Evaluating client-provider interactions in reproductive health settings

Saumya RamaRao, Jacqueline Kim, and Anrudh Jain.
Population Council

DRAFT—NOT FOR CITATION

Paper prepared for presentation at the International Union for the Scientific Study of Population (IUSSP) Conference to be held in Tours, France, 18-23 July, 2005.

BACKGROUND

Client-provider interactions lie at the crux of family planning and reproductive health service delivery. A good exchange between a client and provider can result in client satisfaction and knowledge, which can ultimately lead to behaviors such as method adoption and continuation including switching. Focus on client-provider interactions has gained greater impetus since the 1994 Cairo conference with concerted efforts directed to improving the nature and content of the interaction. It is important to understand the determinants of a good client-provider interaction and the methodological issues associated with measuring such an interaction to inform policies and programs. This paper begins with a review of client provider interactions and their determinants, various methodologies of measurement and, illustrates these with data from a client-centered intervention implemented in the Philippines.

A client provider interaction occurs when a client meets with personnel from the health service system. This interface can occur in a formal setting such as a health facility or during outreach work in the community. Health advocates have argued that all interactions between clients and health personnel should be considered as points of contact, whether it be between the client and the watchman of a facility, or the receptionist, or the dispenser of medicines, or service providers such as nurses, midwives and physicians. For the purposes of this paper, we define a client-provider interaction as that which occurs when a client consults with a service provider.

Many have attempted to define or describe a good client provider interaction. Traditionally, a good interaction or consultation was defined largely in terms of medical or clinical care—such as offering technically competent and safe care for a client. This orientation shifted with the development of the Bruce framework that added several other elements under the rubric of quality of care; these new elements include choice and information given to clients, interpersonal relations, mechanisms for follow-up and appropriate services (Bruce 1990). Input from clients was increasingly included on a variety of service attributes—waiting time, privacy, ease of access, and, at its most basic, whether they received services they wanted (Hernán, 1993). In the last few years, the concept of a client-provider interaction had taken root and form. For example, Murphy and Steel (2000) described a good interaction as having the following: treating the client well, providing the client with the service requested, providing individualized care, striving for a dynamic interaction, avoiding the information overload, and using and providing memory aids. The driving principle behind the this model is that good client-provider interaction creates an atmosphere of trust, enabling discussions about sexuality and gender that influence clients' method of choice. Murphy and Steel also outline key information that clients need to choose a contraceptive method, including understanding effectiveness, knowing the advantages and disadvantages of a method, preventing STIS, using a method, and managing side effects. In summary, there is a general agreement that it a good interaction is one that cultivates rapport between the provider and client, facilitates information exchange, ensures key messages are imparted to the client and allows for management/treatment decisions to be made.

A number of different models of client-provider interactions has accompanying the growing recognition of this aspect of service delivery. Each type of model has tended to reflect different disciplinary backgrounds—communication, training or advocacy. For example, early models tended to emphasize communicational aspects such as body language, appropriate use of tone

and language, and ways of engaging with the client. Subsequently, there was an additional emphasis on information exchange and ensuring that clients got key messages during the consultations. This has led to models that were structured and laid out specific steps that providers were to do during a consultation; examples include the GATHER model (Rinehart and Drennan, 1998). Since then, there have been other variants that go beyond the structure of information exchange. These include how to interact with clients with a gender focus[1] and specifically how to serve male clients (Ringheim, 2002), pay explicit attention to power and status between providers and clients (RamaRao and Mir, 2004), and actively involve the client (DiPrete Brown *et al*., 2000; Kim *et al*., 2001; Kim *et al*., 2003).

Despite the wide acceptance of the importance of good client provider interactions, they may not always achieve their potential. Very frequently, in reality, interactions between clients and provides are limited and constrained. Clients are not always treated well or respectfully, they may not be given choices or options most relevant to their individual life circumstances, or not given complete information. There are many reasons why this occurs, some of which are institutional and some related to the differing backgrounds of providers and clients. Further, societal and cultural perceptions and norms can permeate the interaction in subtle and intangible ways.

At the institutional level, barriers include targets and award systems under which providers perform that may encourage them to achieve program rather than individual client goals. This has been noted in the past with providers serving the priorities of the system (e.g. maximizing the number of contraceptive users or users of a specific method) thereby compromising the potential for a good client-provider interaction. Providers and program managers commonly cite heavy case loads as a major detriment for spending adequate time with clients; they also cite structural issues such as inadequate salaries, limited drugs and equipment, and unreliable electricity and water supply (Fonn *et al*., 2001). Another potential barrier is that providers may not be sufficiently trained to provide client oriented care, which may result in poor interpersonal communication or inability of the provider to give accurate information. Lastly, providers need systematic supervision and support from supervisors to perform their jobs well (Ben Salem and Beattie, 1996).

