ORIGINAL ARTICLE

ASSESSING FAMILY PLANNING SERVICE QUALITY AND USER EXPERIENCES IN SOCIAL FRANCHISING PROGRAMME – CASE STUDIES FROM TWO RURAL DISTRICTS IN PAKISTAN

Syed Khurram Azmat, Moazzam Ali*, Waqas Hameed, Muhammad Ali Awan*****

Division of Health Information System, The Hospital for Sick Children, Toronto-Canada, *Department of Reproductive Health and Research, World Health Organization, Geneva-Switzerland, **University of Karachi-Pakistan, ***Goethe University Frankfurt am Main-Germany

Background: Studies have documented the impact of quality family planning services on improved contraceptive uptake and continuation, however, relatively little is known about their quality of service provision especially in the context of social franchising. This study examined the quality of clinical services and user experiences among two models in franchised service providers in rural Pakistan. **Methods:** This facility-based assessment was carried out during May-June 2015 at the 20 randomly selected social franchise providers from Chakwal and Faisalabad. In our case, a franchise health facility was a private clinic (mostly) run by a single provider, supported by an assistant. Within the selected health facilities, a total 39 user-provider interactions were observed and same users were interviewed separately. **Results:** Most of the health facilities were in the private sector. Comparatively, service providers at Greenstar Social Marketing/Population Services International (GSM/PSI) model franchised facilities had higher number of rooms and staff employed, with more providers' ownership. Quality of service indices showed high scores for both Marie Stopes Society (MSS) and GSM/PSI franchised providers. MSS franchised providers demonstrated comparative edge in terms of clinical governance, better method mix and they were more user-focused, while PSI providers offered broader range of non-FP services. Quality of counselling services were similar among both models. Service providers performed well on all indicators of interpersonal care however overall low scores were noted in technical care. For both models, service providers attained an average score of 6.7 (out of the maximum value of 8) on waste disposal mechanism, supplies 12.5 (out of the maximum value of 15), user-centred facility 2.7 (out of the maximum value of 4), and clinical governance 6.5 (out of the maximum value of 11) and respecting clients' privacy. The exit interviews yielded high user satisfaction in both service models. **Conclusion:** The findings seem suggesting that the MSS and GSM/PSI service providers were maintaining high quality standards in provision of family planning information, services, and commodities but overall there was not much difference between the two models in terms of quality and satisfaction. The results demonstrate that service quality and client satisfaction are an important determinant of use of clinical contraceptive methods in Pakistan.

Keywords: Family planning; Pakistan; Rural; Service quality

Citation: Azmat SK, Ali M, Hameed W, Awan MA. Assessing family planning service quality and user experiences in social franchising programme – case studies from two rural districts in Pakistan. J Ayub Med Coll Abbottabad 2018;30(2):187–97.

INTRODUCTION

Family planning is considered as one of the most cost effective and health promoting activities[1] with the potential to avert around 30% of maternal deaths and 10% of child deaths[2]. According to the latest statistics, contraceptive use has increased in many parts of the world, especially in Asia and Latin America. Worldwide utilization of modern contraception has risen slightly, from 54% in 1990 to 57.4% in 2014.[3] Yet, millions of women are living with unmet need for contraception.[4] The Sustainable Development Goals (SDGs) agenda points to the importance of investing in sexual and reproductive health (SRH). SDG 3 aims to "ensure healthy lives and promote well-being for all at all ages".[5] Target 3.7 sets to "…ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes" by 2030.[5] Moreover, the Global Strategy for Women's, Children's and Adolescents' Health 2016–2030 was launched in 2015 as a guide towards speeding-up health improvement in these sub-populations in accordance with the SDGs. This initiative has been described as the first global strategy to recognize adolescents' health and that aims to end preventable adolescent deaths by 2030. A parallel global strategy is the FP 2020 that targets to ensure universal access to contraceptives by 2020 among more than 120 million women and girls irrespective of residential areas; hence, speeding-up reduction of unmet needs for FP and attainment of health-related SDGs.[6]

Globally, with public sector facing numerous challenges, private sector has played an instrumental role in meeting the demand for family plannin.[7,8] Therefore, the World Health Organization (WHO) has accentuated

the need of public-private partnership to address prevailing issues in developing countries.[9] A range of innovative approaches are recommended to engage private sector in healthcare service provision in lower-middle income countries such as social marketing and social franchising, voucher schemes, contracting out, and insurance schemes.[10–13] Social franchise generally comprises of a network of healthcare providers that contractually obligated which are trained, branded and monitoring and geared towards achieving social goals rather than financial goals; however, the arrangement or method of franchising is commercial. The franchising approach may serve as a possible solution to number of key healthcare challenges such as access, quality, affordability among others.[14]

There is a huge interest and dire need for information for policy-makers to complement existing strategies with quality strategic initiatives to have the greatest impact on the health outcomes.[15] The quality of healthcare services in public sector are compromised due to number of reasons, for example, there are lesser economic incentives for the institution as well as for the individuals and resource (human and financial) constraints results in high work load and lower staff pay which affect adversely on staff morale, attendance and performance[16], though comparatively better in private sector; however, still far below the standards[17]. The private for-profit sector faces greater incentives to be efficient and user-friendly providers of health.

Though predominantly in private sector, the approach of social franchise is gaining interest of the global community[18] and is emerging as a promising solution for improved reproductive health indicators in lower-middle-income countries. In a study, it was noted that the social franchise model complemented with voucher can increase contraceptive use up to 19 percentage points in only 18 months.[19] There is however little evidence available on the effect of social franchising on quality of services and access.[14,20]

Pakistani Context:

Despite considerable increase in the coverage of reproductive, maternal, and child health interventions, Pakistan has achieved sluggish improvement in the health outcomes. Approximately 14,000 women die each year due to pregnancy related complications - enlisting Pakistan among the six developing countries that contributed to more than 50% of maternal deaths occurring worldwide.[21] Family planning (FP) is the most cost-effective intervention to improve maternal and child health and survival[22], yet, millions of people in Pakistan lack access to FP services. Modern FP methods only account for 26% of FP use in Pakistan, and levels of modern FP use in rural areas remain lower (23%) compared to urban areas (32%). About 20% of currently married women have unmet need for contraception, and large disparities exist in unmet need and total fertility between the rich and poor.[23]

