



DETERMINANTS OF THE CHOICE OF A PRIVATE HEALTH FACILITY FOR FAMILY PLANNING SERVICES AMONG THE POOR: EVIDENCE FROM THREE COUNTRIES

October 2009

This publication was produced for review by the United States Agency for International Development. It was prepared by Sohail Agha and Joe Keating for the Private Sector Partnerships-One project.



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Recommended Citation: Sohail Agha and Joe Keating. October 2009. *Determinants of the Choice of a Private Health Facility for Family Planning Services among the Poor: Evidence from Three Countries*. Bethesda, MD: Private Sector Partnerships-One project, Abt Associates Inc.

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Contract/Project No.: GPO-I-00-04-00007-00

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Global Health/Population and Reproductive Health/Service Delivery Improvement
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DETERMINANTS OF THE CHOICE OF A PRIVATE HEALTH FACILITY FOR FAMILY PLANNING SERVICES AMONG THE POOR: EVIDENCE FROM THREE COUNTRIES

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ACRONYMS

ANOVA	One Way Analysis of Variance
DHS	Demographic and Health Survey
FP	Family Planning
MCH	Maternal and Child Health
NGO	Nongovernmental Organization
SPA	Service Provision Assessment
STI	Sexually Transmitted Infection

ABSTRACT

OBJECTIVE

To determine how the structure, process, and outcomes of quality influence the choice of a public or private facility for family planning (FP) services among poor clients.

METHODS

Data from three nationally representative Service Provision Assessment (SPA) surveys conducted in Kenya, Tanzania, and Ghana were used for the analysis. These surveys contain standardized variables measuring structural factors, the process of care provision, and client satisfaction with the quality of services provided. They also include information on whether clients who sought family planning services obtained services from public or private sector facilities. Clients' education was used as a proxy for their poverty status. Multivariate analysis was used to model factors associated with the choice of a public or private facility for FP services.

RESULTS

The most important structural factor associated with a poor client's preference for a private sector facility for FP services was the presence of a trained provider at all times. Shorter waiting times and the maintenance of confidentiality were important determinants of the choice of a private facility for the poor in Kenya and Tanzania but not in Ghana. Poor clients' satisfaction with services provided was consistently associated with their choice of a private facility over a public facility. In particular, poor clients' satisfaction with their interaction with facility staff, the convenience of their visit, and the availability of FP methods influenced their choice of a private facility.

Fewer factors explained nonpoor clients' choice of a private or public facility. Shorter waiting times, privacy during consultation, and perceived cleanliness of the facility appear to be factors that attracted nonpoor clients to private facilities.

CONCLUSIONS

Structure, process, and outcomes of quality have independent effects on the poor's choice of public or private facility. Findings suggest that private facilities are more responsive to the poor. It is possible that because of their higher social status, the nonpoor may be able to extract similar levels of quality of care from both public and private facilities.

I. INTRODUCTION

In spite of the recognition of the importance of the private sector in increasing access to contraceptive services in low-income countries (Hanson et al. 2001, Harvey 2008) or in providing treatment for tuberculosis, malaria, or sexually transmitted diseases (Brugha and Zwi, 1998), relatively little systematic investigation has been conducted of socioeconomic differentials in preference for private health facilities over public health facilities. The general reasons attributed to patient preference for private facilities over public facilities are greater ease of access, shorter waiting times, longer or more flexible opening hours, better availability of staff and drugs, more sensitive attitudes of providers towards clients, and greater confidentiality with services that are stigmatized (Tembon 1996, Brugha and Zwi 1998). Little systematic investigation has been conducted, however, as to whether these reasons vary by the level of clients' wealth.

Understanding why the poor prefer private health facilities over public facilities is important for a number of reasons: policymakers need to know (1) whether increasing access to private sector health services is likely to increase the utilization of health services among the poor and (2) whether public health interventions that increase the quality of private health services benefit poorer members of society. Surprisingly little evidence exists regarding the impact of private sector interventions on the poor's utilization of high-quality services (Pattouillard et al. 2008). A better understanding of poor peoples' preferences for private facilities will help in the design of interventions such as vouchers or insurance schemes that increase the utilization of services among the poor.

Studies that have examined the poor's choice of health facilities have primarily looked at the role of structural factors such as income, price, and travel time (de Bartolome and Vosti 1995). These studies have found an interaction between price and income in the demand for medical care in developing countries, with price having a greater influence on the demand for health care among those with lower incomes (Gertler et al. 1987). Studies have also shown that access costs, such as travel time, function as indirect prices, with travel time having a greater influence on health care demand among the poor compared with the wealthy (Dor et al. 1987). Although poor households have less disposable income to use toward private sector facilities (Tembon 1996), their preference for private facilities over public facilities remains strong (Paphassarang et al. 2002). Several studies have found that private sector facilities are more likely to be preferred because of the better quality of services provided (de Bartolome and Vosti 1995, Tembon 1996), which include the client spending less total time in the facility and receiving better treatment by facility staff (Tembon 1996). Further studies are needed, however, to examine the impact that the range of elements that comprise the process of caregiving has on the choice of public or private facilities.

A feature of the private sector that has received relatively little attention in the literature—possibly because of difficulties in quantification—is the flexibility of the private sector in providing services to the poor. This feature includes both positive and negative aspects: on the positive side, private providers may offer discounts to poor patients or deliver services on credit to patients whom they know; on the negative side, private providers may treat patients based on what the patient can afford to pay (Paphassarang et al. 2002). Many private providers do not have fixed fees and therefore permit patients

to pay what they are able to, or, at times, allow patients to pay in-kind. By contrast, poor patients may not be aware of exemptions available to them at public facilities. Their lack of assertiveness, low self-esteem, and concern about the way they may be treated by staff at public facilities often makes it difficult for the poor to obtain this information. Procedural barriers and inferior treatment from staff at public facilities versus private facilities may also serve as greater barriers for the poor, who usually have a lower social status than the staff at public health facilities (Paphassarang et al. 2002).

Although business literature has widely acknowledged the importance of client perceptions regarding the care they expect to receive (Alden et al. 2004), public health researchers have paid relatively little attention to such perceptions. A recent study that specifically addressed client perceptions of care provided at public or private health facilities found that client expectations of the treatment they were likely to receive were important determinants of their choice of facility. Patients with sexually transmitted infections (STIs) who chose the private health facility over a public health facility were more likely to believe that, compared with public health units, private health units were convenient, were clean, did not cause problems for clients, had sympathetic staff, did not use expired drugs, provided appropriate drugs, were located nearby, did not have corrupt staff, kept patients' confidence, did not delay patients, and were more likely to cure STIs (Nuwaha 2006).

To our knowledge, no previously published study has examined the influence of structural and process aspects of quality and client perceptions of services offered on the choice of a public or private health facility for FP services. This study uses data from clients who visited public or private health facilities for FP services to determine the influence that structural factors, the process of care provision, and client perceptions of services offered had on their choice of visiting the health facility. The data used are from facility and client surveys conducted in three countries where nationally representative data were available for this analysis: Kenya, Tanzania, and Ghana. Two research questions were of interest: What factors influence the choice of a private over a public health facility among poor clients interested in receiving FP services? Does the influence of these factors differ between poor and wealthy clients?

