker and cook

Occupations of the husbands were different in nature. Rickshaw pulling was most dominant, followed by small business/vendor, service and driver (Table 2). It was found that three-fourths of the husbands were involved in these professions. Roughly 15 percent of the husbands were employed in skilled labor including garments. The proportion of husbands earning as day laborer was small. However, the nature of occupation did not vary between surveys.

Demographic characteristics of women

Demographic characteristics of the women with respect to the parity, desire for additional child, and unwanted pregnancy reveal that on all these parameters both the survey findings did not differ noticeably. The mean number of children born for women interviewed was 2.2, while currently married women have on average 2.7 children nationally. Nearly one-fifth of the women said that their last child was not wanted then. Roughly two-thirds women did not want any additional child (Table 3).

Table 3 Demographic characteristics of women (in percent)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Number of living children								
0 - 1	26.9	33.9	32.6	28.3	33.6	38.7	30.9	33.4
2	34.1	38.4	36.1	32.3	40.0	35.0	36.7	35.2
3	19.8	14.7	20.5	26.8	15.8	17.5	18.8	20.0
4+	19.2	13.0	10.8	12.6	10.6	8.8	13.6	11.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	2.4	2.1	2.1	2.3	2.1	2.0	2.2	2.2
Last child not wanted	21.6	13.0	17.5	22.2	14.5	17.5	17.9	17.8
Did not want additional child	68.8	63.8	55.6	67.8	56.7	55.3	60.5	62.8
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**

Purposes of clinic visit

Using exit client interview data the purposes of clinic visit were analyzed with no marked change over time. Before the interventions 24 percent of the married women received FP services for the first time from the clinics, which was 21 percent after the interventions. The proportion of the clients who came to the clinic for re-supplies of contraceptives increased from 49 to 59 percent during the same period. However, the proportion of the clients who came for switching to new methods decreased from 11 to 8 percent over time. Nine percent of the clients visited the clinic for some kind of RTI management before the introduction of interventions, compared to six percent after the intervention (Table 4).

Table 4 Percent distribution of the clients according to reasons for visiting the clinic

Main reason for visiting clinic	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Receive FP service for the first time	25.8	23.2	26.0	21.8	19.7	17.4	24.0	20.9
Get re-supplies of FP methods	44.7	52.5	41.4	58.8	60.6	67.1	48.6	59.3
Have follow-up visits	1.2	0.6	0.6	3.5	-	-	0.6	1.5
Restart the same contraceptive method use	1.8	1.7	5.3	0.5	3.2	1.2	3.4	1.1
Switch contraceptive method	11.8	7.9	16.0	10.9	5.7	3.1	11.3	7.6
Receive services for side effects management	4.7	6.2	1.2	2.0	2.5	1.9	2.8	3.3
Receive information or treatment of RTIs	10.0	7.9	9.5	2.5	8.3	9.3	9.3	6.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	**170**	**177**	**169**	**202**	**157**	**161**	**496**	**540**

Quality of care

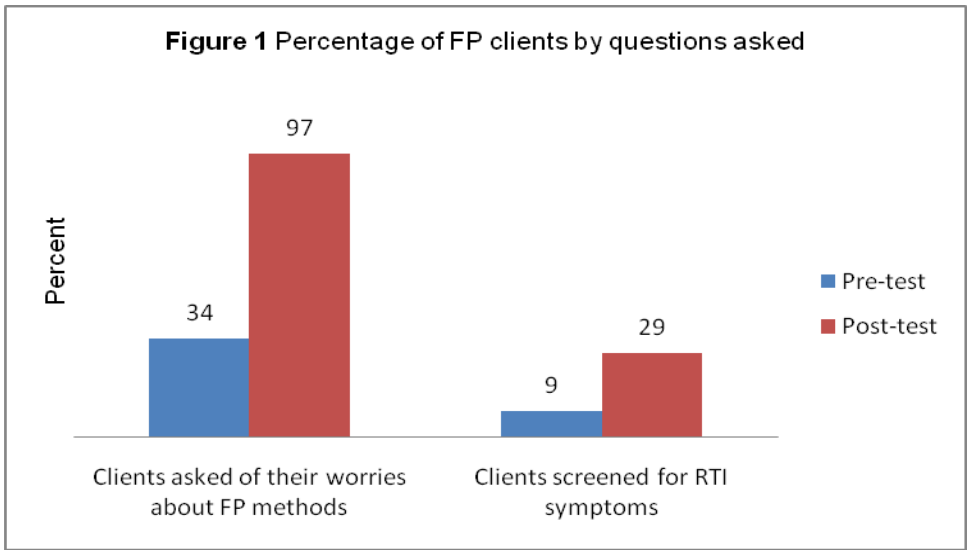
Major quality issues that the NGO clinics addressed were strict adherence to standard screening of clients, informed contraceptive choice to couples who wish to space or limit childbearing, identifying unmet needs, use of counseling tools, and the nature of client-provider interactions.

