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Evaluation of service quality in family planning clinics in Lusaka, Zambia

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Abstract

Objective—To determine the quality of contraceptive services in family planning clinics in Lusaka, Zambia using a standardized approach.

Study design—We utilized the Quick Investigation of Quality, a cross-sectional survey tool consisting of a facility assessment, client-provider observation, and client exit interview, in public-sector family planning clinics. Data were collected on availability of seven contraceptive methods, information given to clients, interpersonal relations between providers and clients, providers' technical competence, and mechanisms for continuity and follow-up.

Results—Data were collected from five client-provider observations and client exit interviews in each of six public-sector family planning clinics. All clinics had at least two contraceptive methods continuously available for the preceding six months. Most providers asked clients about concerns with their contraceptive method (80%) and told clients when to return to the clinic (87%). Most clients reported that the provider advised what to do if a problem develops (93%); described possible side effects (89%); explained how to use the method effectively (85%); and told them when to come for follow-up (83%). Clients were satisfied with services received (93%).

Conclusion(s)—This application of the Quick Investigation of Quality showed that the participating family planning clinics in Lusaka, Zambia were prepared to offer high quality services with the available commodities, and clients were satisfied with the received services.

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Despite the subjective client satisfaction, quality improvement efforts are needed to increase contraceptive availability.

Implications—Although clients perceived the quality of care received to be high, family planning service quality could be improved to continuously offer the full spectrum of contraceptive options. The Quick Investigation of Quality was easily implemented in Lusaka, Zambia, and this simple approach could be utilized in a variety of settings as a modality for quality improvement.

Keywords

contraception; family planning; quality; Africa

1. Introduction

The quality of family planning (FP) services influences uptake and continued use of contraception [1]. Previous research indicates that higher quality services yield more new and returning contraceptive users, especially in the developing world [2–6]. Despite the importance of quality of services for FP uptake and continuation, and an accepted definition of FP quality [7], few data are available from quality assessments performed in the last 15 years. We address this gap in FP implementation research by using a validated methodology to characterize quality of FP services in Lusaka, Zambia. By describing our application of a quality assessment tool, we also provide an example of how family planning service quality can be measured which can potentially be incorporated into programmatic assessments or research studies.

2. Materials and methods

This cross-sectional survey of quality in FP clinics was performed in Lusaka, Zambia. Ethical approval was obtained from the University of Zambia Biomedical Research Ethics Committee (Lusaka, Zambia) and the University of North Carolina at Chapel Hill Institutional Review Board (Chapel Hill, NC, USA).

The Quick Investigation of Quality (QIQ) was the validated tool used to measure five components of FP service quality: available contraceptive methods, information given to clients, interpersonal relations between providers and clients, providers' technical competence, and mechanisms for continuity and follow-up [7, 8]. Offering a range of methods is the underpinning of successful contraceptive provision because it draws new users, ensures client satisfaction, and allows method switching for continued use [9–11]. The primary outcome was availability of contraceptive methods by type, defined as having the commodity in stock and a trained provider with the necessary equipment on-site to supply the method.

The study was conducted at FP clinics in the Zambian capital, Lusaka, in primary care centers supported by the Zambian Ministry of Community Development, Mother and Child Health. Lusaka is urban, and the population represents 13% of the total population of Zambia. According to the Demographic and Health Survey 2013 – 2014, the total fertility rate in urban Zambia is 3.7, and 20% of girls aged 15 – 19 have given birth or are pregnant.

Approximately 57% report using a modern contraceptive method with injectables being the most popular, and the majority receive FP services in the government sector [12]. HIV prevalence in Zambia is 13%, with women being disproportionately affected, especially in urban areas where the prevalence is 21% [12, 13].

According to district health policy, all clinics were expected to offer the minimum standard for FP in Lusaka which meant having the ability to offer all of the following: contraceptive implant, copper intra-uterine device (IUD), injectable contraception, combination and progestin-only contraceptive pills, emergency contraception, and male condoms. Some clinics only provide contraceptive implants and IUDs on specific days of the week; in these cases, the survey was performed on a day when they were offered.