In Pakistan, one of the important factors contributing to limited successes in family planning could be the poor quality of care provided in health facilities.[24] Studies show that information given to users about benefits and potential side-effects of modern methods of contraception is not sufficient.[1,17] For example, although 74% of couples using contraceptives prefer to limit the number of children, only 30% of users select long-acting or permanent contraceptive methods. Furthermore, 72% of users are not aware about potential side effects and its management, leading to high rates of discontinuation (with in12 months).[25]

The current use of IUD is very low (i.e., 2.3%). Inadequate counselling skills, inappropriate supporting infrastructure (e.g. equipment, interrupted supplies etc.), and private healthcare providers' reluctance to provide IUDs due to a lack of competence or motivation, have limited IUD's provision.[21]

Marie Stopes Society (MSS)[26] and Green Star / Population Services International (GS/PSI) each are testing Demand Side Financing (DSF) approaches - integrated with social franchising. These are aimed at improving family planning (FP) uptake with a focus on long-acting reversible contraceptives in targeted communities of Punjab province. The service package has components of comprehensive training on family planning to the service providers, commodity support and activities in demand generation.

Using Donabedian's framework for quality of care[27,28], this study examined the clinical quality among two models in franchised service providers in rural Pakistan and attempted to determine the effect of quality on user experiences.

MATERIAL AND METHODS

Two operational research studies funded by the David and Lucile Packard Foundation intended to increase the uptake of modern contraceptive uptake amongst the poorest in the rural Pakistan using demand-side financing vouchers was implemented by Marie Stopes Society and Greenstar Social Marketing in Chakwal and Faisalabad, respectively. The end line evaluation of the project is being reported separately. The present facility-based, cross-sectional assessment was carried out at the randomly selected social franchise providers from both intervention districts. The data were collected during May–June 2015 through service providers, user's (exit) interviews and observation of health facilities and client-provider interaction. Data were collected by experienced trained healthcare professionals in the field of family planning and reproductive health.

Following Bruce-Jain framework, the study tool had four components. A facility questionnaire[29] was used to collect information on the availability of infrastructure,

including logistics and supplies, basic family planning equipment, staffing, timings, IEC materials and activities, and record keeping and reporting. A service provider questionnaire[30], that collected information on providers profile such as age, education, income and professional qualification along with family planning knowledge, experiences, trainings received, and clinical practices. Moreover, using a structured tool/protocol service provider were observed[30], against the stipulated criteria, to assess the extent to which they adhere to the standard of care including clinical procedures and the information exchanged between the provider and the user. Lastly, exit interviews[30] were conducted with the users who were observed receiving family planning services. The purpose of exit interview was to collect information on user profile, their experiences, comprehension of information received, and their satisfaction with the services provided to them. The study questionnaire was developed based on several tools including: Service Provision Assessment (https://dhsprogram.com/What-We-Do/Survey-Types/SPA.cfm), Service Availability and Readiness Assessment (http://www.who.int/healthinfo/systems/SARA_Reference_Manual_Full.pdf), Quick Investigation of Quality (http://pdf.usaid.gov/pdf_docs/PA00KX4F.pdf). Moreover, we adopted questions from GSM and MSS clinical quality assurance checklist. Under the stated project, MSS and GS/PSI operated at 22 and 75 social franchise providers, respectively. Keeping in view of the practical constraint of time, budgeting and logistics, a total of 20 service providers were randomly selected for this study (Table-1). The details are as follows:

We used the conceptual framework developed by Donabedian[27] to exam structure, process and outcomes in quality of care. The information gathered through observation and interviews were classified into these three aspects of service provision (Table-2). We created a composite index for each dimension (such as physical infrastructure etc.) of quality aspect. All items that belong of the identified dimension were dichotomised (0=no, 1=yes), we then calculated a composite score by summing the scores of each item.

Data was collected by trained healthcare professional with vast experience in the field of family planning and reproductive health. Data was entered and cleaned in Epi-data version 3.1. We used Stata 11.1 for the statistical analysis. The unpaired two-independent sample t-test and Pearson Chi-Square were conducted for continuous and categorical variables, respectively for 'process' and 'outcome' aspects since the analysis was based on thirty-nine records. However, for structural aspect, Wilcoxon-Mann-Whitney test and Fisher's exact tests were used as the sample was based on twenty facilities. The purpose of statistical testing was to assess relationship between two variables.

All respondents were informed about follow-up procedure and their study rights. No personal identifiers were entered in the database. The study protocol was approved by National Bioethics Committee (NBC) Pakistan. Ref: No. 4-87/12/NBC-92/RDC/3548 (31). All survey participants provided a written informed consent before the interviews.

Table-1: Study sample size

Components assessed	MSS	GS/PSI
Service provider interview	10	10
Facility assessment	10	10
User-provider interaction	20	19*
User Exit Interview	20	19*

*Due to refusal and low user flow, 19 interviews were conducted at GS/PSI health facilities

Table-2: Attributes and indicators used for the assessment of quality of care in this study

Attributes and indicator of quality	Definition of indicators
Structure	
Infrastructure	
Physical infrastructure (Score: 0–7)	Number of amenities available at facility: building in good repair, working toilet, drinking and hand washing water, seating arrangement in waiting area, separate examination room or curtain, facility comprise of more than 1 room.
Equipment	
General equipment (Score: 0–19)	Number of the following general items present in the facility: 1) Chlorine solution in use; 2) Clean Mackintosh and sheets (plastic); 3) Instrument cleaning parts present utility (detergent, brush, bucket & gloves); 4) Soap present in hand-washing area; 5) Angle poise/gynaecology lamps/torch; 6) Blood pressure (apparatus); 7) Adult weighing scale; 8) Child weighing scale; 9) Scissors (Large and Small); 10) Antiseptic lotions; 11) Stethoscopes; 12) Examination couch/table; 13) Thermometer; 14) Disposable syringes; 15) Cotton; 16) Gauze; 17) Pyodine; 18) Robin Bleach; 19) Sterilizing equipment;
Procedure room equipment (Score: 0–21)	Number of the following general items present in the procedure room: 1) Location of theatre (isolated from rest of the clinic); 2) Floor marbled/tiled/washable; 3) Well Lighted; 4) O.T. Slippers; 5) Cap & Mask; 6) Soap or antiseptic solution for hand scrub; 7) Running water with Elbow Tape; 8) Bowl with Savelon Solution for scrub brush; 9) Autoclaved drums + instrument; 10) Sterilized gown & gloves surgical; 11) O.T Table adjustable; 12) O.T Light; 13) Emergency Light; 14) Drip Stand; 15) Oxygen Cylinder; 16) Suction Machine; 17) Emergency Medicine; 18) Cannula (2 size); 19) Plastic bucket with 0.5% chlorine bleach; 20) Plastic bucket for waste disposal; 21) Autoclave room + autoclave (boiling container)
Store room equipment (Score: 0–5)	Number of the following general items present in the procedure room: A) Sponge holding forceps; B) Non-disposable gloves; C) Uterine sounds; D) Speculum (L/M/S); E) Disposable gloves