Provider competence

When a new client visits a clinic for FP services, both standard screening and informed counseling are critical issues for providing quality services. The following discussions focus on these issues.

The interventions brought improvements in the providers' competence in client screening. Findings from the exit client interviews with the new FP clients show that the proportion of the clients being asked of their reproductive history (i.e., the number of children the client has) increased from 77 to 89 percent due to interventions. Findings also suggest that in the post-intervention period 55 percent of the clients were asked about the reproductive intentions (i.e., whether the client wants more children) compared with 46 percent in the pre-intervention period. Slightly more than half of the clients were asked about the medical history or health condition by the service providers, with a little change over time (not shown in the table).

This above information, along with the information on client's concerns about using contraceptive methods and previous symptoms/signs/treatment suggestive of RTIs, is crucial for selecting appropriate method for a FP client. Analysis of client-provider observations shows that the proportion of clients who were asked fear/misconceptions about contraceptive methods increased from 34 to 97 percent due to interventions. Similarly, in 29 percent of the cases the service providers asked client's previous symptoms/signs/treatment suggestive of RTIs in the post-intervention period compared to 9 percent in the pre-intervention period (Figure 1).



Informed counseling

Clients need clear, accurate and specific information about the range of their FP choices to make informed decision. Table 5 suggests that in the pre-intervention period 28 percent of the clients were given accurate and complete information (how to use, side-effects, effective duration of methods) on the methods they accepted, which increased to 81 percent after the intervention. The increase is more pronounced in wards 25 and 26.

Knowledge and availability of full range of FP methods will provide the client an opportunity to select a method rationally based on her life cycle needs. Information on other methods was provided to 52 percent of the clients, which was 42 percent prior to interventions. Wards 25 and 26 experienced improvements in terms of providing information on other methods, while ward 47 experienced decrease. The proportion of the clients received information on the management of side-effects of contraceptives increased from 43 to 71 percent due to interventions (Table 5).

Interventions also helped service providers to use the opportunity to encourage clients to revisit the clinic for follow-up or if they experience complications. In the pre-intervention period 46 percent of the clients were requested to come back for receiving more contraceptive supplies or for stopping/changing methods for any reason or when facing any problems, which increased to 74 percent over time. As a result of interventions, service providers were more likely to inform clients that they could change FP methods if they were not happy with the method (45 percent in the pre-intervention against 60 percent in the post-intervention). Here, wards 25 and 26 experienced improvements in terms of providing information about the choice and opportunity for switching methods, while in ward 47 the corresponding proportion decreased, which requires in-depth investigation on the service provision and supervision (Table 5).

Table 5 Information provided to clients regarding contraceptive methods and services (in percent)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Give accurate information on the method chosen	31.1	86.1***	22.7	78.9***	29.0	57.7*	27.7	80.8***
Mention any other contraceptive method to the client	47.7	56.1	29.5	56.8**	51.6	39.3	42.0	52.2
Tell what to do if the client experienced side effects or problems of using contraceptive methods	36.4	78.0***	43.2	63.6*	51.6	71.4	42.9	70.8***
Make schedule for next appointment	86.4	90.2	70.5	93.2**	74.2	92.9*	77.3	92.0**
Request the client to return	52.3	70.7*	34.1	75.0***	54.8	75.0*	46.2	73.5***
Inform the client that she can change method if not happy with the method	56.8	65.9	22.7	63.6***	58.1	46.4	44.5	60.2*
N	**44**	**41**	**44**	**44**	**31**	**28**	**119**	**113**

*** Significant at 0.001 level; ** Significant at 0.01 level; * Significant at 0.05 level

Use of counseling tools

Table 6 presents findings from the observation of client-provider interactions on using counseling tools. Analysis of observation of client-provider interactions suggests an optimistic scenario. It shows that while the providers were found to have used BCC materials during counseling in 13 percent of the cases before interventions, it increased to 51 percent after interventions. While no client was given any BCC materials to take home during the baseline survey, 52 percent of the clients were given BCC materials to take home in the post-intervention period. Improvement is more pronounced in wards 25 and 26 in terms of using BCC materials during counseling and distribution of BCC materials among clients. Analysis of observation of client-provider interactions also reveals that 36 percent of the clients were asked whether they needed any more services other than the service they requested for, nearly three-fold increase over the baseline. In wards 25 and 26, there was a marked increase in terms of asking the clients the need of any other services.