The client-provider interaction may also be affected by differences between the provider and client with respect to various socio-demographic characteristics such as gender, age, class, religious affiliation and ethnicity. A qualitative assessment conducted by John Snow International (JSI) indicated that women who were poor and uneducated were afraid of being scolded or demeaned because they did not know how to properly talk to providers (Schuler, 2000). The study showed that themes relating to class differences emerged in many interviews. For example, providing discounts for need-based clients, without humiliating them, was considered an issue. Gender discordance between a client and provider can also lead to various limitations during a consultation. An interaction may be strained if a women feels hesitant or reluctant to bring up certain issues with male providers (PATH 1999). When clients feel constrained in expressing their real needs to providers and instead withhold relevant and crucial information, the interaction has already been compromised.

[1] This ranges from involving men in women's reproductive health care, counseling couples either jointly or separately, to serving the needs of men.

A number of researchers have identified factors that emphasize the power of providers over clients and which may play out differently in different cultural contexts; these include: the social distance between providers and clients resulting from different educational and social groups, the language and words used by providers and clients, and the use of provider-controlled or client-centered models of service delivery (Abdel-Tawab *et al*., 2002; Gilroy *et al*., 2004; Kim *et al*., 2001). In fact, health care providers in Mozambique, Senegal, Uganda and Zambia, who were participating in an intervention project reported that they were indeed aware of the power they could and did wield over their clients; further, they elucidated that with less educated clients they were either likely to be helpful or perfunctory (Fonn *et al*., 2001). Further compounding this effect, societal values that place emphasis on providers being more knowledgeable than clients, and thus facilitating an unequal interaction.

Social distance between providers and clients is especially pronounced in rural or under-privileged areas where providers may come from dominant or prominent social groups relative to those of the clients. That such concerns of social distance are prevalent in every cultural and economic context is clear from findings of a research study in the United States. This research reports that patients who visited physicians of the same ethnic and racial background or were more likely to have better care such as longer consulting time, better communication, and greater satisfaction with their visit (Cooper and Powe, 2004). This suggests that clients feel a degree of comfort and ease with providers who they perceive to be culturally empathetic or speak the same language.

With this short background on client provider interactions, we proceed to describe methodologies that been used to measure them in the next section.

REVIEW OF METHODOLOGIES

Since research in this area began, various tools have been developed to assess the quality of the client provider interaction with each capturing a different but legitimate aspect or perspective. These different methodologies range from provider self-assessments, client exit interviews to direct observations of interactions by an independent observer or mystery client. Self-assessments conducted by providers are useful for obtaining measures such as services provided to a client during a visit. Client exit interviews are designed to capture clients' perceptions about the care received during an interaction. On the other hand, observation methods are useful for assessing the quality of care that a provider renders to a client, specifically the tasks that were performed. Some researchers have audio-taped or video-recorded observations for analysis later. In addition, interviews with providers furnish additional information that may have an impact on the interaction. Finally, follow-up interview with clients are also used to obtain clients' view of the care they received, as well as the outcomes of those services.

Provider self-assessments are considered an effective approach to performance assessment as well as useful for quality improvement activities. The *Quality Measuring Tool* (QMT) developed by EngenderHealth is a ten-section tool that corresponds to client rights such as information, access to services, choice, and provider needs such as facilitative supervision,

supplies, and training. In addition, through ownership of results, self-assessments such as these can motivate and encourage providers to improve the services they deliver. Though this tool may be valuable for process data, however, the lack of objectivity can produce biased results. For example, a question such as "did the provider ask about client's method preference" is likely to be measured more accurately through an objective observation of provider's behavior as opposed to providers reporting it themselves.

Client exit interviews are important because they can best capture clients' perceptions of what they experienced or felt during an interaction; it is their subjective understanding and rating of the experience as they leave the consultation that may have an effect on their subsequent behavior (Miller *et al*., 1997). It is also a good tool to record their needs and level of satisfaction. However, findings from exit interviews indicate that while clients are able to express dissatisfaction about waiting time, clinics' hours of operation, fees, and access, they have difficulty in talking about direct contact with the provider. Another disadvantage is that clients may have a courtesy bias. Clients may be compelled to be polite or not express dissatisfaction due to fear of not receiving good service. Ways to address this are to assure clients that interviews are anonymous and will not affect the care they receive, conduct the interview outside the facility either immediately or later. However, if exit interviews occur at home regarding a past client-provider interaction, recall bias can be a problem; recall bias can be minimized if the interview takes place soon after the visit. Other valuable information collected from the exit interview is client characteristics such as age, education, and marital status, which can contribute to the client and provider dynamic.