2. METHODOLOGY

Data for this study come from the 2004 Kenya Service Provision Assessment (SPA), the 2006 Tanzania SPA, and the 2002 Ghana SPA. These surveys were conducted to describe the preparedness of health facilities and clients' perceptions of services and to identify gaps in resources and service delivery processes (National Coordinating Agency for Population and Development and ORC Macro 2005, National Bureau of Statistics and Macro International Inc. 2007, Ghana Statistical Office and ORC Macro 2003).

INSTRUMENTS

A *facility inventory questionnaire* was used to collect information on the availability of resources, support systems, and infrastructure elements at facilities. Researchers used an *observation protocol* to assess the extent to which service providers adhered to standards of care. This instrument provided observations of the performance of specific clinical procedures and the exchange of information between the provider and the client. Clients who were observed receiving FP services were subsequently asked to participate in an *exit interview*. The exit interview collected information on clients' understanding of the consultation and their satisfaction with services provided.

KENYA SAMPLE

The 2004 Kenya SPA is a nationally representative sample of health facilities, consisting of hospitals, health centers, maternities, clinics, dispensaries, and stand-alone voluntary counseling and testing centers run by the public sector and private organizations such as nongovernmental organizations (NGOs), faith-based organizations (FBOs), and for-profit facilities. A total of 440 facilities were sampled for the survey, of which 323 provided FP services. Researchers conducted observations of service delivery and exit interviews with 628 family planning clients. Weights were used in the analysis to adjust for unequal probabilities of selection. Details of the approach used for sampling facilities and clients are provided elsewhere (National Coordinating Agency for Population and Development and ORC Macro, 2005).

TANZANIA SAMPLE

The 2006 Tanzania SPA is a nationally representative sample of hospitals, health centers, dispensaries, and stand-alone facilities managed by the public sector, private for-profit sector, parastatal organizations, and FBOs. A sample of 612 facilities was selected to provide national-level representation, of which 479 facilities provided family planning services. Researchers conducted 1,005 observations of client provider interactions and exit interviews. Weights were attached to the data to take into account overrepresentation of certain strata. Details of the study are provided elsewhere (National Bureau of Statistics and Macro International Inc. 2007).

GHANA SAMPLE

The 2002 Ghana SPA is a nationally representative sample of public and NGO-operated facilities. Based on funding, logistical considerations, and the minimum sample size required for regions, 428 facilities were selected that offered maternal and child health (MCH), child, reproductive health, and sexually transmitted infection (STI) services. To permit analysis by region and facility type, the survey

oversampled facilities in some regions. Weights were created to adjust for unequal probabilities of selection. A total of 386 facilities provided FP services. Researchers conducted a total of 611 observations and exit interviews of clients who came for FP visits (Ghana Statistical Office and ORC Macro 2003).

OPERATIONAL DEFINITION OF QUALITY CARE

This study employs the conceptual framework developed by Donabedian (1988) to examine the influence of structure, process, and outcomes of quality of services on the choice of facility. Each of these three aspects of service provision is measured by multiple indicators, as presented in Table I. *Structure* refers to the amenities of care or the attributes of the setting in which care is provided (Donabedian 1988). Information on infrastructure and equipment, management systems, availability of services, materials and structures for counseling, the training and experience of providers, and the degree to which providers are motivated to provide good care to patients reflects structural aspects of quality (Boller et al. 2003). The *process* of service provision (i.e., the performance of the practitioner) comprises technical and interpersonal elements of care. Technical performance depends on the knowledge and judgment of the provider and the provider's skill in implementing strategies that are appropriate. It is measured by the provider's adherence to what is considered good clinical procedure. Success in the technical aspects of care relies on the provider's interpersonal interaction with the client, the second component in the provider's performance (Donabedian 1988). A provider's management of the interpersonal process can be measured by observation of personal interactions between providers and clients. *Outcome* represents the effects of care on the health status of patients or populations. Improvements in the patient's knowledge or behavior, or in the patient's satisfaction with care received, falls under a broad definition of health status (Donabedian 1988, Bruce 1990). Patient satisfaction is one of the desired outcomes of care (Bruce 1990). This quality of care framework has been used extensively in the FP field (Miller et al. 1998, Ndhlovu 1998).

TABLE 1: STRUCTURE, PROCESS, AND OUTCOME VARIABLES IN THE KENYA, TANZANIA, AND GHANA SPAs

Variables of Interest	Kenya 2004	Tanzania 2006	Ghana 2002
Structural Factors – Availability and Costs of Services			
Trained provider always present	✓	✓	✓
Number of days services provided	✓	✓	✓
Waiting time	✓	✓	✓
Time taken to reach facility (minutes)	✓	Not Available	Not Available
Facility chosen is nearest to home	✓	✓	Not Available
Facility has vehicle to bring patients from home	✓	✓	Not Available
Facility charges routine fees for FP services	✓	✓	✓
Facility provides financial support	✓	✓	✓
All fees posted for client to see	✓	✓	Not Available
Total paid by client for services	✓	✓	✓
Total paid by client for services and transport	✓	Not Available	Not Available
Clients with no transport costs	✓	Not Available	Not Available
Paid for services today	✓	✓	✓
Infrastructure at facility	✓	✓	✓
Client is part of prepay plan such as insurance	✓	✓	✓
Process Factors – Interpersonal			
Privacy ensured	✓	✓	✓
Client concerns noted	✓	✓	✓
Confidentiality assured	✓	✓	✓
Process Factors – Technical			
Reproductive history score	✓	✓	✓
Weight and blood pressure taken	✓	✓	✓
Duration of consultation	✓	✓	✓

Variables of Interest	Kenya 2004	Tanzania 2006	Ghana 2002
Outcomes: Client Satisfaction With Experience at Facility			
No problem with time waited	✓	✓	✓
No problem with hours of service at facility	✓	✓	✓
No problem with cleanliness of facility	✓	✓	✓
No problem with treatment by staff at facility	✓	✓	✓
No problem with availability of method at facility	✓	✓	✓
No problem with number of days services are available	✓	✓	✓
No problem with discussion of problems/concerns with provider	✓	✓	✓
No problem with amount of explanation received from provider	✓	✓	✓
No problem with quality of exam and treatment received	✓	✓	✓
No problem with visual privacy at facility	✓	✓	✓
No problem with auditory privacy at facility	✓	✓	✓

DEFINITION OF POOR/NONPOOR

The SPA is a rich source of information on facility resources, clients' perceptions of the care they receive, and the interpersonal and technical quality of service provision. One limitation of the SPA data, however, is that it includes relatively little information on clients' characteristics. The only variable indicating the socioeconomic status of clients who obtained services was education.

Table 2 shows the relationship between household wealth and women's education in Kenya, Tanzania, and Ghana. The data for each country was obtained from the 2003 Kenya Demographic and Health Survey (DHS), the 2003 Ghana DHS, and the 2004 Tanzania DHS (Central Bureau of Statistics [Kenya], Ministry of Health, and ORC Macro 2004; Ghana Statistical Service, Noguchi Memorial Institute for Medical Research, and ORC Macro 2004; National Bureau of Statistics [Tanzania] and ORC Macro, 2005). The cross-tabulations show strong relationships between wealth quintile and secondary education in Kenya and Ghana and between wealth quintile and Primary 7 education (i.e., education through grade 7) in Tanzania. Correlation coefficients between wealth quintile and education are around 0.5 for each country. For each country, women's education is highly correlated with household wealth. Hence, we believe that using education as a proxy for wealth is a reasonable assumption.