Table 6 Use of counseling tools during services (in percent)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Use any BCC materials	11.4	89.7***	21.2	47.4*	3.6	8.6***	12.5	50.5***
Give the client any BCC materials to take home	0.0	89.5	0.0	73.7***	0.0	0.0	0.0	52.2***
Ask if the client need any more services other than the service(s) that she requested for	8.6	64.1*	12.1	31.6*	7.1	5.7	9.4	35.5***
N	**35**	**38**	**33**	**19**	**28**	**35**	**96**	**93**

*** Significant at 0.001 level; ** Significant at 0.01 level; * Significant at 0.05 level

Identifying unmet needs

A key intervention for improving the quality of FP and reproductive health services was the introduction of systematic screening checklist, where all the clients irrespective of primary purpose of visit were asked about their FP and RTI needs. Systematic screening was successful in identifying clients' unmet needs for FP and other reproductive health services. During the six-month intervention period, a total of 3,815 clients were screened for unmet needs by using the systematic screening form. Analysis of the systematic screening forms reveals that two-thirds of the clients (2,475 clients) visited the clinic for general, maternal and child health care. Obtaining FP methods was the primary purpose of visit for 29 percent of the women. Two percent of the clients visited the facility for side-effects of FP methods. Less than 5 percent of the clients visited the clinics for treatment of RTI/STI symptoms including lower abdominal pain, genital ulcer and vaginal discharge/burning urination (Table 7).

Table 7 Percent distribution of clients by reasons for visit

Reasons for visit	Percent
General health care	16.0
Maternal and child health care	31.0
TT/vaccination	17.8
FP methods	28.8
FP side-effect management	2.0
Lower abdominal pain/genital ulcer/ vaginal discharge/burning urination	4.4
Total	100.0
N	**3,815**

A total of 2,475 clients, seeking general health care, were asked whether they had any FP needs or were suffering from reproductive health problems. Forty-two percent of the clients did not have any unmet needs. A number of females had unmet needs for more than one services. Further analysis of the types of unmet needs shows that 31 percent of the females had unmet needs for FP methods or their side-effects. One in every five clients had unmet needs of services for vaginal discharge/burning urination. Yet, similar proportion of the clients had unmet needs of services for lower abdominal pain (Table 8).

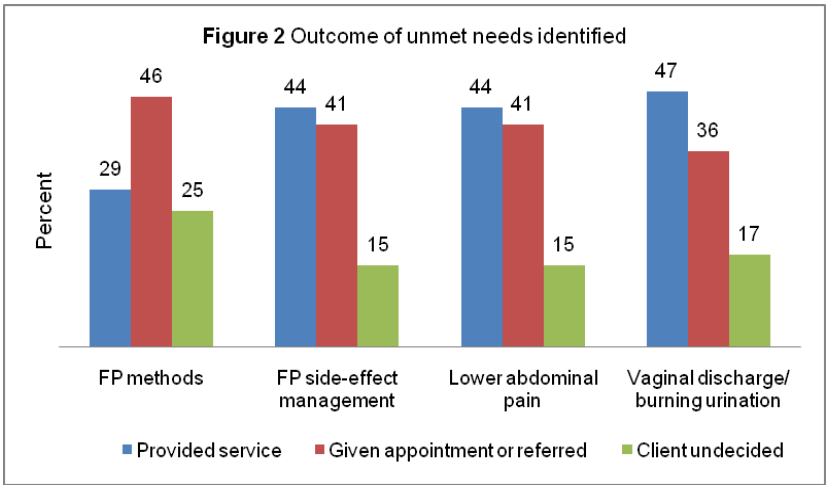
Table 8 Percentage of clients by unmet needs identified

Unmet needs*	Percent
FP methods	28.4
FP side-effect management	2.2
Vaginal discharge/burning urination	20.4
Lower abdominal pain	19.6
Other RH care including genital ulcer	6.3
No unmet needs	41.5
N	**2,475**

*Multiple responses

On the basis of the screening, the clients were provided with necessary services or referred to other facilities for their needs or problems identified. Furthermore, analysis shows that service providers were able to provide services to the clients during the same visits they had identified their unmet needs. This indicates that because of systematic screening the utilization of the clinics would be much higher and cost-effective. In the case of obtaining FP methods, 29 percent of the clients were provided with services immediately and 46 percent given appointment or referred. For management of side-effects of FP and RTI services, roughly half of the clients were provided services immediately. The distribution of clients in terms of receiving appointment or referral was highest for FP methods. Yet, one-fourth of the clients remained undecided when to receive FP methods. The corresponding proportion of those who came with FP side-effects or RTI problems was lower (Figure 2).