Observations taken by an external observer relies on an objective measurement of the interaction between client and provider (Miller *et al*., 1997). Direct observations by third-party observers are effective for measuring various aspects of the client-provider interaction including whether or not needs were assessed, information provided to the client, and told when and where to follow-up. Using a third-party observer has many advantages, the greatest being that it is free from bias, and is a reliable tool for measuring certain aspects of client-provider interaction, such as whether or not services were performed (e.g. whether or not the provider checked blood pressure). Interpersonal communication between the provider and client can also be measured by taking clues such as gestures, eye-contact, and body language. Measurement like these which are not technical in nature, however, are difficult to grasp from an third-party, and may be better measured qualitatively, or from the client's and provider's own perspective. One disadvantage of direct observations is that in the presence of an observer, a provider may be inclined to perform better. This issue can be addressed by prolonging observations, under the assumption that providers will eventually behave naturally over time. Another disadvantage is that observers can be hampered by capturing all elements of the observation. The dynamics of an interaction do not necessarily follow the sequencing of a questionnaire or tool; as a result observers may fail to record all that took place during the interaction, or are unable to record the sequence of events when using a checklist. Furthermore, observations are unable to capture processes and unexpected external factors that may contribute to client or provider behavior. For instance, a question such as "did the provider mention alternative methods" would not take into account supply shortages that might influence the provider's actions.

The "simulated client" of "mystery client" process can eliminate some of these biases (León *et al*., 1994). This process consists of direct observations of services and clinic conditions by trained women playing the role of "mystery clients', who visit clinics without revealing their identity. The advantage of using mystery clients is that is can lower the cost of data collection, and decrease the level of intrusiveness during a consultation by avoiding the presence of an observer. In addition, this particular method is useful when client load is to few to capture those fitting a particular profile. Some disadvantages to this method, which include providers' inability to give consent, and mystery clients' reluctance to undergo physical exams, can be addressed. For example, to address the issues of informed consent, providers may be informed in advance that a mystery client will visit them. Appropriate selection and training of mystery clients can reduce their exposure to unwanted services.

A method called "interaction analysis" uses an alternative method for evaluating client-provider interaction (Kim, 1997). While observation guides and interview questionnaires rely on pre-established criteria for what constitutes good quality of care, interaction analysis allows the exploration of different aspects of client-provider communication, by using audio or video technology to record entire conversations. It is during analysis of tapes that new theories and indicators about quality are developed, eliminating preconceived ideas about the exchange. For example, an interaction analysis can reveal that provider biases exist in the way they treat men and women, younger and older client, or married and unmarried women. Furthermore, the use of videotapes can capture non-verbal communication through gestures and expressions. Some researchers have employed a quantitative method to analyzing this type of communication, by developing code guides to classify sentences or gestures, while others have used qualitative methods to understand client-provider interactions. This method, however, can be costly and time-consuming.

In addition to collecting data about the actual client-provider interaction, it is equally important to examine the inputs that influence the quality of the interaction. Provider interviews are necessary tools for determining factors that impact the way providers treat their clients. This instrument gathers information on the provider's knowledge of service guidelines and procedures, attitudes towards serving different types of clients (e.g. young versus old, unmarried versus married, men versus women), typical procedures followed, and can reveal other attitudinal and behavioral factors that may contribute to the quality of the client-provider interaction. Furthermore, socio-demographic factors such as educational attainment and religious affiliation are other potentials factors that can be determined from the provider interview. One disadvantages is, however, that like the self-assessment tool, providers may be inclined to, consciously or subconsciously, give bolstered accounts of their performance. For example, providers may be biased to report a greater likelihood for performing certain procedures than what is actually provided.

Finally, follow-up interviews are useful for measuring the impact of quality client-provider interactions on specific outcomes. Outcomes such as contraceptive continuation and use of services can be gathered from follow-up interviews of the cohort of women who had visited a facility and had an interaction with a provider. The loss to follow-up of clients is another disadvantage when attempting to gather information from the cohort of women. In addition, many argue the difficulty in determining a causal relationship between the client-provider

interactions and outcomes. External issues are often factors and outcomes cannot be solely attributed to program effectiveness or the quality of the client-provider interaction

DATA AND METHODS

This paper uses data from a Situation Analysis conducted in public sector facilities in the Davao del Norte province of the Philippines. The Situation Analysis methodology measures the readiness of a facility to provide services, as well as the quality of these services through four instruments—an inventory of the facility, an interview with service providers, direct observations of client-provider interactions, and exit interviews with family planning clients (Miller et al., 1998). For our analysis, we present data from three sources—observations, exits, and provider interviews. First, observation data are used to measure the quality of care the provider renders to a client while, second, client exit data are used to measure the quality of care that a respondent reports having received; they also provide information on some background characteristics of clients. Finally, the provider interviews give information on salient provider characteristics. As a results, we have the quality of the client-provider interaction measured in two ways – one from the observation, another from the exit – and the background characteristics, which are extracted from provider interviews and client exit interviews, that are potential factors in driving the interaction.