Attributes and indicator of quality	Definition of indicators
Management	
Waste disposal mechanism (Score: 0–8)	Waste disposal mechanism at the health facility: marking on sharp containers and placed in procedure room; team familiarity with handling and disposal of sharps items; sharps are kept in containers immediately after use and container is incinerated when ¾ full; disposal of placenta; clinical/medical waste put into coloured buckets/containers that are lidded with leak proof plastic bags; waste containers are out of user site; waste burnt and buried in sealed containers
User Centred Facility (Score: 0–4)	The indicators that focuses on user-centred facility are: sign board on the street; display of framed service provider accreditation certificate; Brand logo board is displayed at the entrance; cleanliness of procedure room
Clinical Governance (Score: 0–11)	Clinical governance indicators are: induction training of service providers about social franchiser organisation; monitoring visit by franchisor during last three month; user satisfaction mechanism in place (SP ask users, staff ask user, or suggestion box); changes made in the health facility based on user feedback during the last three months; mechanism for user record system, user record in good quality, maintain user record on method discontinuation and/or switching, availability of written guidelines and protocols on FP service provision
Stock/inventory/storage (Score: 0–15)	Stock is available at the time of assessment, whether there has been any stock out during the last three months, less than 3 days to restore commodities, if stocked-out, and contraceptives are (stored off shelves) protected from water, sun and pests.
Availability of services	
Availability of general services (Score: 0–32)	Availability of services include: number of days service provider is available in a week, daily practicing hours of services provider, and whether staff employed other than service provider
FP methods offered (Score: 0–8)	Number of methods offered: oral pill, intra-uterine device, injectable, implant, male condom, emergency contraception, tubal ligation, and vasectomy
Other reproductive health services offered (Score: 0–10)	Number of RH services besides FP offered: Sexually transmitted infection services, immunization, antenatal care, postnatal care, normal delivery, C-section, postpartum FP, D&C, Manual Vacuum Aspiration, Miso (PAC-medical)
Emergency Preparedness (Score: 0–3)	Training received by service provider on emergency preparedness, whether users with complication are referred to hospitals for managing complication, and whether franchised health facility has a Memorandum of Understanding (MOU) signed with private or public hospital to refer complicated cases
Counselling	
Visual Aids (Score: 0-6)	Availability of range of IEC material including: Poster, flip chart, brochure, information sheet, job aid, counselling card, or any other
Provider Training on FP (Score: 0–8)	Number of providers who received any in-service training in family planning in last 12 months: General clinical skills in FP; FP counselling; IUD insertion/removal; Implant insertion/removal; Tubal Ligation (govt. accreditation); Exclusive breastfeeding (LAM); Natural family planning; contraceptive side effect management
Provider training on non-FP (Score: 0–7)	Number of providers whose profession training cover the following: antenatal care; postnatal care; Child immunization; Normal Delivery; C-section; Manual Vacuum Aspiration; D&C; Post Abortion Counselling
Provider Knowledge (Score: 0–9)	Service provider correctly answer (±3%) effectiveness of the following methods: a) Condom; Oral Pill; Injectable; Intra-uterine device; Implant; Female Sterilization; Male Sterilization; Withdrawal; and Rhythm
Provider Experience in health (Score: 0-4)	The construct comprises of the following: whether provider is working at the index facility for more than 5 years, she is a doctor or midlevel healthcare professional, she has completed professional training more than 10 years, and currently employed at private or public health facility
Privacy (Score: 0-3)	Whether the facility has a separate examination room, facility uses curtain to keep privacy, or there is no arrangement to ensure privacy during examination
Process	
Interpersonal care	
Privacy/confidentiality (Score: 0–2)	Whether provider saw the user in private and ensure auditory privacy during examination
User concerns noted (Score: 0–4)	Whether provider asked user about concerns with methods or with currently used method by asking: open-ended question, encourage user to ask questions, ask user her concern with any method, and user actively participated in discussion
Explained method use (Score: 0–3)	Whether provider explained to the user how to use the method and possible side effects
Treated with respect (%)	Whether provider treated the user with respect
Reproductive History (Score: 0–10)	Provider asked the user about the following: age, marital status, number of living children, history of pregnancy complications, pregnancy status, desire for more children, desired timing of birth of next child, partner's attitude about FP (approve/disapprove), history/sings/symptoms of STIs
Physical Examination (Score: 0–10)	Provider took/asked about the following during the physical exam: blood pressure, weight, asked about smoking, asked about STI symptoms, asked about chronic illness (out of 5)
Informed Choice (Score: 0–2)	Whether provider discuss user's method preference and whether user received her preferred method of choice
Outcome	
User satisfaction Users (Score: 0–17)	Users reported very or highly satisfied with ALL of the following: opening hours of the facility, location of the health facility from the place of residence, length of waiting time to be seen after registering, comfort level of waiting area, overall length of time spent in the facility, price charged for overall service today, cleanliness of the facility, friendliness and respect received from the health care provider, care and concern of the health care provider, length of time that you had with the health care provider, quality of the advice and information received, length of time provided to ask questions or clarify doubts, attentiveness given to user concerns, time it took to receive services, cost to travel at the facility, affordability of the prices of the services received, problems would have faced, if this facility did not exist (y/n).

