Original Article

A social marketing approach to quality improvement in family planning services: a case study from Rawalpindi, Pakistan

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Summary **In the 1990s, social marketing approach was introduced in Pakistan to improve the quality and accessibility of family planning methods involving private practitioners. This study measured six quality elements using a Bruce-Jain framework. Cross-sectional survey data were collected from 29 randomly selected *Green Star* clinics. The study's four components were 1) an inventory of each outlet (infrastructure, equipment, and supplies); 2) an observation guide for interaction between family planning clients and service providers; 3) exit interviews with clients attending the outlet; and 4) interviews with providers at the outlet. Of the 29 clients participating in the exit interviews, 72% were new users of family planning. The clients' mean age was 32 years; all clients were married; 93% had received formal education. Housework was the principal activity of 93% of clients. The mean number of children reported was three. Both hormonal and intrauterine contraceptives (IUCDs) were available in all facilities; 86% of the clients reported being able to obtain their contraceptive of choice. Most facilities had the equipment and supplies needed to deliver services; service personnel were trained and regularly supervised; the service outlets emphasized mechanisms to ensure continuity of use. Notable shortcomings included a shortage of information on alternative methods, contraindications, and side-effect management, as well as a dearth of registration records. In conclusion, this is a good example of public-private partnership involving private practitioners using a social marketing approach. The quality components of a Bruce-Jain framework were achieved, resulting in a satisfied clientele. Involvement of private service outlets increased the accessibility and enhanced the use of services. Social marketing may be expanded to improve quality and access by involving further components of health care.**

Keywords: Social marketing, Public-private partnership, Private clinics, Family planning, Pakistan

Introduction

Of 175 million pregnancies worldwide each year, half are unwanted or ill timed. Around 120 million women do not want another pregnancy within the next two years or at all. Over 350 million women do not use safe and effective contraceptive methods (*1*), because they lack access, information, or support from families and communities.

In Pakistan, national surveys have indicated that, although the majority of the population is aware of at least one family planning (FP) method, the contraceptive prevalence rate is still very low (*2*). Factors hindering bridging of the gap between knowledge and practice of family planning include service delivery inefficiencies and social and cultural barriers. Decisions to adopt family planning methods are also influenced by acquaintance with clinic locations and supply sources, distance from clinic, and the provider's reputation. Quality of care concerns tend to be implicit rather than explicit (*3*).

During the past decade, the international family planning community's focus has shifted towards quality in services. Efforts to define and measure quality are motivated by an interest in identifying areas for improvement in a given family planning program and determining whether the level of quality affects

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outcomes, such as continuation rates (*4*). A program of high quality is one that is client oriented and aims to help individuals achieve their reproductive intentions or goals. Improvement in the quality of care is likely to reduce fertility by generating a more committed clientele of satisfied contraceptive users (*5*). Work over the past decade in this area has been guided by the Bruce/Jain framework that outlines six elements of quality: choice of method, information to the client, technical competence, interpersonal relations, mechanisms to encourage continuity, and constellation of services (*6*).

With this increased focus on quality, there has been a parallel interest in developing means of measuring quality, for several reasons. First, client-provider interactions can be understood as intervening elements in a causal chain through which organized family planning efforts meet or generate demand for fertility regulation. Learning more about these processes with the aim of improving them can have important programmatic payoff (*7*).

The challenge in measuring quality is the complexity of the topic. Although the Bruce/Jain framework outlines six elements of quality; there are literally hundreds of possible "sub-elements" that might be measured. In 1990, a Task Force created to explore the measurement of quality; identified over 200 indicators of quality in family planning services (*8*). In 1997, the MEASURE *Evaluation* project, developed and field-tested a low-cost, practical approach to monitoring quality of care, later named the "*Quick Investigation of Quality*". To this end, staff used a modified Delphi approach to arrive at a short list of 25 indicators of quality of care for family planning programs. Three instruments were developed that draw directly from Situation Analysis: a facility audit, an observation of the client-provider interaction, and an exit interview with clients leaving the facility (*9*). These instruments were field tested in four countries (Ecuador, Turkey, Uganda, and Zimbabwe) between October 1998 and March 1999 to determine the feasibility of data collection and reliability of the data (*10*).