The situation analysis was conducted from December 1999-March 2000. Two levels of clinics are involved—Rural Health Units (RHU) and Barangay Health Stations (BHSs). RHUs are typically located in the town center (poblacion) of a municipality and may include two or three barangays within their catchment area. A doctor, a public health nurse, and one or two midwives staff most RHUs. BHSs on the other hand are smaller facilities, located in less accessible areas and are staffed by a nurse or a midwife on either a full-time or part-time basis. Family planning services are typically provided by midwives and occasionally by nurses. In total, 20 RHUs and 60 BHSs were included in the study. Observation and exit data are available from 232 client provider interactions. Provider and client characteristics, which are matched to the observation and exit files, are taken from provider interview and client exit interviews, respectively. As a result, background variables are available for the 232 clients and 69 providers who were observed and interviewed[2].

Table 1. Sample Description

Data Source	N	Unit of Analysis
Client Exit Interview	232	Clients
Provider Interview	69	Providers
Client-Provider Interaction Observation	232 69 232	Observations Providers Clients

[2] Only matched clients and providers were included in the analysis.

Variables

A *dependent variable* is created to represent these two perspectives of the interaction. This variable captures five dimensions of the client provider interaction—whether the user's family planning needs were assessed; whether she received information, particularly relating to the contraceptive she chose; whether she was presented with a range of contraceptives to make a choice from; whether the consultation was done in a client-friendly manner; and whether she was instructed on follow up services. Each of these five dimensions is comprised of several elements, each of which represents a particular question from the observation or exit interview. Each element is a bivariate variable that takes the value of 1 if a response 'yes' to given question and takes the value of 0 if the response is 'no'. For example, if the observer recorded "yes" to the question "did the provider use IEC materials", one point is given. If the observer responded "no", no points are given. The total score is the sum of the points for all elements are included in the index and the dependent variable is therefore a continuous variable. Elements on which responses were almost all positive or all negative (i.e., >95% responded "yes", or <5% responded "yes") were dropped.[3] For example, a question from the observation, "did the provider greet the client in a friendly way," had a 97% positive response and, as a result, was dropped from the index. Similarly, "did the provider ask if husband influenced client to get family planning service," had only 3.2% positive response and was dropped. The dependent variable is also subcategorized into each of the five dimensions mentioned above.

We also include in the analyses *independent variables* related to the providers' and clients' socio-economic and demographic background that may determine the quality of interaction between clients and providers. For clients, the *independent variables* chosen include age, education, religion, number of living children she has, the age of her youngest child, and whether or not she wants more children. Similarly, the provider characteristics that are considered include age, education, training, religion, marital status, and number of children.

Social distance variables were created to represent the distance or discordance between the client and provider on various characteristics. These include the number of years difference between the client and provider, whether or not the client and provider were of the same religious background, and the difference in number of educational levels between the client and provider.

Analysis

Two types of analyses will be presented. In the first, we will use observation data to examine the effect of client and provider background characteristics on the level of care provided. Using the client-provider interaction as the unit of analysis, a multiple regression model will test the effect

[3] Four items were dropped from the observation: provider asked about method preference, provider asked if husband influenced client to get family planning service, provider greeted client in a friendly way, provider used simple and easy to understand language. Items dropped from the client exit interview are: Client felt that received service wanted, Client felt provider was easy to understand, Client felt provider talked in friendly/approachable manner, Client felt provider listened carefully Client felt provider gave her enough time to describe situation, Client felt provider was competent in FP, and Client felt there was enough privacy.

of the independent background variables on the dependent variable. For the second analysis, we will employ exit data to investigate the effect of client and provider background characteristics on the care clients reported receiving. Clients will be the unit of analysis, and a multiple regression will be used to measure the effect of independent variables on the dependent variable.

FINDINGS

First, a side-by-side glance of provider and client background characteristics will give us an overall impression of clients and providers (Tables 2 and 3). On average, providers are older than clients; most clients are about 30 years old while providers are well into their mid-forties. Nearly all providers and clients are married. In terms of other socio-demographic characteristics, all providers have had at least college education, very few still want to have children, and over three-quarters are Catholic. Clients, on the other hand, tend to be less educated with a little less than a third having finished elementary school and a little over half having completed high school. On average, most clients have about three children and over one-third of them still want to have children. In terms of professional training, about half of providers have received general family planning training, and have been providing family planning services for about 20 years.