TABLE 2: PERCENTAGE OF RESPONDENTS WHO HAVE SECONDARY^a EDUCATION, BY WEALTH QUINTILE

	Kenya 2003 DHS (n = 8,195)	Ghana 2003 DHS (n = 5,691)	Tanzania 2004 DHS (n = 10,329)
Wealth Quintile			
Poorest	4.9***	17.4***	33.7***
Poorer	16.3	34.3	41.1
Middle	22.3	50.0	53.2
Rich	36.2	60.5	67.0
Richest	54.6	80.0	83.4
Correlation coefficient (R)	0.47***	0.50***	0.46***

*** p < 0.001

^a In Kenya and Ghana, we examined the relationship between wealth quintile and secondary education. In Tanzania, we examined the relationship between wealth quintile and Primary 7 education.

STATISTICAL ANALYSIS

We merged the client level and facility level datasets and conducted analyses at two levels. At the bivariate level, we stratified the analysis by poverty status (i.e., poor and nonpoor) and conducted tests to determine whether structure, process, and outcome variables were associated with the choice of public or private facility for each stratum. One Way Analysis of Variance (ANOVA) was conducted for continuous variables and chi-square tests of independence were conducted for categorical variables.

At the multivariate level, we fitted models to determine factors associated with the choice of public or private health facility. These factors included characteristics of the facilities chosen by clients (primarily consisting of the availability and costs of services), interpersonal and technical factors in the quality of care, and client perceptions of quality of services. The choice of private sector facility versus public sector facility was the binary outcome variable used in the logistic regression analysis. To get the best fitting model, we initially included all variables measuring structure, process, and outcome attributes of quality and geographic region of country in the logistic regression model. All variables that were not associated with the outcome at $p < 0.05$ were removed. We then added the excluded variables back to the model, one at a time, to determine whether their inclusion improved the fit of the model. Each variable that improved the fit of the model was retained. Geographic region was used as a control variable and retained in all models. Interactions were also run between independent variables and poverty status. The two-stage design of the survey was taken into account in the statistical analysis. STATA 10 was used for the statistical analysis (StataCorp 2007).

3. RESULTS

KENYA

Structural Factors

Table 3 shows structural and process factors associated with the choice of a private or a public health facility for FP services among the poor (i.e., those with less than secondary education) and the nonpoor (i.e., secondary or higher education) in Kenya. Poor clients' choice of a private facility over a public facility appears to be influenced by the presence of a trained provider at all times: private facilities that poor clients visited were more likely than public facilities they visited to have a trained provider always present (84 percent vs. 41 percent). Nonpoor clients did not differentiate between public or private facilities based on the presence of a trained provider. Poor clients' choice of a private facility was also influenced by whether the facility had a vehicle to bring patients from their homes: 20 percent of the private facilities that poor clients visited had a vehicle to transport patients from home compared with 2 percent of public facilities that nonpoor clients visited. Nonpoor clients did not differentiate between public and private facilities on the basis of the facility having a vehicle to transport patients from home. These findings show that the poor tend to select private facilities that have certain attributes.

In a number of instances, both poor and nonpoor clients had similar reasons for choosing private sector facilities over public sector facilities. Private facilities provided services for more days in the week than public facilities (five and a half days vs. five days, respectively). The waiting time at a private health facility was shorter than at a public health facility: for poor clients, the waiting time at a private facility was about 40 minutes less than at a public facility (29 minutes vs. 69 minutes); for nonpoor clients, the waiting time was about 33 minutes less at a private facility than at a public facility (24 minutes vs. 57 minutes). The time taken to reach a private facility was also shorter than the time taken to reach a public facility: poor clients took 18 fewer minutes to reach a private facility than to reach a public facility (34 minutes vs. 52 minutes); it took nonpoor clients 14 fewer minutes to reach a private facility (23 minutes vs. 37 minutes). These findings reflect the benefits that both poor and nonpoor clients receive from choosing a private facility over a public facility.

TABLE 3: STRUCTURAL AND PROCESS FACTORS ASSOCIATED WITH CHOICE OF PUBLIC OR PRIVATE SECTOR HEALTH FACILITY – KENYA

	Respondents with less than Secondary Education (n=379)			Respondents with Secondary or Higher Education (n=249)		
	Private	Public	p-value	Private	Public	p-value
Structural Factors – Availability and Costs of Services						
Trained provider always present	83.7%	41.2%	<0.001	46.2%	60.5%	0.115
Mean number of days services provided	5.5	5.2	0.001	5.6	5.1	<0.001
Mean waiting time (minutes)	28.8	69.25	<0.001	24.1	57.5	0.002
Time taken to reach facility (minutes)	34.0	51.98	<0.001	23.3	37.5	0.031
Facility chosen is nearest to home	82.8%	78.9%	0.413	69.2%	76.6%	0.354
Facility has vehicle to bring patients from home	19.6%	2.5%	<0.001	15.4%	12.2%	0.605
Facility charges routine fees for FP services	71.0%	45.1%	<0.001	97.4%	58.1%	<0.001
Facility provides financial support	55.4%	40.5	0.012	71.8%	49.6%	0.015
All fees posted for client to see	8.6%	37.0%	<0.001	30.8%	37.4%	0.452
Total paid by clients for services received (shillings)	26.6	11.7	<0.001	84.6	26.8	0.003
Total paid by clients for services and transport (shillings)	36.2	27.9	0.178	119.1	53.7	0.004
% of clients with no transport costs	87.1%	72.8%	0.005	64.1%	53.7%	0.252
Client is part of prepay plan such as insurance	4.3%	0.4%	0.004	7.7%	8.9%	0.819
Paid for FP services today	55.9%	60.9%	0.393	94.9%	66.9%	0.001
Infrastructure at facility (score)	3.5	3.5	0.841	3.6	4.0	0.105
Process Factors – Interpersonal						
Privacy ensured	77.4%	80.3%	0.552	97.4%	82.3%	0.018
Client concerns noted	93.5%	62.7%	<0.001	74.4%	62.9%	0.189
Confidentiality assured	58.1%	41.5%	0.006	38.5%	29.0%	0.268
Process Factors – Technical						
Reproductive history score	2.9	2.8	0.690	3.2	2.3	0.075
Both weight and blood pressure taken	62.0%	60.9%	0.859	94.9%	64.5%	<0.001
Mean duration of consultation (minutes)	19.8	14.9	0.039	14.2	12.2	0.397

In certain cases, both the poor and the nonpoor faced similar barriers to choosing the private sector. A routine fee for FP services was more common at private facilities than at public facilities for both poor (71 percent vs. 45 percent) and nonpoor clients (97 percent vs. 58 percent). Private health facilities, however, were more likely than public health facilities to offer financial support to both poor (55 percent vs. 40 percent) and nonpoor (72 percent vs. 50 percent) clients. Private facilities poor clients visited were less likely than the public facilities they visited to have all fees posted for clients to see (9 percent vs. 37 percent). Nonpoor clients did not differentiate in their choice of public or private facilities based on whether fees were posted or not. These findings indicate that although charging fees is more common in the private sector, the private sector is also more likely to offer discounts to clients. Moreover, poor clients select those private facilities that are less rigid about their fees.