*This tool is an adapted version of Marie Stopes International Quality Assurance Checklist; Marie Stopes User Exit Interview Survey Questionnaire; MEASURE Evaluation <Quick Investigation of Quality (QIQ) A User's Guide for Monitoring Quality of Care in Family Planning. Carolina Population Center, University of Nor Carolina at Chapel Hill: MEASURE Evaluation; 2001 Feb>; Standard Based Management and Recognition, Performance Assessment Tool of Green Star Social Marketing, Pakistan

RESULTS

The table 3 shows the characteristics of the MSS and GS/PSI service providers who were included in this assessment. Overall, majority of the franchised providers interviewed were married (70%), and aged above 30 years (70%, n=14), 65% (n=13) were Lady Health Visitors, 30% (n=6) community midwife, and (n=1) a medical doctor. Sixty percent (n=12) completed professional qualification at least 10 years before, and 65% (n=13) have been practicing at the index facility for less than 5 years.

Three-fifths were not employed at any other public or private organisation, and of those who were employed, the job timing was in the morning (8am-2pm). Half (n=10) of the service providers work 7 days a week at the index facility and the rest (n=9) 6 days a week. The average working hours a day was 10.7 (±8.4) where 60% (n=12) practice full day i.e. 9 am to 6 pm. Average monthly income of the service providers was 315 USD (±193) (1 USD = 104 PKR) and the median was 260 USD. The figures among MSS and GS/PSI characteristics showed some statistical differences which are indicated below:

Table-3: Characteristics of service providers

Indicators	MSS	GS/PSI	Overall
Marital Status			
Married	6 (60.0)	8 (80.0)	14 (70.0)
Unmarried	4 (40.0)	2 (20.0)	5 (30.0)
Age*			
< 30 years	6 (60.0)	0 (0.0)	6 (30.0)
30 years or above	4 (40.0)	10 (100.0)	14 (70.0)
Mean (SD)	31.8 (9.6)	41.5 (7.1)	36.7 (9.6)
Education			
Secondary	1 (10.0)	0 (0.0)	1 (5.0)
Higher	9 (90.0)	10 (100.0)	19 (95.0)
Professional qualification			
M.B.B.S Doctor	0 (0.0)	1 (10.0)	1 (5.0)
Community midwife	4 (40.0)	2 (20.0)	6 (30.0)
Lady Health Visitor	6 (60.0)	7 (70.0)	13 (65.0)
Years since professional qualification completed *			
≤ 10 years	8 (80.0)	0 (0.0)	8 (40.0)
> 10 years	2 (20.0)	10 (100.0)	12 (60.0)
Mean (SD)	8.4 (5.9)	21.1 (7.9)	14.8 (9.4)
Employment other than current clinical practice			
No other employment/practice	5 (50.0)	8 (80.0)	13 (65.0)
Private employee	1 (10.0)	1 (10.0)	2 (10.0)
Public employee	4 (40.0)	1 (10.0)	5 (25.0)
Timing of other employment			
Morning (8am – 2pm)	5 (100.0)	2 (100.0)	7 (100.0)
Distance between index facility and where service provider is employed			
Mean (SD)	3.2 (3.0)	10 (9.9)	5.1 (5.8)
Time since working at the index health facility *			
< 5 years	10 (100.0)	3 (30.0)	13 (65.0)
5 years or more	0 (0.0)	7 (70.0)	7 (35.0)
Mean (years)	2.8 (1.7)	8.5 (6.6)	5.7 (5.5)
Standard Deviation (SD)			
Number of working days (/week) at index facility *			
1 day	0 (0.0)	1 (10.0)	1 (5.0)
6 days	3 (30.0)	6 (60.0)	9 (45.0)
7 days	7 (70.0)	3 (30.0)	10 (50.0)
Mean (SD)	6.7 (0.5)	5.8 (1.8)	6.25 (1.3)
Service provider practice time at the index facility			
≤ 5 hours	4 (40.0)	4 (40.0)	8 (40.0)
6 or more hours	6 (60.0)	6 (60.0)	12 (60.0)
Mean (SD)	12.7 (10.1)	8.6 (6.1)	10.7 (8.4)
Shift during which service provider practice at the index facility**			
Morning (first half)	1 (10.0)	1 (10.0)	2 (10.0)
Afternoon (first half)	4 (40.0)	2 (20.0)	6 (30.0)
Full day	5 (50.0)	7 (70.0)	12 (60.0)
Monthly income			
Median	226	385	260
Mean (SD)	239 (88)	390 (246)	315 (193)
* *p*-value <0.05 ** Missing: MSS=4; GSM/PSI=2; Overall=6			

The mean age of the FP exit user who were interviewed (n=39) was 30.7 (±5.7) years. Nearly half (46.2%, n=18) had 3–4 living children, almost 3/4th (n=28) had no formal education and all were (n=28) housewives. Approximately 8% were living below 1.25$ a day and nearly half (46.2%, n=18) had no desire for more children (Table-4). Majority (87.2%, n=34) had been to the index health facility previously. Proximity to health facility was the prime reason (53.9%, n=21) for visit and it took an average of 11.4 (±10.5) minutes to get to the facility. Approximately 70% (n=27) had ever used any form of contraceptive method in life time while 21 had used in the past 3 months. Of the users interviewed, 12.8% (n=5) had switched from short-acting to a long-acting contraceptive. Looking at the differences between GS/PSI and MSS users, (table 4) data shows that users attending GS/PSI health facilities were younger, had a greater desire for spacing, and nearly one third chose the facility owing to good reputation of service provider.