Figure 2 Outcome of unmet needs identified



Clients' perception about the service received

Service providers' interpersonal relations affect the acceptance of FP methods through generating confidence to adopt/continue contraceptive use. Poor interpersonal relations can create psychological barriers to the use of FP methods and a negative impression of service quality will spread fear in the community. Interpersonal relations may strongly influence clients' confidence in their own choices and ability, satisfaction with the services, and the probability of a return visit (Bruce 1990).

During exit interviews, opinions on overall quality of services and related issues were sought from the clients. There was little room left for improvements in different aspects of quality of care. Analysis of pre-intervention data shows that more than 90 percent of the clients reported that service providers greeted them properly and requested them to take a seat. Before interventions, almost 90 percent of the service providers treated the client with dignity and respect and 93 percent of the clients felt comfortable to ask questions. Yet, interventions brought further improvements in terms of greeting clients properly, requesting to take a seat, treating the client with dignity and respect, and clients feeling comfortable (Table 9).

Table 9 Impression of the clients about the services received (in percent)

Characteristics	Ward 25		Ward 26		Ward 47		All	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Greet in a friendly manner	92.4	100.0***	91.7	99.0	93.0	99.3**	92.3	99.6***
Request to take seat	90.6	97.2**	94.1	97.6*	94.9	94.4	93.1	96.3*
Treat client with dignity and respect	87.6	100.0***	88.2	99.5***	91.7	98.1**	89.1	99.6***
Client felt comfortable to ask questions	95.3	99.4*	89.9	100.0***	94.3	100.0**	93.1	99.8***
Maintain privacy during counseling	77.6	79.6	66.9	97.0***	59.9	85.1***	68.3	87.8***
Information will be kept confidential	60.0	84.7***	65.1	91.6***	70.7	62.7	65.1	80.7***
Waiting time was reasonable	57.6	97.1***	43.8	94.1***	21.0	75.8***	41.3	89.7***
Other staff treat client well	81.2	88.6*	84.0	99.0***	79.0	85.2	81.5	93.2***
N	**170**	**176**	**169**	**202**	**157**	**161**	**496**	**540**

*** Significant at 0.001 level; ** Significant at 0.01 level; * Significant at 0.05 level

Regarding ethical issues, improvements are remarkable. The proportion of the clients reporting privacy ensured during counseling increased from 68 to 88 percent. Sixty-five percent of the clients believed that the provider would keep their information confidential, which increased to 81 percent due to interventions, suggesting that service providers earned the trust and acceptability of the clients while providing services. In the post-intervention period, 89 percent of the clients considered waiting time reasonable, which was 41 percent before the interventions. Due to interventions, other staff became more client-friendly. The proportion of the clients treated well by other staff increased from 82 to 93 percent over time (Table 9).

Almost all the clients said that they would visit the clinic again if necessary and suggest others to visit the clinic. The clients were inquired of the reasons why they would make such suggestions. Availability of full range of contraceptive methods was reported as the main reason for suggesting others. This aspect of quality serves two purposes: (i) clients will be able to voluntarily choose a contraceptive method, either permanent or temporary; and (ii) they will have the opportunity for switching among methods. Good behavior of service providers and good quality of care also contributed to increasing the trust and confidence in the services provided (not shown in the table).

FINDINGS FROM IN-DEPTH INTERVIEWS

Attempts were made to address the FP needs of married women of reproductive age based on their life cycle. But, the use of long-term and permanent methods was low. To identify the reasons for non-acceptance of long-term and permanent methods, in-depth interviews were conducted with a sub-sample of survey respondents. Women were interviewed at their home using a detailed guideline, and tape recorder was used to avoid loss of any information. All in-depth interviews were transcribed immediately to ensure the quality of findings.

Background information of the respondents

The mean age of respondents was 31 years. More than half of the respondents (11 out of 20 respondents) were illiterate, and one-fourth completed primary education or higher. Sixteen of them were housewives, two were garment workers, one was housemaid, and remaining one was involved with small business. On an average, husbands were 10 years older than their wives. The average number of children was 2.6. Less than half of the respondents reported that the last pregnancy was planned.