Studies exploring the linkages between the quality of care and continued contraceptive practice have revealed an apparent association between clients receiving inadequate counseling and higher levels of contraceptive discontinuation. A study in India confirms that women who opted for an intrauterine device and who received proper counseling and information on side effects are more likely to continue using it than those who did not (*11*), and similar findings were cited from studies in Gambia and Niger (*12*).

In response to perceived inefficiencies and lack of capacity in public health care delivery systems, many developing countries have contracted out health services to private providers (*13*). An estimated 70 percent (*14*) of Pakistanis seek health care from private sector clinics and pharmacies; private health facilities are disproportionately based in urban areas and focus on providing curative services. Quality, cost containment, and equity issues arise from this situation, as the private sector is unregulated. Relatively few private providers offer reproductive health services because their training is limited and curative services are more lucrative. Collaborations with the private sector such as social marketing non-governmental organizations (NGOs) might help effectively to manage such niches, as recognized by the Ministry of Population Welfare.

Social marketing is the application of traditional marketing principles towards the promotion of health behavior change (*15*). It is based on traditional market exchange theory, which states that consumers will adopt behavior changes when barriers are reduced and benefits highlighted, according to their specific needs (*16*). Social marketing manages behavior change by creating incentives or consequences that invite voluntary exchanges. Specifically, social marketers seek to identify barriers to behavior change and to highlight benefits that are relevant to the audience (*17,18*).

Social Marketing Pakistan is an NGO that works in the health sector in collaboration with the Government of Pakistan and the private sector. The Government of Pakistan considers social marketing intervention as an important strategy to advance the cause of population welfare.

Green Star (*19*) is currently the country's second-largest family planning provider. It has developed a social franchise network of private health care providers to increase access to reproductive health care targeting low-income Pakistanis. More than 18,000 specially-trained private-sector doctors, paramedics, and chemists have received extensive training in counseling and service provision and offer quality FP services.

The training program provides a 10-day course (classroom & clinical) to lady doctors and paramedics. It is mainly focused on intrauterine contraceptive device (IUCD) insertion, counseling, provision of hormonal and barrier contraceptives, management of side effects, infection prevention, and record keeping. Franchise members also receive refresher training and are monitored on a regular basis to ensure adhesion to *Green Star* quality standards.

Green Star uses a variety of communications channels to address key barriers to FP, such as low confidence in the safety or efficacy of available methods, ignorance about where to seek quality services and lack of social support for FP, especially from husbands. Messages highlight the availability of products and services and link clients to delivery points (clinics) displaying the *Green Star* logo.

This report assesses quality provision in services from franchised *Green Star* service outlets. It has attempted to measure the six elements of quality in accordance with the Bruce-Jain framework and to

determine whether the above dimensions of care could be enhanced through public-private partnership. The study's four components were 1) an inventory of each outlet (infrastructure, equipment, and supplies); 2) an observation guide for interaction between family planning clients and service providers; 3) exit interviews with clients attending the outlet; and 4) interviews with providers at the outlet.

The following sections provide details on client and provider perspectives on quality in family planning services, and a description of the range of services they offer.

Methods and Material

Study site

This study was conducted in Rawalpindi city. According to the latest census it has a population of 1,406,214 (Males: 747,923, Females: 658,291) (*20*). Women of reproductive age (15-49 years) comprise 52% of the female population and the contraceptive prevalence rate is 41%. The literacy rate is 76%. The Ministry of Population Welfare provides family planning services through its 20 family welfare centers and four reproductive health centers. A handful of NGOs (*e.g.*, Behbood, Family Planning Association of Pakistan, Key Social Marketing, and Social Marketing Pakistan) also provide family planning services through their outlets.

Study methods and materials

A cross sectional study assessed the quality of care in family planning services in Social Marketing Pakistan "*Green Star*" clinics in Rawalpindi. As mentioned above, we utilized the *Quick Investigation of Quality* methodology; that consisted of: an observation of the client-provider interaction, an exit-interview with the client, and a facility inventory (*9*), in addition to the above the authors also interviewed the service providers. Data were mainly collected using the questionnaire developed by Miller *et al.* (*9,21*). The exit interview questionnaire, client-provider interaction checklist and checklist for facility infrastructure and equipment was adapted and modified according to local conditions. An ethnographic field guide was used to interview service providers. The triangulation used, thus enhanced the study's reliability.