Clients paid more for FP services received at a private facility than for the same services received at a public facility. Poor clients paid 15 shillings more at a private facility than at a public facility (27 shillings vs. 12 shillings), while nonpoor clients paid 58 shillings more at a private facility than at a public facility (85 shillings vs. 27 shillings). At the same time, a higher proportion of the poor who visited a private health facility had no transportation costs compared with those who visited a public facility (87 percent vs. 73 percent). When transportation costs were combined with service costs, the amount paid by the poor to visit a private facility was not different from the amount they paid to visit a public facility. The amount nonpoor clients paid to visit a private facility rather than a public facility was about twice as high even after taking transportation costs into account (119 shillings vs. 54 shillings). These findings show that greater access of the Kenyan poor to private sector facilities compared to public sector facilities makes the overall costs of visiting them comparable to the overall cost of visiting public sector facilities.

Poor clients' choice of a private facility was influenced by whether they were part of an insurance plan: 4 percent of poor clients who visited a private facility were part of an insurance plan, compared with 0.4 percent of nonpoor clients. Nonpoor clients' choice of a private facility was not influenced by this factor. The level of infrastructure did not appear to influence the choice of public or private facility by clients.

Process Factors

Poor clients' choice of a public or private facility was not influenced by providers ensuring privacy during the consultation. Privacy appears to be an important reason for nonpoor clients' preference for private health facilities: 97 percent of nonpoor clients who visited private providers were ensured of privacy, compared with 82 percent of nonpoor clients who visited public providers. Poor clients' choice of a private facility over a public facility was influenced by the empathy shown by the provider: 93 percent of poor clients visited private providers who noted their concerns, compared with 63 percent of poor clients who visited public providers. Provider empathy did not influence nonpoor clients' choice of facility. The provider's assurance of confidentiality regarding their visit influenced poor clients' choice of facility: 58 percent of poor clients who visited private facilities were assured by the provider about the confidentiality of their visit, compared with 41 percent of poor clients who visited a public facility. The assurance of confidentiality did not influence nonpoor clients' choice of public or private facility.

Private providers spent more time than public providers in consultation with poor clients (20 minutes vs. 15 minutes). Nonpoor clients did not experience any difference in the amount of time public providers spent with them versus private providers. Private providers spending more time with poor clients, however, did not translate into the provision of better quality of care to poor clients:

no difference was evident between public and private providers in how thoroughly they took the reproductive history or the weight and blood pressure of poor clients. Private providers offered better quality in the technical aspects of care to nonpoor clients than did public providers: private providers took a more thorough reproductive history of nonpoor clients than did public providers (reproductive history score of 3.2 vs. 2.3, $p=0.075$), and private providers were also more likely than public providers to take the blood pressure and weight of nonpoor clients (95 percent vs. 64 percent).

Client Perceptions

Table 4 shows client perceptions of public and private health facilities in Kenya. Both poor and nonpoor clients reported a much higher level of satisfaction with waiting time at private health facilities. Similarly, all clients at private sector health facilities gave a more positive evaluation of the facility's hours of service and its cleanliness than clients at public sector facilities. Poor and nonpoor clients also reported greater satisfaction with how they were treated by staff at private facilities compared with staff at public facilities.

TABLE 4: CLIENT PERCEPTIONS OF EXPERIENCE AT FACILITY – KENYA

	Respondents with less than Secondary Education (n=379)			Respondents with Secondary or Higher Education (n=249)		
	Private	Public	p-value	Private	Public	p-value
Client Perceptions						
No problem with time waited	91.4%	63.0%	<0.001	94.9%	61.3%	<0.001
No problem with hours of service at facility	98.9%	93.3%	0.037	100.0%	87.9%	0.023
No problem with cleanliness of facility	100.0%	93.7%	0.013	100.0%	85.4%	0.011
No problem with treatment by staff at facility	100.0%	91.5%	0.004	100.0%	92.7%	0.083
No problem with availability of family planning method at facility	98.9%	76.8%	<0.001	74.4%	71.5%	0.732
No problem with number of days services are available	100.0%	95.8%	0.045	94.9%	93.5%	0.764
No problem with discussion of problems or concerns about health with provider	92.5%	90.8%	0.630	97.4%	95.9%	0.665
No problem with amount of explanation received from provider	93.5%	87.0%	0.088	94.9%	91.9%	0.533
No problem with quality of exam and treatment received	98.9%	94.4%	0.066	100.0%	93.5%	0.102
No problem with visual privacy at facility	82.6%	91.9%	0.011	100.0%	86.3%	0.015
No problem with auditory privacy at facility	91.3%	91.5%	0.942	97.4%	86.2%	0.051

Only the poor, however, reported higher satisfaction with certain factors at private facilities when compared with public facilities. Poor clients reported greater satisfaction with the availability of FP methods at private facilities than at public facilities (99 percent vs. 77 percent). Poor clients were also more satisfied with the number of days services were provided at private facilities compared with public facilities (100 percent vs. 96 percent).

Consistent with findings from the observations of client-provider interaction, nonpoor clients expressed greater satisfaction with visual privacy at private facilities compared with public facilities (100 percent vs. 86 percent). By contrast, poor clients reported lower satisfaction with visual privacy at private facilities compared with public facilities (83 percent vs. 92 percent).

Multivariate Analysis

Table 5 shows adjusted odds ratios of factors associated with a FP client's choice of a private health facility over a public health facility in Kenya. The main effects model explained 58 percent of the variation in the outcome. A FP client's waiting time of 1 hour or less (compared to more than 1 hour) was associated with higher odds of choosing a private facility than a public facility (odds ratio=5.56). Reaching a health facility within 30 minutes was associated with higher odds of choosing a private facility over a public facility (odds ratio=4.32). Clients at private facilities were more likely than clients at public facilities to have no transport costs (odds ratio=2.87, $p=0.075$). Private health facilities were more likely than public health facilities to charge a routine fee for FP services (odds ratio=41.32). At the same time, private health facilities were more likely than public health facilities to provide financial support to clients (odds ratio=4.00). Private facilities were less likely than public facilities to post all fees for clients to see (odds ratio=0.25, $p=0.066$).

TABLE 5: ADJUSTED ODDS RATIOS OF FACTORS ASSOCIATED WITH CHOICE OF PRIVATE VS. PUBLIC SECTOR FACILITY IN KENYA

	All respondents (n=628)		
	Odds Ratio	95% Confidence Interval	p-value
Structural Factors – Availability and Costs of Services			
Trained provider always present	2.67	0.75 – 9.49	0.128
Waiting time is 1 hour or less	5.56	1.52 – 20.32	0.009
Time taken to reach facility is 30 minutes or less	4.32	1.73 – 10.82	0.002
Facility has vehicle to bring patients	2.90	0.49 – 17.25	0.240
Client has no transport costs	2.87	0.90 – 9.14	0.075
Facility charges routine fees for FP services	41.32	8.73 – 195.62	<0.001
Facility provides financial support	4.00	1.21 – 13.24	0.023
All fees posted for client to see	0.25	0.06 – 1.10	0.066
Process Factors – Interpersonal			
Privacy ensured	7.64	1.68 – 34.83	0.009
Client concerns noted	2.56	0.94 – 6.96	0.065
Confidentiality assured	3.52	1.32 – 9.38	0.012
Process Factors – Technical			
Both weight and blood pressure taken	2.32	0.84 – 6.44	0.105
Client Perceptions of Experience at Facility Today			
No problem with time waited	3.61	1.22– 10.65	0.020
No problem with availability of method	3.16	1.11 – 8.96	0.031
No problem with cleanliness at facility	10.09	1.90 – 53.63	0.007
No problem with treatment by staff	28.99	5.40 – 155.72	<0.001
Client Characteristics			
Client's age	1.10	1.03 – 1.17	0.004
Less than secondary education	3.99	1.38 – 11.50	0.010
Interactions			
<sec education X provider always present	7.65	0.92 – 63.44	0.059
<sec education X waiting time < 1 hour	14.08	1.38 – 143.37	0.026
<sec education X routine fees for FP	0.04	0.00 – 0.64	0.022
<sec education X all fees posted	0.15	0.02 – 1.34	0.090
<sec education X privacy ensured	0.13	0.01 – 1.85	0.131
<sec education X client concerns noted	6.67	1.61 – 27.60	0.009
<sec education X no problem with availability of method	33.64	4.22 – 268.29	0.001

R-squared was 57.8 percent for the main effects model. Model also controls for geographic region.