Knowledge about IUD, Norplant and sterilization

Sterilization was known to the respondents. All the respondents knew more or less about IUD and Norplant, but they did not have the clear concept about these methods. Most importantly, they did not know about the reversibility of IUD and Norplant (i.e., these methods can be removed when one wants). Women heard about long-term and permanent methods from their relatives, friends and service providers. Sterilization is performed only at the hospital was known to all. Women also knew that IUD was available at NGO clinics and government health facilities. Yet, few respondents had the incorrect information about the source of Norplant that this method was available at the pharmacy.

Most of the participants did not know what IUD is and how it looks like. Moreover, they did not know where the method is inserted. They stated, "…IUD is a permanent method, which remains stuck in the urethra. It is a rubber like substance that may come out to the upper portion of uterus during intercourse." Many respondents did not have correct knowledge about the effectiveness of IUD. They mentioned that effectiveness of the method was about 2-5 years. Few women reported that IUD could space birth for 10 years.

Regarding Norplant, the respondents had better knowledge. Most of them said that Norplant is inserted in the arm and remains firm there. Most of them had the correct knowledge about the effectiveness of Norplant (spacing birth for 5 years). But, some women explained the effectiveness of Norplant in a way that was confusing. For example, it has been reported by few respondents that a woman could use one or more stick whatever she wants as each stick is effective for one year and thus 5 sticks for 5 years.

Most of the participants reported that male or female sterilization is a permanent contraceptive method and effective for those eligible couples that never want any more children. All the respondents knew that they would be infertile and not be able to reproduce if a child dies after sterilization. Except one respondent, no one exactly knew how sterilization was performed.

Misconceptions about IUD, Norplant and sterilization

Most of the respondents had misconceptions about IUD, Norplant and sterilization. About IUD, some respondents expressed fear that IUD is not found after some days of insertion and it moves across the body. Discomforts and side-effects were commonly reported. Some mentioned that IUD makes intercourse uncomfortable and husband feels pain. Women feel uncomfortable due to the thread of IUD. Few respondents expressed concerns that IUD causes severe bleeding and irregular menstruation. Some participants held the use of IUD responsible for worsening of RTI and consequently for uterus cancer.

Misconceptions about the use of Norplant relate to its suspected mobility across body and imaginary health concerns. Some respondents said, "Norplant should be used by only healthy women, not by the ill health women. Norplant moves over the hand." Women were not in favor of using Norplant, as they argued, "We will not accept Norplant because it will make us unable to do hard work and thus household chores will be hampered…We heard that this method decreases breast milk for child."

There are serious misconceptions about sterilization. It has emerged from the interviews that due to negative rumors people are not interested in sterilization. All the respondents regarded it as a harmful method. The common misconception about female sterilization is that menstruation will be stopped after sterilization. Other misconceptions about sterilization relate to ability to work and have sex. Women believed, "Sterilization or operation will make us weak and debilitated and we will not be able to do any hard physical labor. After sterilization, men become physically and mentally weak and as a result they cannot perform sexual activities as before." However, women also said, "Sterilization should be performed only for healthy and young men and women. Particularly, those men who are physically weak should not get sterilization."

There are widespread religious fears about long-term and permanent methods. Women considered undergoing sterilization as a great sin. The respondents put forward reasons that female sterilization removes the uterus forever which in turn stops the process of birth of a child. Some went one step ahead by quoting "…Sterilization is a process of killing a child, which is gifted by God and God never pardons them who are sterilized to control birth." Respondents strongly believed that they would not be buried after death if sterilized. Similar religious misbelieves or fears continue to exist for Norplant and IUD. Respondents were of the belief, "…If we die with Norplant or IUD, we will not be buried after death and certainly we will never go to the heaven."

Most of the respondents considered female sterilization as a responsibility of being a wife. They expressed their reluctance to motivate their husbands for sterilization because husbands do hard work and they will become unable to do so if sterilized.

Reasons for not accepting the long-term and permanent methods

People do not opt for long-term and permanent methods for various reasons and the common reason is fear of accepting IUD, Norplant and sterilization. Misconceptions constitute fear for these methods. Fears of losing potency and ability to work are the commonly described reasons for which people are not interested to accept sterilization.

The respondents reported that they were using contraceptive pill or injectable for a long time and they thought that those were suitable for them. They argued, "We are habituated in using these methods and, therefore, do not need to switch to other methods. If we do not feel problem in using pill or injection so, why should we use Norplant, IUD or other methods?"