The questionnaires were translated into the local language (Urdu), and back-translated to check the sequence, relevance, and clarity of the questions. After pilot-testing for face validity with a few family planning clients outside the study area, the question order was adjusted to facilitate client comprehension.

For the family planning client-provider interactions, the principal investigator; a physician himself, obtained consent from both the provider and client to be present during individual counseling and clinical examination. He used an observation guide to record yes/no answers to a series of actions reflective of quality of care (questions that the provider should ask, points of information that should be covered, clinical procedures that should be used in administering certain contraceptives, *etc*.) As the client left the facility after her visit, the interviewer approached her to ask if she could interview her about the visit and her satisfaction with the services received. The interviewer explained to the client that he did not work for the clinic; that all responses would remain confidential; and that her answers would in no way affect her getting services in the future. After obtaining the consent, the interviewer then proceeded to ask her a series of questions. The clinical facilities, equipment, and services provided were assessed by direct observation.

Samping and analysis

There are 140 *Green Star* clinics in Rawalpindi city offering a full range of *Green Star* products (58 owned by paramedics and 82 owned by doctors). A sample of 20% (n = 29) of clinics were randomly selected; they included clinics owned by paramedics (n = 12) and owned by doctors (n = 17) (*22*). The inclusion criteria were all *Green Star* clinics with at least 1-2 family planning clients per day where provider and client observation and client exit poll interviews could be performed. Neither the provider nor the researcher knew the day of the visit in advance. In selected health centers, 29 in-depth interviews with health care providers (12 paramedics and 17 doctors) were performed, in addition to 29 observations of client-provider interactions and exit poll interviews. Before the start of the study, approval was obtained from Social Marketing Pakistan and individual informed consent was also obtained before each interview.

Data processing and analysis were carried out using SPSS version 10 (SPPS Inc., Chicago, IL, USA) to produce frequencies and percentages. Separate files were created for entering data from the inventory, observations, and client exit interviews. In-depth interviews were recorded in detail and later transcribed. Domains and sub-domains were identified and the responses were analyzed and on their bases and results were drawn.

Results

Characteristics of client population

In the study sample, all respondents at the *Green Star* clinics were females and their average age was 32 ± 16 years. Five clients refused to take part in exit poll interviews. Seventy-two percent (n = 21) of the clients who took part in the exit poll interviews were

new clients, while 28% of the clients were continuing users. Seven percent of the clients were illiterate, while 31% had primary, 45% had secondary, and 17% had university level education. The mean number of children was 3 ± 1 and the mean age of the youngest child was 1.5 years.

Interpersonal relations

All clients were observed to receive friendly greetings from the provider. The majority (83%) of the providers replied to the client's questions satisfactorily. Overall 73% had provided visual privacy, 62% had provided auditory privacy (contrasting with only 8% in paramedic outlets). The duration of the client-provider interaction exceeded 10 minutes in most observations.

All clients were of the opinion that their provider was friendly, but few clients (10%) had been told to ask questions if something was unclear. The majority (97%) regarded their provider as easy to understand and also felt that their privacy was adequate (76%). All replied that the waiting time in the clinic was reasonable, the consultation time with the provider was about right (93%), and the provider listened to their concerns about family planning (97%). From the provider's perspective one mentioned, "Most of the clients come regularly and are like friends and they even discuss family matters with us" (*40-year-old female health care provider*).

Choice of method

Green Star Social Marketing Pakistan is promoting four types of family planning methods: oral contraceptive pills, progesterone injections, IUCDs, and condoms. No product except condoms has ever been out of stock since joining *Green Star*.

The client's ability to make informed choices is determined by the variety of contraceptive methods discussed with her. It was observed that all clients (specifically new users) were told about more than one method and the majority of clients (86%) received the method they chose.

Sixty-two percent of clients were informed about all four methods. The majority (88%) of doctors, but only a minority (25%) of paramedics informed their clients about all four methods. The majority of clients (86%) received their method of choice, as noted in exit interviews.

Regarding predilections for different methods, one health worker stated, "Clients choose either hormonal or IUCD, no one takes condoms from the clinic" (*40-year-old female health care provider*). While explaining how the clients select the methods, it was stated, "First of all, I leave the choice to clients and I help them in choosing an appropriate method for them, but if they depend on my choice then I advise them" (*36-year-old female health care provider*).