Next, we examine the quality of the client provider interaction, irrespective of the effect of background factors. From the observation data, we find that the percentage of providers assessing client's needs is very low (Table 4). The highest response to any element is providers asking clients about their reproductive intentions in terms of wanting to space or limit (20%). In general, providers are observed to perform better on presenting a range of contraceptive options to clients. Importantly, in most of the interactions, the provider did not promote one specific method over another. In other words, there was no subtle pressuring on the client to choose one method over another. However, just over 15 percent, mentioned an alternative method to the one the client was given at the end of the interview. This is particularly low presumably due to providers failing to mention an alternative method if the client's method of choice is the pill. Only in 10 out of 100 interactions when the pill was chosen was another method mentioned. On the other hand, nearly half of clients who chose the condom were given another choice of method (Table 4). We conjecture that providers were more likely to mention an alternate method when the condom was chosen because they consider to be a less effective method and one which required the partner's involvement. In terms of providing materials, very few providers offered a client an informational leaflet or used IEC materials such as flipcharts during the consultation. Overall, providers were observed to perform very well on other aspects that reflected creating rapport and providing information on return visits.

In comparison to the quality of client-provider interaction measured by the observation, the quality of interaction measured by the exit interview is somewhat higher (Table 5). Over ninety percent of clients felt they received the information they wanted during the interaction, which gives some indication that the client's perspective on services is often better than what is actually observed. Over four-fifths reported that they thought the consultation time was adequate and over three-quarters reported that the provider had told them about their return visit. Perhaps more telling is that less than a third reported that their provider had told them about the possibility of switching and just over 10 percent were told an alternate source of supply. These

indicate that even though clients may indicate that they are satisfied with the services received, these data indicate that do not receive key messages.

In the next set of analyses, we test the effect of the independent variables on the dependent variable—the quality of the client-provider interaction. We further analyze the effect of background factors on client-provider interactions by including social distance variables. Using the observation data, we also test this association by examining the five sub-indices of the client-provider interaction: needs assessed, choice, materials provided, continuity, and interpersonal communication.[4] We also accounted for cluster of design effects since multiple clients were seen by a single provider.

Table 6 presents regression results of the effect of the independent variables on five aspects of the client provider interaction. Here, we find the providers own reproductive intentions had a bearing on the client-provider interaction. If the provider wanted more children, she was less likely to assess client's needs, offer choice, and provide materials. This implies that the provider is inclined to subject the client to her own reproductive desires. There were other factors that had a negative effect on the interaction as well; when the client was older or wanted to have more children, she was less likely to be given a choice of methods.

Encouraging findings also emerged; if the provider had been trained in interpersonal communication, interactions in which trained providers participated were more likely to be successful. The effect of training remains positively and significantly associated with two out of the five sub-indices, needs assessed and materials provided. The other sub-indices on which provider training did not have an effect were questions that had universally high response levels, which explains the why provider training did not show up. That training has a positive and significant effect is noteworthy; it implies that training can counter-act any effect that can stem from provider attitudes or client background.

Table 7 presents regressions on a dependent variable that combines all five aspects of the interaction so as to get a more comprehensive picture.[5] Two models are presented—Model 1 includes provider and client characteristics while Model 2 tests for the effect of social-distance. On comparing the analysis in Tables 6 and 7, it suggests that the effects of some characteristics were attenuated; for example, the effect of reproductive intentions of providers and clients and educational background of the client on the overall interaction is reduced. However, there are other results are similar to the ones presented in Table 6. There is a positive and statistically significant association between training of providers and the overall quality of the client-provider interaction. Older clients tend to experience poorer interactions.

Contrary to our hypothesis, social distance does not come up as statistically significant when included in the regression. The direction of the association, however, is as expected. Greater education and age distance result in improved interactions, while religious incompatibility leads to lower quality of interactions.

[4] We did not do a sub-index analysis for data from the exit interviews due to the small number of elements (5) that composed the index.

[5] It combines the 5 aspects—needs assessed, choice, materials provided, continuity, and inter-personal communication into one index.

A similar analysis is conducted using the client exit interview data (Table 8). Again, provider training comes up positively associated with the quality of client-provider interaction, and is statistically significant. Client age also has a negative effect, again indicating that older clients in some way diminish the quality of the interaction. The client's number of living children is positively associated with the quality score. Similar to the results from the observation data, social distance does not appear to be significantly associated with the quality of the client-provider interaction.