A client's privacy was more likely to be ensured at a private facility (odds ratio=7.64). A private provider was also more likely to note client concerns (odds ratio=2.56, $p=0.065$) and to assure clients of the confidentiality of their visit (odds ratio=3.52). A private provider was more likely than a public provider to take a client's weight and blood pressure (odds ratio=2.32, $p=0.105$).

Clients who chose private facilities over public facilities reported higher satisfaction with a number of aspects of service quality: clients at private health facilities were more satisfied with the waiting time (odds ratio=3.61), the availability of family planning methods (odds ratio=3.16), the facility's cleanliness (odds ratio=10.09), and the treatment they received from the facility staff (odds ratio=28.99).

Each additional year of the client's age was associated with a greater odds of choosing a private facility over a public facility (odds ratio=1.10). After controlling for all variables in the model, the odds of a poor client choosing a private facility over a public facility were nearly four times as high. It is noteworthy that the unadjusted odds of a poor client's choice of a private facility over a public facility was not significant (odds ratio=1.03, not shown).

We noted several significant interactions between being poor and variables associated with the choice of a private or public sector health facility. The odds were higher that a poor client would choose a private facility over a public facility because of the constant presence of a trained provider than the odds of a nonpoor client choosing a private facility over a public facility for the same reason ($p=0.059$). The odds of a poor client experiencing a waiting time of less than 1 hour at a private facility relative to a public facility were higher than the odds of a nonpoor client having a waiting time of less than 1 hour at a private facility versus a public facility. The odds of a private provider versus a public provider noting a poor client's concerns were higher than the odds of a private provider rather than a public provider noting a nonpoor client's concerns. The odds of a poor client reporting no problem with the availability of a family planning method at a private rather than a public facility were higher than the odds for a nonpoor client.

The odds of a poor client choosing a private facility over a public facility because the facility charged a routine fee for family planning services were lower than similar odds for a nonpoor client. The odds of a poor client choosing a private facility over a public facility because the facility posted its fees were lower than the odds of a nonpoor client choosing a private facility over a public facility for this reason.

TANZANIA

Structural Factors

Table 6 shows structural and process factors associated with the choice of a private or a public health facility among poor (i.e., those with less than secondary education) and nonpoor (i.e., those with secondary or higher education) clients in Tanzania. The choice of a private facility over a public facility appears to be governed by some of the same factors among poor and nonpoor clients. Private facilities that poor clients visited were more likely to have a trained provider always present than public facilities poor clients visited (75 percent vs. 51 percent). Private facilities that nonpoor clients visited were also more likely than public facilities to have a trained provider always present (75 percent vs. 41 percent). The waiting time at a private facility was less than the waiting time at a public facility for poor clients (44 minutes vs. 72 minutes) and nonpoor clients (21 minutes vs. 56 minutes). Better infrastructure also influenced the choice of a private facility over a public facility for both poor (infrastructure score of 4.6 vs. 3.6) and nonpoor (infrastructure score of 5.3 vs. 3.8) clients.

TABLE 6: STRUCTURAL AND PROCESS FACTORS ASSOCIATED WITH CLIENT CHOICE OF PUBLIC OR PRIVATE SECTOR FACILITY – TANZANIA

	Respondents with less than Secondary Education (n=894)			Respondents with Secondary or Higher Education (n=111)		
	Private	Public	p-value	Private	Public	p-value
Structural Factors – Availability and Costs of Services						
Trained provider always present	75.4%	51.1%	<0.000	(75.0%)	41.0%	0.079
Mean number of days services provided	4.2	4.9	<0.000	(5.3)	5.0	0.282
Mean waiting time (minutes)	44.4	72.5	0.004	(20.9)	56.1	0.103
Facility chosen is nearest to home	78.5%	92.0%	<0.000	(85.7%)	87.2%	0.916
Facility has vehicle to bring patients from home	35.4%	36.4%	0.870	(28.6%)	30.8%	0.907
Facility charges fee for FP	27.7%	0.2%	<0.000	(57.1%)	0.0%	<0.000
Facility provides financial support	76.9%	64.1%	0.039	(75.0%)	59.0%	0.396
All fees posted	6.2%	16.2%	0.032	(12.5%)	15.4%	0.835
Client is part of prepay plan such as insurance	4.6%	4.4%	0.925	(25.0%)	10.3%	0.255
Paid for FP services today	10.8%	1.0%	<0.000	(57.1%)	5.1%	<0.000
Infrastructure at facility	4.6%	3.6%	<0.000	(5.3%)	3.8%	0.021
Process Factors – Interpersonal						
Privacy ensured	84.6%	80.2%	0.396	(42.9%)	82.1%	0.025
Client concerns noted	80.0%	75.4%	0.408	(100.0%)	76.3%	0.150
Confidentiality assured	73.8%	59.6%	0.025	(62.5%)	61.5%	0.959
Process Factors – Technical						
Reproductive history score	2.5	2.4	0.772	(2.4)	2.5	0.940
Both blood pressure and weight taken	80.0%	39.2%	<0.000	(100.0%)	46.2%	0.008
Mean duration of consultation (minutes)	14.1	13.3	0.638	(12.5)	13.5	0.850

Figures in parentheses are based on fewer than 30 unweighted cases.

The poor and the nonpoor faced certain disadvantages of choosing private health facilities over public health facilities. Private sector facilities were more likely than public sector facilities to charge routine fees for family planning to poor (27 percent vs. 0.2 percent) and nonpoor (57 percent vs. 0 percent) clients. The proportion of clients who paid for family planning services at private facilities was higher than the proportion of clients who paid for these services at public facilities, for both poor (11 percent vs. 1 percent) and nonpoor (57 percent vs. 5 percent) clients.

Some important differences were evident in poor and nonpoor clients' reasons for choosing private or public facilities. Poor clients chose private facilities over public facilities despite the private facilities providing fewer days of services than the public facilities (4.2 days vs. 4.9 days). Moreover, the private facilities that poor clients chose appeared not to be the facilities nearest to their homes: 78 percent of poor clients at private facilities compared with 92 percent of poor clients at public facilities chose facilities that were located nearest to them. Poor clients chose private facilities in which fees were less likely to be posted than they were at public facilities (6 percent vs. 16 percent). Poor clients were also more likely to get discounts on fees from private providers than from public providers (77 percent vs. 64 percent).