Few respondents expressed, "…We will use long-term or permanent method when the current method does harm to our body." They also mentioned that if the doctor or the paramedic or the fieldworker, who were known to them, suggested them to switch to another method then they might consider those methods. At the same time, they were skeptical about the role of fieldworkers. They said, "…Fieldworkers try to convince us for long-term and permanent methods, because they can earn money if we accept these methods. It is an additional earning source for them."

Deficiency in the complete knowledge about methods is also disclosed. Although the respondents knew about IUD, they did not know about removal or reversibility of IUD. Similarities continue for Norplant too. Respondents knew that Norplant is entrenched in arm, but it is not clear to them that it is implanted underneath the skin of arm. They had no clear idea of these methods because of lack of proper counseling.

Most of the respondents explained that their husbands did not like IUD, Norplant and sterilization. Some of them shared that they could not discuss FP methods with their husbands, because their husbands did not like to talk about contraceptive methods. It was also reported by few women that husbands did not allow them to seek care at the health facility for general illnesses and FP services.

FINDINGS FROM MONITORING OF INTERVENTIONS

Client access to services is heavily influenced by the readiness of the facility. The availability of service providers and contraceptive methods, and the adequacy of facilities affect the utilization of services by the clients. The study team made regular visits to the clinics to observe the services being provided, whether the service providers were screening cases appropriately, identifying the unmet needs of clients for FP and RTI services, and providing complete and accurate information on contraceptive methods. If counselors or paramedics required any clarification on informed counseling and systematic screening, this was done on the job once a week by the study team. Service providers were found present in the clinics.

Although flipcharts and leaflets were always visible in all study clinics, leaflets were not distributed by the service providers in ward 47. Service providers in ward 25 were found to use and explain leaflets on a regular basis during counseling. Service providers in ward 26 were more likely to distribute leaflets, not to explain. While service providers used and distributed leaflets, none of them used flipcharts. This can be partly explained by the clients' lack of time to have a detailed counseling. It was observed that clients were not attentive and did not give enough time to service providers for counseling them properly.

Experiences with the introduction of systematic screening form were mixed. During the six-month intervention period, a total of 3,815 clients were systematically screened to identify their unmet needs for FP and RTI services. The service providers in wards 25 and 26 were more likely to use systematic screening form while substantially lower numbers of clients were screened for unmet needs in ward 47. It was observed that in ward 47 the providers were pre-occupied with their regular activities or responsibilities. Screening and completing the form was found to be an additional work for them, for which they could not give attention to the systematic screening form. However, in wards 25 and 26, the workload was redistributed among service providers to ensure the completion of the screening form. There is a need for stronger supervision in this regard. Encouragement from senior officials of the clinic can also help strengthen compliance.

Problems in supplying contraceptives continued to exist in the first three months of the six-month intervention, which is one of the main barriers to ensure quality service. For a whole month condom was absolutely out of supply at the clinics located in wards 25 and 26. Attempts were made to resolve the supply problem. The clinics get the contraceptives once a month. These supplies are exhausted in two weeks. In every month there has been shortage of temporary contraceptives– the supply always falls short of the demand. For example, the demand of injectables is more than twice the supply at each clinic. On the other hand, clients, who visit the clinic for contraceptive methods but fail to get their desired method, may lose trust on the clinics. It is, therefore, necessary to regularly supply different types of contraceptives as per clinic demand. In addition, a buffer stock for one month can be provided to the clinics, which will enable the service providers to offer clients a choice of methods.

DISCUSSION AND CONCLUSION

Quality of care has been a neglected dimension of FP services for a long time in Bangladesh. In urban areas, a major concern is that NGO clinics have not considered the quality of their FP services as a priority. Furthermore, effective programs are yet to be implemented to address the imbalance in contraceptive method mix. The quality of services the clients receive from NGO providers can be improved.

Efforts were made through this operations research project to improve the quality of FP and RTI services provided by the NGO clinics in selected slums. To provide quality FP and RTI services to the slum population, the capacity of these clinics was strengthened. The key intervention was to provide quality counseling to ensure client satisfaction and to increase the utilization of FP and RTI services by women living in slums. The service providers were trained on counseling techniques and requested to give particular attention to follow standard screening criteria and informed counseling so that the client can select an appropriate contraceptive method. They were also sensitized to counsel clients by using the 'life cycle approach' with emphasis on the long-term or permanent methods for women who have completed their desired family size.