DISCUSSION

There are three main findings from the data we analyzed from our intervention project in the Philippines. First, in this context, social distance between providers and clients does not seem to be an important factor in determining the nature of the client-provider interaction which is very encouraging. Filipinos like many other South East Asian cultures place a lot of emphasis on social cohesion and harmony; this is reflected in social interactions that are polite with efforts to reduce tension and disagreement. Social distance may be a dominant feature in other cultural contexts where there can be more entrenched notions of social power and prestige.

The second finding is also encouraging in that any influence that a provider's or client's background may have on an interaction tends to level off if the provider had been trained in interpersonal communication. In other words, training reduces any attitudinal bias that providers may have towards clients who hail from certain groups or have specific needs. In analyses that were not presented, there were starker effects of background variables on some aspects of the interaction; on inclusion of training as a control, the effects of the background variables minimized and had no effect on the overall interaction. This finding will be useful to trainers and other program planners about the effect of training. It also provides information on the areas in which more progress is required to achieve effective interactions. In general, data from both the observations and exit interviews indicate that providers do fairly well on creating a conducive and friendly atmosphere for the consultation; however, they do less well on gathering information on the needs of the client, and they do poorly on providing information. Specific areas for improvement include the following: providers do not ask about the reproductive intentions about the client and this could have bearing on the contraceptive options offered. Also, while clients are not pressured to accept one method over another, they are not however, provided with a wider choice. Further, providers are less likely to inform clients that they could switch to a different method if the one chosen was not liked for any reason.

The third result is more methodological. Although we were able to capture both client and provider perspectives on many of the same aspects of the interaction, they do not always match item by item. Furthermore, on many items we recorded normative answers and which we discarded during analysis. This indicates that there is further need to refine and test the methodology of measurement. While the body of knowledge on methodology has certainly grown over the past few years, there is considerable room for improvement as our measures are still blunt. There are some inherent pragmatic and field issues that constrain the data collection; it is difficult to maintain a balance between collecting sufficient information without overloading a

tool and making it simple enough to field. One issue is related to the use of the observation guide; these guides tend to be short such that they can be used easily by an observer, but their very brevity may not allow for recording specific issues that may arise with different types of clients (e.g., with different types of contraceptive users, or new and continuing clients). Similarly, they do may not capture the essence of an interaction such as the communication strategies used by the provider (e.g., use of open and close ended questions, body language such as nodding at appropriate times).

There are similar issues with exit interviews as well. Exit interviews have to be brief so as to not take too much of a client's time as they would have already spent some time at the facility from the time of arrival until the services are delivered. As a result, while the emphasis is on collecting information on the interaction per se, it is at the cost of detailed information on background characteristics that may have had an effect on the consultation. Further, while both the observation guide and exit interviews record if specific actions had occurred or information been exchanged, they shed little light on how well the task had been done.

Another methodological issue is that of the small sample sizes. This depended largely on the number of clients who visited the facilities during the data collection period. We could have increased our sample sizes by staying longer at the facilities but this would have increased the costs of data collection considerably.

We would like to conclude with the message that it is important to continue to pay attention to client-provider interactions as contact between clients and providers is an intrinsic part of the care giving process. Paying attention to client-provider interactions will ensure that clients are well-served, their rights respected and that providers and programs are responsive to their intended clients. There are other benefits as well. It results in clients who are more engaged and participate in the consultation, satisfied clients who perceive their needs being catered to; further they are better informed and may form a favorable opinion of health services in the long run. More importantly, in the family planning context they are likely to adopt or continue contraceptive use (Koenig *et al*., 1997; RamaRao *et al*., 2003; Sanogo *et al*., 2003). There is evidence from other areas of health care as well that show that clients who perceive receiving good care are more likely to adhere (or comply) with management or treatment plans and return for visits at the requisite time. For providers, it results in greater satisfaction of a job well done; for systems it may result in effective use of resources such that return visits that result from for lack of adequate information or comprehension is minimized.

There are a number of activities that can be undertaken to foster and support good interactions. The family planning and reproductive health field can adopt some of the lessons learnt from experiments conducted in other aspects of health care including primary health care and HIV management.

First, as we have seen in the illustration in this paper, provider training does have a clear effect. Training can emphasize to providers the notion of client-oriented care; it can help mitigate the effect of traditional norms and stereo-types of clients; further, it can equip them with skills to explicitly address issues of gender and other constraints at the household level that can limit client access. Training of health providers is a viable intervention that has demonstrated gains;

for example, a training in interpersonal skills in Honduras resulted in better provider-client interactions: trained providers were able to communicate in a more positive fashion than those untrained, provide more information and clients too responded by communicating and disclosing more (DiPrete Brown *et al*., 2000). Providers too are willing to be trained in how to communicate better with clients, propose solutions that clients can implement; they cite their frustration at their inability to help clients who seek help on issues that they are ill-equipped to address such as domestic violence (Fonn *et al*. 2001). They also indicated that current training modules very rarely incorporated aspects such as the social context of their clients or gender dimensions and as a result they felt hampered in service delivery conditions (Fonn and Xaba, 2001).