Table-4: Characteristics of family planning users

User Profile	MSS	GS/PSI	Overall
Age (in years) *			
15 – <25	0 (0.0)	6 (31.6)	6 (15.4)
25 – <35	11 (55.5)	8 (42.1)	19 (48.7)
35 – 49	9 (45.0)	5 (26.3)	14 (35.9)
Mean (SD)	32.8 (4.7)	28.5 (6.0)	30.7 (5.7)
Number of children			
1 – 2	8 (40.0)	8 (42.1)	16 (41.0)
3 – 4	9 (45.0)	9 (47.4)	18 (46.2)
5 +	3 (15.0)	2 (10.5)	5 (12.8)
Mean (SD)	3.0 (1.5)	3.2 (1.5)	3.1 (1.5)
User's education			
None or completed primary	14 (70.0)	14 (73.7)	28 (71.8)
Secondary or above	6 (30.0)	5 (26.3)	11 (28.2)
Husband's education			
None or completed primary	8 (40.0)	11 (57.9)	19 (48.7)
Secondary or above	12 (60.0)	8 (42.1)	20 (51.3)
Duration of marriage in years			
≤ 10 years	9 (45.0)	11 (57.9)	20 (51.3)
11 or more	11 (55.0)	8 (42.1)	19 (48.7)
Mean (SD)	12.7 (7.6)	9.6 (5.8)	11.2 (6.9)
Age of youngest child (in years)			
≤ 2	10 (50.0)	12 (63.2)	22 (56.4)
More than 2	10 (50.0)	7 (36.8)	17 (43.6)
Mean (SD)	3.0 (2.7)	2.9 (3.9)	2.9 (3.3)
Desire for a/another child (in years)*			
Want no more child	12 (60.0)	6 (31.6)	18 (46.2)
Want less than 2 years	4 (20.0)	3 (15.8)	7 (18.0)
Want after 2 years	4 (20.0)	10 (52.6)	14 (35.9)
Mean (SD)	1.5 (1.5)	1.3 (1.6)	3.0 (1.4)
Working status of women			
Housewife	12 (60.0)	16 (84.2)	28 (71.8)
Working women	8 (40.0)	3 (15.8)	11 (28.2)
Poverty level			
Living below $ 1.25 a day	4.9%	10.7%	7.7%
Living below $ 2.50 a day	60.8%	67.6%	10.5%
Health Seeking Behaviour			
Existing user of health facility			
Yes	16 (80.0)	18 (94.7)	34 (87.2)
No	4 (20.0)	1 (5.3)	5 (12.8)
Reason for choosing health facility *			
Nearby	16 (80.0)	5 (26.3)	21 (53.9)
Low cost	2 (10.0)	5 (26.3)	7 (18.0)
Good reputation of provider	1 (5.0)	6 (31.6)	7 (18.0)
Best quality	1 (5.0)	0 (0.0)	1 (2.6)
Good previous experience	0 (0.0)	3 (15.8)	3 (7.7)
Travel time to get to health facility			
<15 minutes	16 (80.0)	15 (79.0)	31 (79.5)
15 or more	4 (20.0)	4 (21.1)	8 (20.5)
Mean (SD)	10.4 (7.7)	12.4 (13.0)	11.4 (10.5)
Ever use of contraceptive in life time			
Yes	15 (75.0)	12 (63.2)	27 (69.2)
No	5 (25.0)	7 (36.8)	12 (30.8)
Current use of FP (last three months)			
Yes	14 (73.7)	7 (53.9)	21 (65.6)
No	5 (26.3)	6 (46.2)	11 (34.4)
Method switching from short to long acting FP			
Yes	1 (5.0)	4 (21.1)	5 (12.8)
* *p*-value <0.05			

Table-5 shows the comparison in mean values of structural indicators of quality of care between MSS and GS/PSI along with the overall values.

There was no significant difference found between facilities used by MSS and GS/PSI with respect to infrastructure of facilities and the number of necessary equipment available at the health facilities. With regard to the physical infrastructure amenities, franchised providers obtained an average score of 5.6 on a scale of 7.

Similarly, the mean score for the equipment available in the facilities was 30.4 (on a scale of 45). The component was further stratified to the equipment's used in procedure room, store room and general ones. Lowest score 10.8 (out of 21) was noted for equipment used in the procedure room highlighting a major gap needing attention. No difference was observed between providers of MSS and GS/PSI in terms of the relevant staff availability. However, MSS franchised providers offered broader range of FP services compared with GS/PSI providers (5.0 vs 4.2, *p*-value=0.0004). It was further noted that some of the GS/PSI facilities were not providing condom services; whereas, GS/PSI provider was provider higher number of non-FP services compared with MSS providers (7.8 vs 5.1, *p*-value=0.0010), e.g. MVA, immunization, and C-section. On management indicators, MSS providers were more user-centred (3.4 vs 2.0, *p*-value=0.0076). Comparatively, some GS/PSI centres had no certificate framed mounted on the wall and information signboards were missing in clinics. Similarly, they scored better in clinical governance (7.6 vs 5.4) especially on data records management. With respect to the counselling, no differences were found between MSS and GS/PSI providers Service providers attained an average score of 6.7 (out of 8) on waste disposal mechanism, supplies 12.5 (out of 15), user-centred facility 2.7 (out of 4), and clinical governance 6.5 (out of 11). Within the domain of counselling, on average providers had received 6 family planning and 7 (non-family planning) reproductive health related trainings. Service providers had adequate mechanism in place for user's privacy.

The differences in mean values of process and outcome indicators of quality of care between MSS and GS/PSI along with the overall values are presented in table 6. Similar to the structural aspect, few differences were found between MSS and GS/PSI service providers. GS/PSI providers were observed to be performing better on technical care, comprehensively taking reproductive history (assessing more parameters) compared with MSS providers (7.9 vs 6.0, *p*-value=0.0116). On the other side, MSS providers were more likely to ask users about concerns with family planning methods (4.0 vs 3.7, p-value = 0.0153). Overall, service providers were rated high on all indicators of interpersonal care compared to technical care.

User satisfaction in the MSS and GS/PSI facilities were overwhelmingly high – service providers attained an average score of 16.6 (out of 17).