Process Factors

One benefit the poor experienced in visiting private facilities was that private sector providers were more likely to assure the confidentiality of their visit than public sector providers (74 percent vs. 60 percent). Another benefit of visiting private facilities, common to both poor and nonpoor clients, was that the facilities provided better quality in the technical aspects of care: the proportion of clients whose blood pressure and weight were taken was twice as high at private facilities than at public facilities for poor (80 percent vs. 39 percent) and nonpoor (100 percent vs. 46 percent) clients.

Client Perceptions

Table 7 shows client perceptions of public or private sector facilities in Tanzania. Poor clients reported a higher level of satisfaction with the availability of FP methods at private facilities than at public facilities (94 percent vs. 80 percent) and with the way staff treated them at private facilities compared with public facilities (100 percent vs. 92 percent). Poor clients also reported higher levels of satisfaction with waiting time (83 percent vs. 73 percent, $p=0.078$) and with cleanliness (95 percent vs. 87 percent, $p=0.055$) at private facilities compared with public facilities.

TABLE 7: CLIENT PERCEPTIONS OF EXPERIENCE AT FACILITY – TANZANIA

	Respondents with less than Secondary Education (n=894)			Respondents with Secondary or Higher Education (n=111)		
	Private	Public	p-value	Private	Public	p-value
Client Perceptions						
No problem with time waited	83.3%	73.4%	0.078	(62.5%)	81.6%	0.234
No problem with discussion of problems or concerns about health with provider	100.0%	96.6%	0.134	(100.0%)	94.9%	0.513
No problem with amount of explanation received from provider	96.9%	95.6%	0.627	(85.7%)	92.3%	0.569
No problem with quality of exam and treatment received	100.0%	96.0%	0.100	(100.0%)	94.9%	0.513
No problem with visual privacy at facility	93.8%	96.0%	0.419	(85.7%)	94.9%	0.366
No problem with auditory privacy at facility	93.8%	96.0%	0.419	(85.7%)	94.9%	0.366
No problem with availability of family planning method at facility	93.8%	79.7%	0.006	(100.0%)	82.1%	0.194
No problem with hours of service at facility	93.8%	88.8%	0.210	(100.0%)	89.7%	0.375
No problem with number of days services are available	89.2%	92.3%	0.387	(100.0%)	92.3%	0.417
No problem with cleanliness of facility	95.4%	87.3%	0.055	(100.0%)	82.1%	0.194
No problem with treatment by staff at facility	100.0%	92.3%	0.020	(100.0%)	94.9%	0.513
No problem with cost for services	92.3%	95.6%	0.227	(100.0%)	100.0%	1.000

Figures based in parentheses are based on fewer than 30 unweighted cases.

Multivariate Analysis

Table 8 shows the adjusted odds ratios of factors associated with the choice of a private health facility over a public health facility in Tanzania. The main effects model explained 44 percent of the variation in the outcome.

Clients' choice of a private facility over a public facility was associated with a shorter waiting time: clients at private facilities had a higher odds of having a waiting time of 1 hour or less (odds ratio=3.67). Clients' choice of a private facility was associated with better infrastructure: the odds ratio of the infrastructure score being higher at a private facility than at a public facility was 1.37 ($p=0.084$). Clients' choice of a private facility over a public facility was associated with better quality in the technical aspects of care: providers at private facilities were more likely than providers at public facilities to take clients' weight and blood pressure (odds ratio=8.92). Clients who chose private facilities were more likely to be satisfied with the cleanliness of the facility (odds ratio=5.44). Clients at private facilities were more satisfied with how they were treated by facility staff (odds ratio=31.52). It is noteworthy that, after controlling for other factors, there was no significant difference by poverty status in the odds of choosing a private facility over a public facility.

Several factors were associated with a lower likelihood of choosing a private facility over a public facility. Clients were less likely to choose private facilities if the facilities offered services on fewer days (odds ratio=0.34). Clients were also less likely to choose private facilities if the facility was not the nearest facility to the client’s home (odds ratio=0.29). Private facilities were less likely than public facilities to post all fees for clients to see (odds ratio=0.22). Although clients were more likely to pay for FP services at private facilities than at public facilities (odds ratio=44.39), private providers had greater room for negotiation of fees with their clients because they did not post their fees.

Client satisfaction with the number of days services were provided was lower for private facilities (odds ratio=0.19). Clients were also less satisfied with the cost of services at private versus public facilities (odds ratio=0.30).

TABLE 8: ADJUSTED ODDS RATIOS OF FACTORS ASSOCIATED WITH CHOICE OF PRIVATE VS. PUBLIC SECTOR FACILITY IN TANZANIA

	All Respondents (n=1005)		
	Odds Ratio	95% Confidence Interval	p-value
Structural Factors – Availability and Costs of Services			
Trained provider always present	2.13	0.72 – 6.33	0.171
Number of days services provided	0.34	0.21 – 0.55	0.000
Waiting time is 1 hour or less	3.67	1.48 – 9.06	0.005
Facility chosen is nearest facility to home	0.29	0.13 – 0.64	0.002
Facility has vehicle to bring patients	2.73	0.76 – 9.76	0.123
Client paid for family planning today	44.39	3.49 – 564.16	0.003
All fees posted for client to see	0.22	0.06 – 0.79	0.021
Infrastructure at facility	1.37	0.96 – 1.97	0.084
Process Factors – Technical			
Both weight and blood pressure taken	8.92	2.82 – 28.18	<0.001
Client Perceptions of Experience at Facility Today			
No problem with cleanliness at facility	5.44	1.58 – 18.79	0.007
No problem with treatment by staff	31.52	3.18 – 312.76	0.003
No problem with number of days services available	0.19	0.08 – 0.45	<0.001
No problem with cost of services	0.30	0.10– 0.94	0.040
Client Characteristics			
Client’s age	1.00	0.95 – 1.06	0.858
Less than secondary education	1.07	0.32 – 3.64	0.909

R-squared was 43.9 percent for the main effects model. Model also controls for geographic region.

GHANA

Structural Factors

Table 9 shows structural and process factors associated with the choice of a private or a public sector health facility for FP services among the poor (those with less than middle education) and the nonpoor (those with middle or higher education) in Ghana. The factor of having a trained provider always present was associated with the choice of a private facility over a public facility for both poor clients (74 percent vs. 54 percent) and nonpoor clients (71 percent vs. 53 percent). The choice of a private provider was associated with better infrastructure among both poor (infrastructure score of 5 vs. 3.6) and nonpoor (infrastructure score of 5 vs. 4.5) clients.

The cost disadvantage of choosing a private facility over a public facility was apparent for both poor and nonpoor clients. Private facilities were more likely than public facilities to charge routine fees for FP services to both poor (38 percent vs. 15 percent) and nonpoor (27 percent vs. 13 percent) clients. No difference existed in the proportion of poor clients who were provided financial support by public or private sector facilities. By contrast, public sector facilities were more likely to provide financial support to nonpoor clients (31 percent vs. 7 percent). By being part of a prepay plan, the poor were less likely to pay for FP services at private facilities than at public facilities (84 percent vs. 94 percent). However, the amount clients paid for FP services at private facilities versus public facilities was higher for both poor (3,621 shillings vs. 2,619 shillings) and nonpoor (3,277 shillings vs. 2,414 shillings) clients.