If standard screening criteria for modern contraceptive methods are not observed, side-effects that arise may lead to the contraceptive discontinuation. Screening of client is necessary to exclude the client who is not eligible for a particular contraceptive method. Strict adherence with the FP screening criteria was emphasized throughout the intervention period on the assumption that strict adherence with the FP screening criteria will serve two purposes: the decision made by the client will be rational, and the decision will be based on the client's life cycle considerations.

Before selecting an appropriate method for the FP client, it is necessary for the service provider to know the client's reproductive history, intentions, and medical history or health condition. The interventions brought some improvements in the provider's competence in client screening, however, the level of improvements varied. Findings suggest improvements in the proportion of the clients being asked how many children they had (66 to 82 percent) and the proportion of the clients were asked whether they wanted more children (27 to 44 percent). It is worth noting that the proportion of the clients being asked about their number of children was higher than the proportion being asked about the desire for additional children. It is yet to be a common practice for the service providers to ask client's medical history or health condition – more than half of the clients were asked about this with a little change over time.

Information on client's concerns about using contraceptive method and previous symptoms/ signs/treatment suggestive of RTIs is also significant for selecting appropriate method for a FP client. Findings suggest that there has been a remarkable increase in the proportion of the clients who were asked fears/misconceptions about contraceptive methods – almost all the clients (97 percent) were asked this information while it was only 34 percent before the interventions. There has been a three-fold increase in the number of the clients who were asked previous symptoms/signs/treatment suggestive of RTIs, yet the increased proportion is still small (29 percent), which requires the service providers to make it a common practice.

Clients need clear, accurate and specific information about the range of their FP choices to make informed decision. Clients visiting clinics were offered informed counseling. This approach was

expected to help clients make healthy choices, which would ultimately result in longer and more effective use of FP methods. Before the interventions, clients frequently received limited information on contraceptive side-effects, and providers deliberately withheld such information because of the fear of losing clients. Service providers were trained to provide full information on a method and requested to make clear that the use of a contraceptive technology has ramifications beyond simply regulating fertility. Findings suggest that service providers provided information on the effectiveness of the chosen method, how to use the method, and possible side-effects and complications in most of the cases. In the pre-intervention period 28 percent of the clients were given accurate and complete information (how to use, side-effects, effective duration of methods) on the methods they accepted, which increased to 81 percent after the interventions. There has been a 10 percentage point increase regarding provider's competence in giving information on other methods, however, it is yet to be a common practice for the service providers.

Improvements were observed in several quality issues related to follow-up and service continuity mechanism. Interventions helped service providers to use the opportunity to encourage clients to revisit the clinic for follow-up or if they experience complications. Findings show that in the pre-intervention period 46 percent of the clients were requested to return for receiving more contraceptive supplies or for stopping/changing methods for any health reason, which increased to 74 percent over time. The proportion of the clients received information on the management of side-effects of contraceptives increased from 43 to 71 percent due to interventions. As a result of interventions, service provides were more likely to inform clients that they could change methods if they were not happy with the method (45 percent in the pre-intervention against 60 percent in the post-intervention).

To identify the unmet FP and RTI needs of the clients who attended the clinic for any services, a systematic screening checklist was introduced. As a result of the introduction of systematic screening, the provision of FP services during the health care visit for general illnesses occurred systematically. Systematic screening was successful in identifying clients' unmet needs for FP and other reproductive health services. Analysis of the types of unmet needs shows that 29 percent of the clients had unmet needs for FP services. One-fifth of the clients had unmet needs of services for vaginal discharge/burning urination. Similar proportion of the clients had unmet need of services for lower abdominal pain. Findings also suggest that service providers were able to provide services to the clients during the same visits they had identified their unmet needs. Approximately, 80 percent of the clients were provided services immediately, given appointment, and/or referred. The remaining one-fifth of the clients was undecided when to receive services for their needs/problems. This indicates that by using systematic screening the utilization of the clinics would be much higher and cost-effective. However, observations of client-provider interactions suggest that service providers did not complete the systematic screening checklist on a regular basis.

Interventions improved the provider's competence in using BCC materials during counseling and distribution of BCC materials. Overall, the proportion of the cases where service providers used BCC materials increased from 13 to 51 percent. While no client was given any BCC materials to take home in the pre-intervention survey, 52 percent of the clients were given BCC materials to take home in the post-intervention period. Yet, there is much scope for improvement in using BCC materials during counseling among clients.