Table-5: Differences in structural attributes of quality

Indicators of Quality	Mean value		Bivariate significance level *p*-value	Mean value
	MSS (n=10)	GS/PSI (n=10)		Overall (n=20)
STRUCTURE				
Infrastructure and equipment				
Physical infrastructure (no. of amenities) (out of 7)	5.3 (1.2)	5.8 (1.2)	0.2682	5.6 (1.2)
Equipment in the facility (out of 45)	28.7 (3.3)	32.1 (5.5)	0.1188	30.4 (1.1)
General equipment (out of 19)	14.4 (1.7)	15.3 (2.2)	0.1450	14.9 (2.0)
Procedure room (out of 21)	9.7 (2.1)	11.9 (3.6)	0.1352	10.8 (3.1)
Store room (out of 5)	4.6 (0.97)	4.9 (0.32)	0.5032	4.75 (0.7)
Availability of services				
Availability of provider and facility opening hours (out of 32)	19.6 (10.0)	15.2 (5.8)	0.7317	17.4 (1.8)
Availability of FP services (out of 8)	5 (0.0)	4.2 (3.9)	0.0004	4.6 (4.4)
Availability of non-FP services (out of 10)	5.1 (1.2)	7.8 (1.3)	0.0010	6.5 (1.9)
Management				
Waste disposal mechanism (out of 8)	6.6 (1.5)	6.8 (1.4)	0.694	6.7 (1.4)
User-centre facility (out of 4)	3.4 (0.8)	2.0 (1.1)	0.0076	2.7 (1.2)
Clinical governance (out of 11)	7.6 (1.5)	5.4 (1.5)	0.0037	6.5 (1.9)
Supplies (out of 15)	12.4 (2.4)	12.5 (1.3)	0.4301	12.5 (1.9)
Emergency preparedness	1.7 (1.1)	1.9 (0.3)	0.5582	1.8 (0.8)
Counselling				
Visual aids (out of 6)	3.3 (0.8)	2.8 (1.2)	0.2690	3.1 (1.1)
Training of service provider on FP (out of 8)	5.7 (2.1)	5.2 (3.0)	0.9068	5.5 (2.5)
Training of service provider on non-FP (out of 7)	6.5 (0.9)	6.4 (1.0)	0.9667	6.5 (0.9)
Service provider knowledge about method effectiveness	4.2 (2.2)	4.2 (2.0)	0.8478	4.2 (2.0)
Provider Experience of working in health facility (out of 4)	0.7 (0.8)	2 (0.5)	0.0016	1.4 (0.9)
Privacy (out of 3)	2.3 (0.5)	2.6 (1.0)	0.0643	2.5 (0.8)

Table-6: Differences in process and outcome attributes of quality

Indicators of Quality	Mean value		Bivariate significance level *p*-value	Mean value
	MSS (n=20)	GS/PSI (n=19)		Overall (n=39)
PROCESS				
Service provider ensure privacy while seeing user (0-2)	1.8 (0.4)	1.9 (0.3)	0.4185 [0.4258]	1.9 (0.4)
User concerns noted (out of 4)	4 (0.0)	3.7 (0.5)	0.0153 [0.132]	3.9 (0.3)
Explained method use (out of 2)	1.9 (0.5)	1.6 (0.6)	0.0635 [0.1323]	1.7 (0.6)
Treated the user with respect (%)	100.0	100.0	not applied	100.0
Technical care				
Reproductive History (out of 9)	6.0 (2.5)	7.9 (1.5)	0.0116 [0.0060]	6.9 (2.3)
Physical Examination				
Informed choice (out of 2)	2.0 (0.2)	1.8 (0.4)	0.2732 [0.2790]	1.9 (0.3)
*Assessment of procedure (oral pill, condom, IUD, and injectable) (average %)	61.9 (34.2)	90.2 (7.9)	0.0479 [0.0603]	69.0
OUTCOME				
User Satisfaction (out of 17)	16.6 (0.7)	16.5 (1.0)	0.9723 [0.7834]	16.6 (0.8)
* n=25				

As can be noted in table 7, only client-provider knowledge about the effectiveness of contraceptive use was associated with client satisfaction, with odds of satisfaction increase by a factor of 1.61 (*p*-value=0.018).

Table-7: Factors associated with user satisfaction – univariable analysis

Indicators of Quality	Univariable odds ratio (95% CI)	p-value
PROVIDER CHARACTERISTICS		
Provider's age	1.02 (0.90, 1.14)	0.787
Years since profession qualification completed S1Q05a (<10 years)	1.04 (0.13, 8.02)	0.969
Years of experience	1.02 (0.88, 1.18)	0.823
Employed elsewhere (public or private)	0.82 (0.14, 4.71)	0.816
Years since facility exist	1.02 (0.88, 1.18)	0.823
Daily practice hours at the index facility	1.00 (0.89, 1.14)	0.949
Staff employed at the facility (ref: none)	0.57 (0.08, 4.05)	0.553
STRUCTURE		
Infrastructure and equipment		
Physical infrastructure (no. of amenities) (out of 7)	1.71 (0.71, 4.11)	0.216
Equipment in the facility (out of 45)	0.98 (0.79, 1.22)	0.854
General equipment (out of 19)	1.06 (0.59, 1.89)	0.835
Procedure room (out of 21)	0.94 (0.77, 1.15)	0.553
Store room (out of 5)	0.88 (0.27, 2.93)	0.827
Availability of services		
Availability of provider and facility opening hours (out of 32)	1.01 (0.89, 1.14)	0.897
Availability of FP services (out of 8)	1.04 (0.18, 5.95)	0.964
Availability of non-FP services (out of 10)	1.03 (0.59, 1.77)	0.918
Management		
Waste disposal mechanism (out of 8)	1.36 (0.69, 2.67)	0.346
User-centre facility (out of 4)	0.61 (0.25, 1.48)	0.255
Clinical governance (out of 11)	0.84 (0.46, 1.54)	0.545
Supplies (out of 15)	0.93 (0.49, 1.73)	0.799
Emergency preparedness	2.36 (0.7, 7.95)	0.152
Counselling		
Visual aids (out of 6)	1.24 (0.56, 2.73)	0.574
Training of service provider on FP (out of 8)	1.32 (0.94, 1.85)	0.104
Training of service provider on non-FP (out of 7)	1.20 (0.37, 3.83)	0.750
Service provider knowledge about method effectiveness	1.61 (1.1, 2.37)	0.018
Provider Experience of working in health facility (out of 4)	0.85 (0.31, 2.33)	0.738
Privacy (out of 3)	0.85 (0.14, 5.27)	0.849
PROCESS		
Interpersonal		
Service provider ensure privacy while seeing user (0-2)	0.40 (0.05, 3.51)	0.384
User concerns noted (out of 4)	0.52 (0.03, 8.51)	0.629
Explained method use (out of 2)	1.26 (0.32, 4.97)	0.722
Treated the user with respect (%)	-	-
Technical care		
Reproductive History (out of 9)	0.72 (0.44, 1.18)	0.182
Informed choice (out of 2)	2.5 (0.2, 31.32)	0.453
*Assessment of procedure (oral pill, condom, IUD, and injectable) (average %)	1.01 (0.97, 1.04)	0.718

DISCUSSION AND CONCLUSION

Numerous studies have documented the impact of quality family planning services with contraceptive uptake[27], prevalence[27] and continuation[21,27,32], however, relatively little is known about quality of services and care especially in the context of social franchising[33]. This study is first in Pakistan that assessed the quality of family planning service provision and care at social franchised providers.