Data were collected by an all-female study team trained to conduct the survey per the QIQ training manual [8]. The QIQ comprises three data collection tools: facility audit with manager's survey, client-provider observation, and client-exit interview. The QIQ data collection tools were reviewed prior to the training, and minimal adaptations were made. The physician team leader trained a registered midwife to conduct the observations and two community health workers (CHWs) to conduct exit interviews. The same team performed the survey at each clinic. The team leader performed the facility audit while the CHWs located private areas to perform exit interviews. The midwife obtained verbal consent from the FP provider(s) to observe client visits and determined where she would sit to observe the visits without interfering.

Women aged 18 and older in the clinic waiting area were eligible to participate. When at least five women were in the waiting area, the midwife explained the survey to the group and introduced the CHWs and their locations. Each individual was approached and consented to participate. The midwife then followed a client through her routine visit, being as unobtrusive as possible. After the observation was finished, the client was given a numbered card and proceeded to an available CHW. The CHW obtained informed consent from the client and then asked for the numbered card to ensure that the exit interview was linked to the appropriate observation. The exit interview was then performed in the client's preferred language: English, Bemba, or Nyanja.

Our sample size was one of convenience. FP clinics that typically served at least 30 clients per day were selected to ensure that at least five clients would be available and agree to participate in the study on the day of the survey. The number of clients selected was also related to feasibility for the study team in the available time.

3. Results

Data were collected from April 29 to May 7, 2014. Five client-provider observations and exit interviews were performed at each of six FP clinics. Three clinics had one provider, two had two providers, and one clinic had three providers. All providers were included via at least one observation.

For the preceding six months, none of the clinics reported availability of the seven FP options at all times (Figure 1), but all clinics always had at least two contraceptive methods

available. All clinics reported stock-outs of progestin-only pills; two of the six clinics reported stock-outs of combination pills; two reported stock-outs of condoms; and two reported stock-outs of injectables. The duration of the stock-outs varied from one week to more than six months at a time. Emergency contraception was reportedly never available in three of the surveyed clinics. Contraceptive implants and IUDs were not available in three of the clinics due to lack of trained staff and in one separate clinic due to lack of equipment.

Interpersonal relations between client and provider were observed to be very good with adequate information sharing. All clinics had a private area for the visit and pelvic examinations. During the client-provider observations, the providers almost always asked open-ended questions (97%). Observed health providers encouraged clients to ask questions (80%); asked clients about concerns with their FP method (80%); and told clients when to return to the clinic (87%). HIV and other sexually transmitted diseases (STDs) were usually discussed (83%). All administrations of injectable contraception were timed appropriately using sterile technique ($n = 18$). Desire for more children (57%), regularity of menstrual cycle (50%), and current pregnancy status (17%) were infrequently discussed.

All clients who had their FP visit observed also had an exit interview ($n = 30$). The median age was 28.5 years (interquartile range 18 – 33.5), and 60% reported completing secondary education (Table). Most clients were satisfied with services received (93%) and would encourage a friend to use the facility (93%). The clients corroborated the observed provider communication and counseling skills and information provided (Figure 2). Clients felt privacy was adequate (97%); information exchanged would remain confidential (87%); and waiting time was reasonable (83%). While most providers observed during the study did discuss HIV and other STDs, only 63% of clients reported that they were encouraged to use condoms with their FP method.

4. Discussion

Among the six public FP clinics assessed using the QIQ in Lusaka, Zambia, all reported having at least two contraceptive commodities continuously available over the preceding 6 months. However, none of the clinics was able to provide all contraceptive methods to women on the day of the survey. The availability of contraceptive options was limited due to lack of commodities, trained providers, and equipment. Despite this objective finding that all methods were not always available, clients reported satisfaction with the care they received. The client-provider observations and client exit interviews both demonstrated accurate and appropriate exchange of information and interpersonal relations between the clients and providers. The observed providers demonstrated correct technical skills, and most clients reported being told when to return for follow-up.