TABLE 9: STRUCTURAL AND PROCESS FACTORS ASSOCIATED WITH CLIENT CHOICE OF PUBLIC OR PRIVATE SECTOR FACILITY – GHANA

	Respondents with less than Middle Education (n=295)			Respondents with Middle or Higher Education (n=316)		
	Private	Public	p-value	Private	Public	p-value
Structural Factors – Availability and Costs of Services						
Trained provider always present	74.4%	53.9%	0.001	71.4%	53.5%	0.005
Mean number of days services provided	6.0	5.9	0.720	5.4	5.5	0.414
Mean waiting time (minutes)	36.0	29.2	0.217	31.6	23.0	0.089
Facility charges fee for FP	37.7%	15.1%	<0.000	27.1%	13.0%	0.003
Facility provides financial support	20.5%	16.4%	0.405	7.1%	31.3%	<0.000
Client is part of prepay plan such as insurance	6.5%	0%	<0.000	4.8%	1.9%	0.160
Paid for FP services today	84.4%	94.4%	0.005	97.6%	91.7%	0.063
Amount paid for services (shillings)	3,621	2,619	0.027	3,277	2,414	0.017
Infrastructure at facility	5.0	3.6	<0.000	5.0	4.5	0.004
Process Factors – Interpersonal						
Privacy ensured	85.7%	81.5%	0.403	90.6%	79.3%	0.020
Client concerns noted	83.3%	73.0%	0.065	83.5%	76.9%	0.202
Confidentiality assured	35.9%	43.5%	0.237	37.6%	44.4%	0.283
Process Factors – Technical						
Reproductive history score	3.1	3.0	0.947	2.4	2.7	0.395
Both blood pressure and weight taken	71.4%	63.9%	0.230	69.0%	67.1%	0.750
Mean duration of consultation (minutes)	23.0	24.0	0.689	20.0	20.4	0.845

Process Factors

Poor clients' choice of private facilities over public facilities appears to be influenced by the higher likelihood that private providers would note clients' concerns (83 percent vs. 73 percent, $p=0.065$). This was not a factor for nonpoor clients. Nonpoor clients preferred private facilities over public facilities because private providers were more likely to ensure their privacy (91 percent vs. 79 percent). Technical aspects of quality of care did not influence poor or nonpoor clients' choice of public or private facilities.

Client Perceptions

Table 10 shows client perceptions of the quality of services received at public and private facilities. Poor clients' perceptions of quality of care differed between the public and private sectors and influenced their preference for the private sector. Poor clients reported greater satisfaction with the time waited at private facilities compared with public facilities (99 percent vs. 87 percent). Poor clients reported greater satisfaction with the provider's explanation concerning their health (99 percent vs. 93 percent). They were also more satisfied with the availability of FP methods at private facilities than at public facilities (100 percent vs. 96 percent, $p=0.079$) and with the hours of service at private facilities versus public facilities (100 percent vs. 93 percent). The only factor in which nonpoor clients differentiated between public or private facilities was satisfaction with cleanliness of the facilities: nonpoor clients perceived private facilities to be cleaner than public facilities (94 percent vs. 87 percent, $p=0.079$).

TABLE 10: CLIENT PERCEPTIONS OF EXPERIENCE AT FACILITY – GHANA

	Respondents with less than Middle Education (n=295)			Respondents with Middle or Higher Education (n=316)		
	Private	Public	p-value	Private	Public	p-value
Client Perceptions						
No problem with time waited	98.7%	87.5%	0.004	88.2%	93.1%	0.169
No problem with discussion of problems or concerns about health with provider	98.7%	96.1%	0.268	96.4%	93.5%	0.328
No problem with amount of explanation received from provider	98.6%	92.7%	0.049	94.0%	93.5%	0.866
No problem with quality of exam and treatment received	98.7%	94.8%	0.140	95.3%	93.1%	0.472
No problem with visual privacy at facility	98.7%	97.0%	0.403	94.0%	94.9%	0.766
No problem with auditory privacy at facility	98.7%	95.7%	0.211	95.2%	94.9%	0.913
No problem with availability of family planning method at facility	100.0%	96.1%	0.079	96.4%	95.8%	0.813
No problem with hours of service at facility	100.0%	93.1%	0.018	95.3%	93.5%	0.564
No problem with cleanliness of facility	93.5%	94.0%	0.878	94.1%	87.1%	0.079
No problem with treatment by staff at facility	100.0%	98.7%	0.314	97.6%	94.5%	0.245

Multivariate Analysis

Table 11 shows adjusted odds ratios of factors associated with the choice of a private health facility over a public health facility in Ghana. The main effects model explained 32 percent of variation in the outcome. A number of factors influenced a client's choice of a private health facility over a public health facility. One factor influencing a client's choice of a private facility over a public facility was the presence of a trained provider at all times (odds ratio=5.34). Another factor influencing a client's choice was better infrastructure at private facilities (odds ratio=1.63).

Private facilities were more likely than public facilities to charge a routine fee for FP (odds ratio=8.99). At the same time, private facilities were less likely to provide financial support to clients (odds ratio=0.16). Clients at private facilities paid more for family planning services than clients at public facilities (odds ratio=1.001). Being part of a prepay plan increased the odds of clients choosing private health facilities over public health facilities (odds ratio=15.64). After controlling for other factors, there was no association between poverty status and the likelihood of choosing a public or a private sector facility for FP services.

Several interactions were significant. Poor clients were more likely than nonpoor clients to choose a private facility over a public facility if the private facility offered financial support. Poor clients were also more likely than nonpoor clients to choose a private facility rather than a public facility if the facility had better infrastructure.

TABLE 11: ADJUSTED ODDS RATIOS OF FACTORS ASSOCIATED WITH CHOICE OF PRIVATE VS. PUBLIC SECTOR FACILITY IN GHANA

	All Respondents (n=611)		
	Odds Ratio	95% Confidence Interval	p-value
Structural Factors – Availability and Costs of Services			
Trained provider always present	5.34	1.47 – 19.39	0.011
Facility charges routine fees for FP services	8.99	2.67 – 30.28	<0.001
Facility provides financial support	0.16	0.04 – 0.68	0.013
Amount paid for family planning by client	1.001	1.00025 – 1.0033	0.001
Client is part of prepay plan	15.64	2.59 – 94.53	0.003
Infrastructure at facility	1.63	1.15 – 2.32	0.006
Process Factors – Interpersonal			
Privacy ensured	2.27	0.57 – 9.02	0.243
Client Characteristics			
Client's age	0.99	0.96 – 1.02	0.410
Less than middle education	0.91	0.54 – 1.54	0.717
Interactions			
<middle education X facility provides financial support	5.09	1.42 – 18.24	0.012
<middle education X infrastructure at facility	1.43	1.01 – 2.03	0.045

R-squared was 32.3 percent for the main effects model. Model also controls for geographic region.

4. DISCUSSION

This is perhaps the first study that has systematically assessed poor clients' reasons for choosing a private health facility over a public health facility for FP services. In addition, the study examined whether poor clients' reasons for choosing private facilities over public facilities were different from nonpoor clients' reasons for making the same choice. Although the study was conducted in three countries with different socioeconomic conditions and health systems, the findings across countries were remarkably consistent.