Findings also indicate improvements in the providers' interpersonal relations with clients, which is necessary to generate confidence among clients to adopt/continue contraceptive use as well as to

create positive impression of the service quality in the community. Clients' opinions on the overall quality of services reveal that interventions brought improvements in terms of greeting clients properly, requesting to take a seat, treating the client with dignity and respect, and clients feeling comfortable, despite there was limited room for improvements where more than 90 percent of the clients reported affirmative in these aspects of quality of care before the interventions. Regarding ethical issues, improvements were remarkable. The proportion of the clients reporting privacy ensured during counseling increased from 68 to 88 percent. Sixty-five percent of the clients believed that the provider would keep their information confidential, which increased to 81 percent due to interventions, suggesting that service providers earned the trust and acceptability of the clients while providing services. Findings also suggest a 48 percentage point increase in the number of the clients considering waiting time as reasonable, which rose to 89 percent after interventions. Interventions also brought changes in the behavior of other staff, who became more client-friendly.

Improvements in the quality of FP and RTI services were expected to result in more rational use of FP methods. Attempts were made to address the FP needs of married women of reproductive age based on their life cycle. Since RTI problems could have a significant impact on the use of IUD, attention to the diagnosis and treatment of these problems was increased. Despite all these efforts, the use of long-term and permanent methods was low.

The most common reason for which people do not prefer long-term and permanent methods is fear of using IUD, Norplant and sterilization. Misconceptions constitute fear for these methods. Fears of losing potency and ability to work are the commonly described reasons for which people are not interested to accept sterilization. If women use pill and injectable for long time without major complications, they think these are suitable for them and hence do not perceive the need to switch to IUD, Norplant or sterilization which requires medical interventions. Lack of knowledge about methods is another barrier to accept long-term and permanent methods. Although the respondents know about IUD and Norplant, they do not know the process of insertion and removal/reversibility of these methods.

Problem regarding the supply of contraceptive methods is one of the main barriers to ensure quality service. Supply always falls short of demand; the clinics get contraceptives once a month, which are exhausted in two weeks. Shortage of temporary contraceptive methods limits client's choice of methods. On the other hand, clients, who visit the clinic for contraceptive methods but fail to get their desired methods, may lose trust on the clinics.

Most of the respondents explained that their husbands did not like IUD, Norplant and sterilization. Yet, few husbands do not allow them to seek care at the health facility for general illnesses and FP services. Male participation is important with regard to making decision for a female client. Service providers hardly inform married women about male methods, and therefore miss the opportunity to request their husbands to visit the clinic for FP and reproductive health services. In addition, there is a lack in the service provision to encourage women to discuss FP with their husbands.

Lessons learned

- Training of providers is not synonymous with quality assurance. Training contributes to the improvement of services, but for achieving expected level of quality in services effective supervision and encouragement from senior officials is necessary.
- Service providers need to screen the FP clients based on their needs and life cycle to exclude the client who is not eligible for a particular contraceptive method and to select an appropriate contraceptive method for the client. In particular, couples who have completed their family size or need long-term spacing should be motivated to use permanent or long-term methods. Stronger efforts are needed to sensitize service providers to the needs and cultural traditions of the slum people they serve.
- Clear, accurate and complete information about the range of FP choices will not only help clients make informed choice but also decrease the discontinuation rate. Service providers should be sensitized and motivated to give complete information to clients.
- Introduction of systematic screening has been successful in identifying client's unmet needs and subsequently providing services other than the service explicitly requested by the client. However, experience with the systematic screening form was mixed. Service providers viewed screening as an additional work and did not complete the form regularly, suggesting the need for effective supervision while initiating the effort. Encouragement from senior officials of the clinic can also help strengthen compliance.
- Similarly, service provider's unwillingness in using BCC materials during counseling was identified, which needs special attention of the service providers and effective supervision.
- Although some women want to have long-term or permanent methods, their husbands do not allow them to do so. Moreover, women consider sterilization as a responsibility of being a wife. To increase the use of long-term and permanent methods, male participation should be ensured in FP and couple's reproductive health, which can be increased through couple counseling and targeted BCC activities.
- Fear and misconceptions are prevalent about IUD, Norplant and sterilization. Clients should get clear and complete information about these methods. Instructive counseling can reduce fears and will, therefore, increase the level of acceptance of long-term and permanent methods.
- Supply problem of contraceptive methods exists, which is one of the main barriers to ensure quality service. A provision of buffer stock of contraceptive methods can ensure the continuous supply of contraceptives, enabling the service providers to offer an effective and uninterrupted service.
- Overall, there is an opportunity to further improve the services of the clinic. To manage the client load, it is necessary to have more trained service providers at the clinic. In the interim period, assignments can be redistributed among service providers to manage the client load.

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