Limited contraceptive availability and commodity stock-outs were identified in surveyed FP clinics. Commodity stock-outs occurred in all sites, consistent with findings from a previous nationwide FP logistics survey in Zambia and a cross-sectional survey in Malawi [14, 15]. We did not collect data on the cause of the stock-outs but other regional reports have suggested ineffective procurement procedures, true commodity shortages, or lack of transport to deliver the commodities [14–16]. The Procurement Planning and Monitoring

Report is a monthly logistics and forecasting tool used by governments and partner organizations in Zambia, Malawi, and over 30 other countries to prevent contraceptive stock-outs by identifying potential supply issues in time to mobilize resources to help avoid stock imbalances [17].

Provision of contraceptive implants and IUDs was limited by equipment and trained provider shortages. Ensuring equipment and providers trained to insert implants and IUDs are present in FP clinics is a current project within the Zambian Ministry of Community Development, Mother and Child Health. A national database of FP providers, their training, and their current clinic affiliation, including equipment, is under revision. Based on the database results, provider trainings will be held and equipment distributed to ensure equal access to long-acting reversible contraception (LARC) throughout the country. The database will be monitored to ensure that relocation of providers does not alter FP access nationwide. Multiple other efforts are underway in Zambia to improve availability of LARC methods. For instance, non-governmental organizations are working to increase the number of dedicated LARC providers and extend service areas using mobile clinics [18–20]. Finally, task shifting is an additional approach that can increase access to more contraceptive options, and reach underserved communities [21, 22]. The Zambian government is addressing policy barriers to allow task shifting so more efficient FP service delivery options are utilized [23].

Gaps in health education provision were identified in this study. The client's desire for more children was only assessed in half of the interactions. One-third of clients only heard about one contraceptive method. Despite being a high HIV prevalence setting, clients were not always encouraged to use condoms with their FP method. During every FP visit, a provider should assess the client's FP goals, including desire for and timing of more children; help identify the most appropriate method to meet the client's needs; and discuss dual method use to prevent HIV and STDs [24]. Structured visit forms or checklists, on-site refresher updates, and provider mentoring during district supervisory visits will help ensure each FP visit reviews the client's reproductive life plan [25, 26].

The results of this study may not be generalizable because of the limited number of clinics and FP clients, especially new FP users. Women younger than 18 were not included due to the need for parental consent for study participation. The sample included too few contraceptive implant and IUD insertions to accurately assess technical competence. Also, the view of quality among those not seeking services was not assessed. The QIQ itself has other inherent limitations, though efforts were made to minimize their impact. The observer was as unobtrusive as possible to reduce the Hawthorne Effect. Recall bias was limited as the exit interview occurred immediately after the visit was completed. Clients were reassured that their answers were confidential and would not affect their care to help limit courtesy bias. No composite quality score is determined by the QIQ which prevents quick comparison of service quality between sites.

The London Summit and Family Planning 2020 have refocused much needed attention to clinical contraceptive services [27, 28]. To improve contraceptive uptake and continuation, quality assessment and improvement must be performed to help women and families

achieve their FP goals. The results of this study highlight the need for focused attention on method availability to improve FP service quality. This study also demonstrated the applicability of QIQ methodology as a tool to assess FP service quality. The QIQ is a comprehensive tool that can be quickly and easily implemented. Program managers and researchers can use the QIQ to obtain objective data regarding the quality of FP service provision to help inform quality improvement and evaluations of new contraceptive methods and techniques. In this demonstration project, we showed the utility of the QIQ as an evaluation tool, one that should be adapted for ongoing FP quality improvement efforts.