The poor were attracted to private sector facilities because of certain *structural* factors. The most important of these factors was the presence of a trained provider at all times: in all three countries, a trained provider was more likely to be always present at a private facility compared with a public facility. The waiting time at a private facility was about half an hour shorter than at a public facility in Kenya and Tanzania but was no different in Ghana.

The *process* of care provision was somewhat better for poor clients at private facilities compared with public facilities. Private providers were more likely to assure poor clients of the confidentiality of their visit in Kenya and Tanzania. Certain technical aspects of quality of care provided to poor clients at private facilities were superior to those provided to poor clients at public facilities. For example, in Kenya, private providers spent more time consulting with poor clients than did public providers; in Tanzania, private providers were more likely than public providers to weigh and take blood pressure of poor clients. In Kenya and Tanzania, a factor that was not important for poor clients' choice on whether they would visit a private or public facility but attracted nonpoor clients was the privacy offered during service provision at private facilities.

What is striking is that the *outcome* of care—as reflected by client satisfaction with a range of aspects of service quality—was better across all countries for poor clients who visited private facilities rather than public facilities. Poor clients' satisfaction with their interaction with clinic staff, the convenience of the visit, and the availability of FP methods was consistently superior at private facilities.

Nonpoor clients shared several reasons with poor clients in their preference for private facilities over public facilities. For example, for nonpoor clients, the waiting time at private facilities was also half an hour shorter than the waiting time at public facilities in Kenya and Tanzania. Technical aspects in the quality of care, in terms of blood pressure and weight being taken, were better for nonpoor clients who visited private facilities rather than public facilities in Kenya and Tanzania. Surprisingly, however, across all three countries, nonpoor clients did not consistently report higher satisfaction with their interaction with clinic staff, the convenience of the visit, or the availability of FP methods in private clinics compared with public clinics. In other words, unlike poor clients, nonpoor clients did not consistently rate their experience at a private facility to be more satisfactory than their experience at a public facility. It is possible that this finding reflects nonpoor clients' ability to extract equivalent attention from public providers and private providers because of their higher social status. This finding merits further investigation.

Cost appears to be a primary barrier to choosing a private facility over a public facility. Private facilities are more likely than public facilities to charge the poor routine fees for FP services. At the same time, private facilities are more likely to provide financial assistance to the poor or enable the poor to visit them by being part of an insurance plan. The poor also seem to select private facilities that are less likely to have their fees posted, which means the facilities are able to exercise greater flexibility in charging the poor for services. In general, the private sector's responsiveness to poor clients' needs appears to be an important force driving the poor's choice of private facilities over public facilities.

The study found strong empirical evidence indicating that the availability of trained providers, the convenience of services, the costs of services, and client satisfaction with service quality are important determinants of the choice of public or private facility, independent of the actual quality of services provided. That these factors can exert an independent influence on the choice of public or private facilities suggests that multiple avenues are available for interventions to increase the utilization of services in the public or private sectors.

REFERENCES

Alden, D.L., D.M. Hoa, and D. Bhawuk. 2004.

Client satisfaction with reproductive health-care quality: Integrating business approaches to modeling and measurement. *Social Science and Medicine*, 59: 2219–2232.

Boller, C., K. Wyss, D. Mtasiwa, and M. Tanner. 2003.

Quality and comparison of antenatal care in public and private providers in the United Republic of Tanzania. *Bulletin of the World Health Organization*; 81: 116–122.

Bruce, J. 1990.

Fundamental elements of the quality of care: A simple framework. *Studies in Family Planning*; 21: 61–91.

Brugha, R., and A. Zwi. 1998.

Improving the quality of privately provided public health care in low and middle income countries: Challenges and strategies. *Health Policy and Planning* 13(2): 107–120.

Central Bureau of Statistics, Ministry of Health and ORC Macro. 2004.

Kenya Demographic and Health Survey 2003. Maryland: Central Bureau of Statistics, Ministry of Health, and ORC Macro.

de Bartolome, C.A.M., and S.A. Vosti. 1995.

Choosing between public and private health care: A case study of malaria treatment in Brazil. *Journal of Health Economics* 14: 191–205.

Donabedian, A. 1988.

The quality of care. How can it be assessed? *Journal of the American Medical Association*; 260: 1743–1748.

Dor, A., P. Gertler, and J. Van Der Gaag. 1987.

Non-price rationing and the choice of medical care providers in rural Cote D'Ivoire. *Journal of Health Economics* 6: 291–304.

Ghana Statistical Service, Ministry of Health and ORC Macro. 2003.

Ghana Service Provision Assessment Survey 2002. Calverton, Maryland: Ghana Statistical Service and ORC Macro.

Ghana Statistical Service, Noguchi Memorial Institute for Medical Research and ORC Macro. 2004.

Ghana Demographic and Health Survey 2003. Calverton, Maryland: Ghana Statistical Service, Noguchi Memorial Institute for Medical Research, and ORC Macro.

Gertler, P., L. Locay, and W. Sanderson. 1987.

Are user fees regressive? The welfare implications of health care financing proposals in Peru. *Journal of Econometrics* 36: 67–68.

Hanson, K., L. Kumaranyake, and I. Thomas. 2001.

Ends versus means: The role of markets in expanding access to contraceptives. *Health Policy and Planning* 16(2): 125–136.

Harvey, P. 2008.

Social marketing: No longer a sideshow. *Studies in Family Planning* 39(1): 69–72.

Miller, K., R. Miller, I. Askew, M.C. Horn, and L. Ndhlovu. 1998.

Clinic-Based Family Planning and Reproductive Health Services in Africa: Findings from Situation Analysis Studies. New York: The Population Council.

National Bureau of Statistics [Tanzania] and ORC Macro. 2005.

Tanzania Demographic and Health Survey 2004–05. Dar es Salaam, Tanzania: National Bureau of Statistics, and ORC Macro.

National Bureau of Statistics [Tanzania] and Macro International Inc. 2007.

Tanzania Service Provision Assessment Survey 2006. Dar es Salaam, Tanzania: National Bureau of Statistics and Macro International Inc.

National Coordinating Agency for Population and Development [Kenya], Ministry of Health, Central Bureau of Statistics, ORC Macro. 2005.

Kenya Service Provision Assessment Survey 2004. Nairobi, Kenya: National Coordinating Agency for Population and Development, Ministry of Health, Central Bureau of Statistics, and ORC Macro.

Ndhlovu, L. 1998.

Determinants of quality of family planning services: A case study of Kenya. In *Clinic-Based Family Planning and Reproductive Health Services in Africa: Findings from Situation Analysis Studies*. New York: The Population Council.

Nuwaha, F. 2006.

Determinants of choosing public or private health care among patients with sexually transmitted infections in Uganda. *Sexually Transmitted Diseases* 33 (7): 422–427.

Paphassarang, C., K. Philavong, B. Boupha, and E. Blas. 2002.

Equity, privatization and cost recovery in urban health care: The case of Lao PDR. *Health Policy and Planning* 17 (Suppl. 1): 72–84.

Pattouillard, E., C.A. Goodman, K.G. Hanson, and A. Mills. 2007.

Can working with the private for-profit sector improve utilization of quality health services by the poor? A systematic review of the literature. *International Journal for Equity in Health* 6:17.

StataCorp. 2007.

Stata Statistical Software: Release 10. College Station, TX: StataCorp LP.

Tembon, A.C. 1996.

Health care provider choice: The north west province of Cameroon. *International Journal of Health Planning and Management* 11:53–67.