Data indicated that comparatively service providers at GS/PSI franchised were generating higher income, the facilities had higher number of rooms and relevant staff employed, and providers had facility's ownership. These differences may be attributed to the fact that GS/PSI providers were older with higher experience and their facilities were based in urban periphery, with high user flow and affordability compared with the rural settings where majority of MSS are based.

We observed higher level of quality at the structural and process level, among MSS and GS/PSI franchised providers, which translated into higher user satisfaction. For example, structural attributes such as user centred approach; better clinical governance; availability of FP as well as non-FP services; adequate level of user's privacy and process and outcome attributes such as better technical care; comprehensive history taking contributed to higher user satisfaction. The findings are consistent with the other research findings.[34] Moreover, previous studies from Pakistan[28,35] and other countries[36,37] showed service providers tend to struggle more on the 'technical' aspect of the service provision; however, the findings in our study described a more balanced picture especially for GSM/PSI providers.

MSS and GS/PSI providers were found to be performing equally well on number of structural indicators – the only exception was the possession of equipment that are usually used in the procedure room such as such as autoclave, oxygen cylinder, suction machine. A possible reason may be that such equipment is relatively expensive; and, a perception among providers is that as there is very minimal risk to clients in the context of family planning methods so investing in buying such equipment deemed less worthy.

In management context, MSS franchised providers demonstrated better clinical governance and were more user-focused. This may be contributed to strong mechanisms in place for monitoring and supervision from the franchiser; given MSS had lesser providers as well compared to GS/PSI. On the contrary, GS/PSI providers offered broader range of non-FP services compared with MSS provider. And, MSS providers were found to be offering higher range of FP methods compared with GS/PSI providers. As stated above, GS/PSI providers were generating higher income through this (index) facility – one of the possible reasons could be the wider range (non-FP) maternal health services that are more lucrative than FP services.

Similar to the structural findings, both MSS and GS/PSI performed well for both process and outcome indicators. Overall, service providers were rated high on all indicators of interpersonal care compared to technical care. However, it is interesting to note that GS/PSI providers were better in technical care, whereas MSS providers did better on interpersonal care. This observation can possibly be explained on the grounds of comparatively more experienced GS/PSI providers leading to improved technical knowledge and care, whereas the younger and less experienced MSS providers demonstrated better interpersonal skills. However, the overall user satisfaction, at both the models of franchised clinics was very high, indicative to good quality of service provision to users.

It was interesting to note that none of the facility level factors showed association with user satisfaction except for provider knowledge. The findings are inconsistent with other studies conducted in other countries where numbers of factors seem to influence users' experiences.[36,37] This may be due to the smaller study sample to detect differences.

Limitations:

Like any other study, this also has certain limitations, which are important to consider while interpreting the results. First of all, the visits to the health centres/clinics for conducting the assessment were planned ahead. This can introduce bias as the centres could prepare themselves for the day and could make arrangements to present high quality service on the day of the visit. This invariably can result in the scores being skewed. There is a possibility that the level of service on other days is different from what was being observed during the audit. Although, the authors tried to be as objective as possible in the assessment but acknowledge the possibility of bias. However, we also accept that there was an element of subjectivity in the findings rather objectivity gather from this study once data of analysed. Secondly, in order to ensure reliability of observations, after proper training, the entire assessment was carried out by two expert assessors. The possibility of observing some level of Hawthorne Effect results from the presence of an observer in the room during the counselling and clinical sessions with the provider; may influence the provider's behaviour. We tried to minimize this by training the observer to be as unobtrusive as possible; however, it can be seen as a limitation. Finally, an inherent limitation of

conducting exit interviews at the health facilities is the potential lack of negative assessment of services at the service point of care by the users. All possible efforts were made to ensure that the interview was conducted in privacy and the collected information was delinked from individual identification.

We can conclude that the social franchising model in engaging the private sector is perhaps the way forward to increase access, improve quality of care and consequently increase contraceptive. It is critical to ensure a strong component of monitoring and supervision for the franchised clinics in ensuring that quality family planning and reproductive health care and services are available, accessible, and acceptable and of high quality, in order to ensure that all men, women and girls can exercise and enjoy the highest attainable standard of health.

Disclaimer: This report contains the collective views of an international group of experts and does not necessarily represent the decisions or the stated policy of the World Health Organization.

Funding: The study is funded by the David and Lucile Packard Foundation. The funding sources did not play a role in the study design, in the writing of the report, or in the decision to submit the article for publication.

AUTHORS' CONTRIBUTION

SKA and MA conceptualized the design of the study and written the protocol. MAA, SKA and MA developed the study tools. MA conducted the data collection. SKA and MA led the analysis. All authors contributed to the development of this manuscript.