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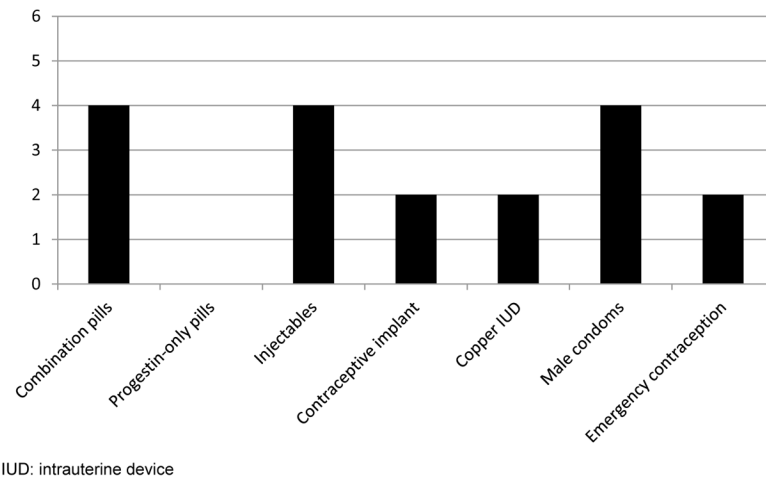


Figure 1. Number of family planning clinics with continuous contraceptive method availability during the last six months by contraceptive method type in Lusaka, Zambia (N = 6)
IUD: intrauterine device

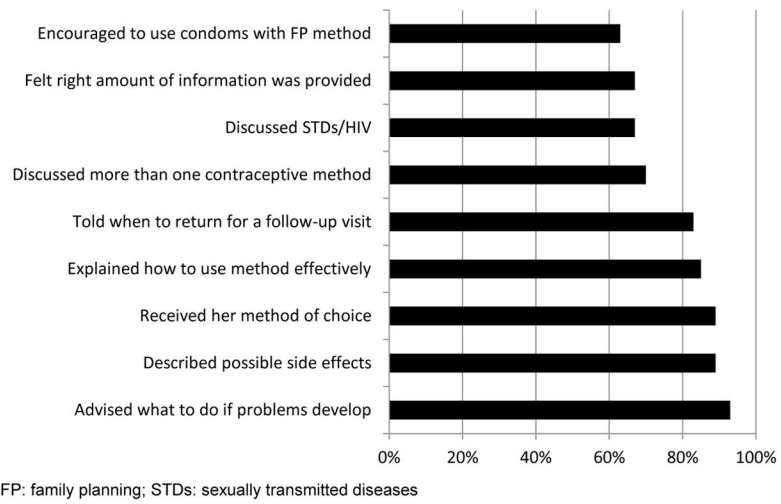


Figure 2. Provider counseling and communication skills as reported by clients after their family planning clinic visit in Lusaka, Zambia (N = 30)
FP: family planning; STDs: sexually transmitted diseases

Table

Characteristics of surveyed clients attending six public-sector family planning clinics in Lusaka, Zambia (N = 30)

	Results* n (%)
Age, median (IQR)	28.5 years (18 – 33.5)
Relationship status	
Single/never married	2 (7)
Married	26 (87)
Other (cohabiting, divorced/separated/widowed)	2 (6)
Number of living children, median (IQR)	2.5 (0 – 3)
Education	
None	1 (3)
Primary	7 (23)
Secondary	18 (60)
More than secondary	4 (13)
Wants more children	19 (63)
Desired timing of next birth among those wanting more children (n = 19)	
Less than one year	1 (5)
One to two years	5 (26)
More than 2 years	11 (58)
Don't know	2 (11)
Reason for visit	
New client	8 (27)
Routine follow-up (re-supply or discontinue)	20 (67)
Switch	1 (3)
Discuss a problem	1 (3)
Current method use (n = 22)	
Injectable	16 (73)
Contraceptive implant	5 (23)
Combination pill	1 (4)

* Data represented as n (%) unless otherwise noted.

IQR=interquartile range