Provider - client information exchange

It was observed that in general 79% of clients were asked by their doctor about their reproductive goals; only half of paramedics asked their clients about this. All clients were asked about breast-feeding and if they had any problem or the desire to change the current method.

Exit poll interviews revealed that 55% of clients do not want more children, and an equal number were also breast-feeding at the time of survey. Almost 86% of clients made their own decision to accept their current method.

Health care providers put special emphasis on information exchange: "In the training they said it is important to listen to clients and then help accordingly. I follow that" (*38-year-old female paramedic*). Another declared, "I spend more time on counseling to satisfy my clients" (*46-year-old female paramedic*).

Information given to clients

In all clinics visited, Information, education & communication (IEC) material for use during counseling about family planning was present in examination rooms, waiting rooms, and inside clinics. During client provider interactions, 86% of providers utilized IEC material to explain contraceptive methods. All were told about method usage and effectiveness; 72% were also told about the side effects. Sixty-nine percent were actually shown various contraceptive samples (see Table 1).

Regarding information sharing, one mentioned "I tell my clients especially about how to use the product and possible side effects, so she does not panic if anything happens" (*36-year-old female health care*

Table 1. Information given to clients about contraceptive methods

Information given	Total (*n* = 29)		Doctors (*n* = 17)		Paramedics (*n* = 12)	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Method of application	100	0	100	0	100	0
Effectiveness	100	0	100	0	100	0
Contraindications	72.4	27.6	82.4	17.6	58.3	41.7
Side effects	72.4	27.6	82.4	17.6	58.3	41.7
Sample contraceptive shown	69	31	64.7	35.3	75	25
IEC material shown	86.2	13.8	76.5	23.5	100	0

Table 2. Technical competence of doctor and paramedic providers in Green Star clinics

Components of examination	Total (*n* = 29)		Doctors (*n* = 17)		Paramedics (*n* = 12)	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Medical history	93.1	6.9	100	0	83.3	16.7
Date of last menses	100	0	100	0	100	0
Abnormal vaginal bleeding	69	31	100	0	25	75
Pelvic pain	62.1	37.9	88.2	11.8	25	75
Weight	44.8	55.2	76.5	23.5	0	100
Breast examination	51.7	48.3	88.2	11.8	0	100
Blood pressure	65.5	34.5	100	0	16.6	83.3

provider). Asked how they help clients make a choice, one said "I use brochures, flip charts, and posters to provide information about family planning methods, and I also show them the actual products" (*46-year-old female paramedic*).

Technical competence

All the providers had an average of two years of working experience since training with the *Green Star* program. All clinics had functioning sterilizers, blood pressure monitoring apparatus, weighing scales, antiseptic solutions, an examination couch, gloves, IUCD insertion and removal kits, and relevant equipment. Sixty-five percent (*n* = 19) of clinics had proper waste boxes for disposal of needles. Most clinics were clean and well furnished with adequate seating. Providers were observed during service delivery and clinical procedures. The details are shown in Table 2.

When health care providers were asked about the indications and contraindications for contraceptive prescription, one stated, "I will not insert an intrauterine contraceptive device in a woman whom I suspect to have a reproductive tract infection" (*42-year-old female health care provider*). One maintained, "I will not give hormonal methods to women who are not having their menses, as they emphasized in my training" (*48-year-old female paramedic provider*).

Another stated, "…I advise breast-feeding mothers to avoid hormonal methods and instruct them about alternatives" (*38-year-old female health care provider*).

Mechanism to ensure continuity

None of the *Green Star* clinics had ever experienced any shortages in the supply of hormonal and IUCD contraceptives. Most providers had no client registration log-books; however, they did have registration cards for family planning clients provided by the *Green Star* program. All clients were told when to return; the 35% of clients who chose hormonal contraceptives were given written reminders. It was observed that 69% were instructed how to manage complications, and all were informed how to replenish their supplies.

The providers highlighted the importance for continuity of proper counseling. One mentioned, "Clients should be told in advance about the side effects of those contraceptives. This decreases their anxiety and increases their continuation rate" (*38-year-old female paramedic*). Another stated, "…sometimes it is important to give a written reminder about the next visit: many remember better that way" (*42-year-old female health care provider*).