A secondary but relevant activity is the use of appropriate job aids during an interaction. This has been tested in a variety of service delivery settings and results in vastly improved interactions. We cite an illustration from primary health care to illustrate our point that such interventions are useful. A research project in rural Cameroon found that the use of aids with non-literate women did increase both comprehension and compliance with antibiotic use (LN Ngoh and M.D. Shepherd, 1997).

Third, the role of facilitative supervision mechanism to bolster and strengthen client-provider interactions cannot be minimized. However, it is important for supervisors to be trained in how to facilitate, educate, and solve problems that their supervisees face. In most developing countries, supervision is rare and even when it does occur it can be deficient in many important respects. A study of supervisory practices in Zimbabwe reported that supervisors spent less than five percent of their time on client care issues; they were unlikely to make suggestions to their supervisees, seek client input, or solve their providers' problems (Tavrow *et al*., 2002). If front line workers are to adopt a client-centered model of care, it is important that their supervisors too are supportive in this effort.

REFERENCES

Abdel-Tawab, Nahla and Debra Roter. 2002. "The relevance of client-centered communication to family planning settings in developing countries: Lessons from the Egyptian experience," *Social Science and Medicine*, 54: 1357-1368.

Askew, Ian. 1998. "Using Situation Analysis to improve reproductive health programs," in Kate Miller, Robert Miller, Ian Askew, Marjorie C. Horn and Lewis Ndhlovu (editors) *Clinic-Based Family Planning and Reproductive Health Services in Africa: Findings from Situation Analysis Studies*. New York: Population Council.

Ben Salem, Beverly and Karen J. Beattie. 1996. "Facilitative supervision: A vital link in quality reproductive health service delivery." *AVSC Working Paper* No. 10. New York: Engenderhealth.

Bessinger, Ruth and JT Bertand. 2001. "Monitoring the Quality of Care in Family Planning Programs: A Comparison of Observations and Client Exit Interview." 27(2): 63-70.

Bruce, Judith. 1990. "Fundamental elements of the quality of care: A simple framework". *Studies in Family Planning* 21 (2): 61-91.

Chikamata, Davy M., Oliver Chinganya, Heidi Jones, and Saumya RamaRao. "Dual needs: Contraceptive and sexually transmitted infection protection in Lusaka, Zambia," *International Family Planning Perspectives* 28(2): 96-104.

Cooper, Lisa A and Neil R. Powe. 2004. "Disparities in patient experiences, health care processes, and outcomes: The role of patient-provider racial, ethnic, and language concordance." The Commonwealth Fund. Accessed from http://www.cmwf.org/publications/publications_show.htm?doc_id=231670 on June 13, 2005.

DiPrete Brown, Lori, Bérengér De Negri, Orlando Hernandez, Lilian Dominguez, Julie H. Sanchak, and Debra Roter. 2000. "An evaluation of the impact of training Honduran health care providers in interpersonal communication," *International Journal for Quality in Health Care*, Vol. 12(6): 495-501.

Fonn, Sharon and Makhosazana Xaba. 2001. "Health Workers for Change: Developing the initiative," *Health Policy and Planning*, Vol. 16(Suppl. 1): 13-18.

Fonn, Sharon, A.S. Mtonga, H.C. Nkoloma, G. Bantebya Kyomuhendo, D. Dasilva, E. Kazilimani, S. Davis, and R. Dia. 2001. "Health providers' opinions on provider-client relations: results of a multi-country study to test Health Workers for Change," *Health Policy and Planning*, Vol. 16(Suppl. 1): 19-23.

Gilroy, K, P.J.Winch, A. Diawara, E. Swedberg, F. Thiéro, M. Kané, Z. Daou, Z. Berthé, and A. Bagayoko. 2004. "Impact of IMCI training and language used by provide on quality of

counseling provided to parents of sick children in Bougouni District, Mali," *Patient Education and Counseling*, Vol. 54: 35-44.

Hernán, Vera. 1993. "The client's view of high-quality care in Santiago, Chile," *Studies in Family Planning*, Vol. 24(1): 40-49.

Kim, Young- Mi, A. Kols et al. 1997. Client-Provider Communication in Family Planning: Assessing Audiotapes Consultations from Kenya. Johns Hopkins School of Public Health Center for Communication Programs: Working paper number 5.