REFERENCES

1. Goldie SJ, Sweet S, Carvalho N, Natchu UC, Hu D. Alternative Strategies to Reduce Maternal Mortality in India: A Cost-Effectiveness Analysis. PLoS Med 2010;7(4):e1000264.
2. Bongaarts J. The impact of family planning programs on unmet need and demand for contraception. Stud Fam Plan 2014;45(2):247–62.
3. WHO. Family Planning/Contraception Geneva: WHO; 2015 [cited 2015 Aug 5]. Available from: http://who.int/mediacentre/factsheets/fs351/en/
4. Singh S, Darroch JE. Adding it up: Costs and benefits of contraceptive services. Guttmacher Inst UNFPA 2012.
5. UN. Sustainable Development Goals. New York: United Nations, 2016 [cited 2017 July]. Available from: https://sustainabledevelopment.un.org/?menu=1300
6. UN Foundation. Family Planning 2020 Washington, DC: United Nations Foundation; 2016 [cited 2016 Sep 10]. Available from: http://www.familyplanning2020.org/about
7. Kamugumya D, Olivier J. Health system's barriers hindering implementation of public-private partnership at the district level: a case study of partnership for improved reproductive and child health services provision in Tanzania. BMC Health Serv Res 2016;16(1):596.
8. Basu S, Andrews J, Kishore S, Panjabi R, Stuckler D. Comparative Performance of Private and Public Healthcare Systems in Low- and Middle-Income Countries: A Systematic Review. PLoS Med 2012;9(6):e1001244.
9. WHO. Public policy and franchising reproductive health: current evidence and future directions Guidance from a technical consultation meeting. Geneva: World Health Organization, 2007.
10. Ensor T, Weinzier S. Regulating health care in low- and middle-income countries: Broadening the policy response in resource constrained environments. Soc Sci Med 2007;65(2):355–66.
11. Mackintosh M, Channon A, Karan A, Selvaraj S, Cavagnero E and Zhao H. What is the private sector? Understanding private provision in the health systems of low-income and middle-income countries. Lancet. 2016 ;388 (10044):596–605
12. Chapman, A. The Impact of Reliance on Private Sector Health Services on the Right to Health. Health Hum Rights 2014;16(1):122–33.
13. Beyeler N, York De La Cruz A, Montagu D. The impact of clinical social franchising on health services in low- and middle-income countries: a systematic review. PLoS One 2013;8(4):e60669.
14. Koehlmoos TP, Gazi R, Hossain SS, Zaman K. The effect of social franchising on access to and quality of health services in low- and middle-income countries. Cochrane Database Syst Rev 2009;21(1):CD007136.
15. WHO. Quality of Care: a process of making strategic choice in health systems. Geneva: World Health Organization, 2007.
16. Nishtar S, Boerma T, Amjad S, Alam AY, Khalid F, ul Haq I, *et al*. Pakistan's health system: performance and prospects after the 18th Constitutional Amendment. Lancet 2013;381(9884):2193–206.
17. NIPSI. Pakistan Demographic and Health Survey 2012–13. Second Pak Demogr Health Surv. 2012;13:2013.
18. Ngo AD, Alden DL, Pham V, Phan H. The impact of social franchising on the use of reproductive health and family planning services at public commune health stations in Vietnam. BMC Health Serv Res 2010;10(54).
19. Montagu D, Yamey G, Visconti A, Harding A, Yoong J. Where do poor women in developing countries give birth? A multi-country analysis of demographic and health survey data. PLoS One 2011;6(2):e17155.
20. Mumtaz, Z. Social franchising: whatever happened to old-fashioned notions of evidence-based practice? Lancet Glob Health 2018;6(2):e130–1.
21. Azmat SK, Ali M, Ishaque M, Mustafa G, Hameed W, Khan OF, *et al*. Assessing predictors of contraceptive use and demand for family planning services in underserved areas of Punjab province in Pakistan: Results of a cross sectional baseline survey. Reprod Health 2015;12:25.
22. Cleland J, Conde-Agudelo A, Peterson H, Ross J, Tsui A. Contraception and health. Lancet 2012;380(9837):149–56.
23. Azmat SK, Hameed W, Hamza HB, Mustafa G, Ishaque M, Abbas G, *et al*. Engaging with community-based public and private mid-level providers for promoting the use of modern contraceptive methods in rural Pakistan: results from two innovative birth spacing interventions. Reprod Health 2016;13(25):1–15.
24. Hogan MC, Foreman KJ, Naghavi M, Ahn SY, Wang M, Makela SM, *et al*. Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5. Lancet 2010;375(9726):1609–23.
25. Planning Commission. Pakistan Millennium Development Goals Report 2013. Islamabad: Government of Pakistan, 2013. [Internet]. [cited 2017 July]. Available from: http://www.pk.undp.org/content/dam/pakistan/docs/MDGs/MDG2013Report/final%20report.pdf
26. Nishtar NA, Sami N, Alim S, Pradhan N, Hasnain FU. Determinants of Contraceptives Use amongst Youth: An

Exploratory Study with Family Planning Service Providers in Karachi Pakistan. Glob J Health Sci 2013;5(3):1–8.
27. Donabedian A. The quality of care: How can it be assessed? JAMA 1988;260(12):1743–8.
28. Bhutta ZA, Hafeez A, Rizvi A, Ali N, Khan A, Ahmad F, *et al*. Reproductive, maternal, newborn, and child health in Pakistan: challenges and opportunities. Lancet 2013;381(9884):2207–18.
29. Schlein K, De La Cruz AY, Gopalakrishnan T, Montagu D. Private sector delivery of health services in developing countries: a mixed-methods study on quality assurance in social franchises. BMC Health Serv Res 2013;13:4.
30. Munroe E, Hayes B, Taft J. Private-Sector Social Franchising to Accelerate Family Planning Access, Choice, and Quality: Results From Marie Stopes International. Global Health Sci Pract 2015;3(2):195–208.
31. Azmat SK, Ali M, Hameed W, Mustafa G, Abbas G, Ishaque M, *et al*. A study protocol: using demand-side financing to meet the birth spacing needs of the underserved in Punjab Province in Pakistan. Reprod Health 2014;11(1):39.
32. Miller G, Babiarz KS. Family planning program effects: Evidence from microdata. Popul Dev Rev 2016;42(1):7–26.
33. Sprockett A. Review of quality assessment tools for family planning programmes in low- and middle-income countries. Health Policy Plan 2017;32(2):292–302.
34. Malik FR. Quality family planning services provision at private clinics of Khyber Pakhtunkhwa province, Pakistan. Gomal J Med Sci 2015;13(3):177–82.
35. Agha S, Fareed A, Keating J. Clinical training alone is not sufficient for reducing barriers to IUD provision among private providers in Pakistan. Reprod Health 2011;8:40.
36. Agha S, Do M. The quality of family planning services and client satisfaction in the public and private sectors in Kenya. Int J Qual Health Care 2009;21(2):87–96.
37. Hutchinson PL, Do M, Agha S. Measuring client satisfaction and the quality of family planning services: a comparative analysis of public and private health facilities in Tanzania, Kenya and Ghana. BMC Health Serv Res 2011;11:203.

Received: 15 November, 2017	*Revised: 31 October, 2017*	*Accepted: 30 November, 2017*

Address for Correspondence:
Syed Khurram Azmat, Division of Health Information System, The Hospital for Sick Children, Toronto-Canada
Email: khurramazmat@gmail.com