Constellation of services and accessibility

The questionnaire also captured topics other than family planning that were discussed during counseling sessions. All the clinics surveyed provide family care; and family planning was one component of the services offered. In exit interviews, many clients also mentioned that besides family planning they received services for child care and also obtained information on HIV or other sexually transmitted diseases (STDs), when asked.

Most of the *Green Star* clinics could be reached by local residents on foot. Only 10% of clients used public transport, 7% a private car, and 14% a motorcycle to come to the clinic. The average duration of the trip to the clinic was seven minutes. Most clients were satisfied with the clinic hours, as services were offered both morning and evening. *Green Star* signboards were properly placed at clinics to indicate the availability of family planning services. One provider noted, "The government facilities are far away, but clinics like mine are easily accessible and clients can visit anytime" (*38-year-old female health care provider*).

Discussion

Quality of care should be defined in terms of the provider's technical standards and the patient's expectations. In 1990, Judith Bruce offered a framework for assessing quality of family planning services from the client's perspective. This research has investigated whether the framework dimensions of care could be enhanced through public-private partnership at the level of program efficiency and impact.

The results suggest not only that all the selected service centers were geographically accessible but also that the infrastructure, equipment, and contraceptive supplies were adequately available. Most providers

demonstrated commitment to the program and they satisfied the various quality component criteria in addressing women's reproductive needs. Client-provider relations were based on mutual trust in these clinics and most of the clients considered providers to be warm and technically competent. The present study reveals that providers were encouraging and helping clients to make informed decisions when selecting family planning methods. Through this they sought to build the client trust that would eventually lead to increased continuation rates and greater client satisfaction.

Social Marketing Pakistan's *Green Star* program offers four methods (two hormonal, one barrier, and one IUCD method); all member clinics therefore offer these services. According to providers, supplies have never been out of stock, because *Green Star* supervisors perform their duties efficiently, visit clinics regularly, and provide technical assistance. The clinics were generally well equipped. The majority of providers took detailed medical histories, checked blood pressure, and inquired about menstrual history; half also weighed the patient before prescribing any method.

Most clients were asked about their reproductive goals and were informed about more than one method. The majority of clients received the method of their choice. Most of the clients were given additional information about side effects and contraindications and, to alleviate anxiety and reduce avoidable visits, were told what measures to take in the event of minor side effects.

During counseling, all providers used IEC materials and contraceptive samples and the majority of clients were given an information brochure to take home. Providers and clients both considered revisits as an opportunity to review and revise their choice of methods.

There was an appropriate constellation of family welfare services (*23*) in *Green Star* clinics, including trained providers, medications, equipment, and supplies; besides they also offered mother and child care services. Our research results demonstrate that clients expressed satisfaction with services they received at *Green Star* clinics, citing their geographical accessibility, adequate facilities, provider's technical competency, reasonable waiting times, and convenient clinic hours. The majority stated that contraceptive services were affordable, reported having satisfactorily received the services they desired, and stated that they would recommend this clinic to their acquaintances.

The study had certain limitations. First, the sample size is small. We believe that the clinics studied are representative of *Green Star* member clinics in Rawalpindi city and provided useful information; however, extrapolation of the findings to the rest of Pakistan requires careful consideration, as clinics and services in other geographic areas may vary due to diverse client characteristics and demographic and other factors. Second, the exit poll interviews were conducted just outside the clinic and client responses may have been biased by proximity.

Certain aspects of services require improvement and should be emphasized more in future training programs and clinic follow-ups. For example, some providers and most paramedics failed to inform their clients about side effects and contraindications. Some also failed to take detailed medical histories, including asking about abnormal bleeding, taking blood pressure, and weighing, and never encouraged clients to ask questions. Clients lacked privacy in some clinics. Client registration records were also noticeably lacking. Many providers also felt the need to have more regular refresher training courses so they can keep up with the latest developments in the field.

This study provides an interesting view of a public-private partnership to improve the quality and accessibility of family planning services by involving private practitioners. Public-private partnerships are joint ventures sharing a set of attributes, the most important of which is a shared objective: in this case, improving quality and access to family planning services.

Given the pressure on government resources, it is likely that the private sector will continue to play an increasing part in the provision of services alongside other institutions. Based on the current private sector experience, it is important for the government to review past procedures and move towards developing systems which can extend longer-term relationships and involve the private sector in planning.

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(*Received December 4, 2007; Accepted December 20, 2007*)