Kim, Young- Mi, E. Basuki, and A. Kols. 2000. "Self-assessment and peer review: Improving Indonesian service providers' communication with clients." *International Family Planning Perspectives*, 26(1): 4-12

Kim, Young Mi, Adrienne Kols, Christine Bonnin, Paul Richardson and Debra Roter. 2001. "Client communication behaviors with health care providers in Indonesia," *Patient Education and Counseling*, Vol. 45: 59-68.

Kim, Young Mi, Adrienne Kols, Fitri Putjuk, Michelle Heerey, Ward Rinehart, Glyn Elwyn, and Adrian Edwards. 2003. "Participation by clients and nurse midwives in family planning decision making in Indonesia," *Patient Education and Counseling*, Vol. 50: 295-302.

Koenig, Michael, Mian Bazle Hossain, and Maxine Whittaker. 1997. "The influence of quality of care upon contraceptive use in rural Bangladesh," *Studies in Family Planning*, Vol. 28(4): 278-289.

Leon, Federico R, Gustavo Quiroz, and Alfredo Brazzoduro. 1994. "The reliability of simulated clients' quality-of-care ratings," *Studies in Family Planning*, Vol. 25(3): 184-190.

Miller, Kate, Robert Miller, Ian Askew, Marjorie C. Horn, and Lewis Ndhlovu. 1998. *Clinic Based Family Planning and Reproductive Health Services in Africa: Findings from Situation Analysis Studies*. Population Council, New York.

Miller, Robert, Andrew Fisher, Kate Miller, Lewis Ndhlovu, Baker Ndugga Maggwa, Ian Askew, Diouratie Sanogo, and Placide Tapsoba. 1997. *The Situation Analysis Approach to Assessing Family Planning and Reproductive Health Services: A Handbook*. Population Council, New York.

Murphy, Elaine and Cynthia Steele. 2000. Client Provider Interactions in Family Planning Services: Guidance from Research and Program Experience. Maximizing Access and Quality (MAQ) Paper Vol. 1, No. 2.

Ngoh, Lucy N and Marvin D. Shepherd. 1997, "Design, development and evaluation of visual aids for communicating prescription drug instructions to non-literate patients in rural Cameroon," *Patient Education and Counseling*, Vol. 30: 245-261.

PATH. 1999. *Improving interactions with clients: a key to high-quality services.* Outlook: Volume 17(2).

Quality Assurance Project. October 2002. Client Communication Behaviors with Healthcare Providers in Indonesia. Operations Research Results.

RamaRao, Saumya and Ali Mir. 2004. "Transforming relationships in Pakistani villages." *Quality/Calidad/Qualite* No. 15. New York: Population Council. Pp.20-35.

RamaRao, Saumya, and Raji Mohanam. 2003. "The Quality of Family Planning Program: Concepts, Measurements, Interventions, and Effects. *Studies in Family Planning*, 43(4): 227-248.

RamaRao, Saumya, Marlina Lacuesta, Marilou Costello, Blesilda Pangolibay, and Heidi Jones. 2003. "Quality matters: The link between care and contraceptive use," *International Family Planning Perspectives*, Vol. 29(2): 76-83.

Rinehart, W, S. Rudy, and M. Drennan. 1998. *GATHER Guide to Counseling.* Population Reports, Series J. Number 48. Baltimore: Johns Hopkins School of Public Health, Population Information Program.

Ringheim, Karen. 2002. "When the Client is Male: Client-Provider Interaction from a Gender Perspective," *International Family Planning Perspectives* 28(3): 170-175.

Sanogo, Diouratié, Saumya RamaRao, Heidi Jones, Penda N'diaye, Bineta M'bow, and Cheikh Bamba Diop. 2003. "Improving quality of care and use of contraceptives in Senegal," *African Journal of Reproductive Health*, Vol. 7(2): 57-73.

Schuler, Sidney Ruth, Kharul Islam, Lisa Bates. 2000. "From Home to the Clinic: The Next Chapter in Bangladesh's Family Planning Success Story Urban Sites," JSI the POLICY Project. Project Report.

Tavrow, Paula, Young-mi Kim, and Lynette Malianga. 2002. "Measuring the quality of supervisor-provider interactions in health care facilities in Zimbabwe," *International Journal for Quality in Health Care*, Vol. 14(Supplement 1): 57-66.

Table 2. Client characteristics

Characteristics	N=232
Average age of client [standard deviation]	29.8 [5.90]
Client's highest level of school attended (%)	
None	0
Elementary	30
High school	55
College	15
Client is Catholic (%)	75
Client is married (%)	99.6
Average age of client's youngest child [standard deviation]	2.76 [2.74]
Client wants (more) children (%)	35
Client discussed family planning w/ husband/partner (%)	99.1
Average number of living children [standard deviation]	2.82 [1.56]
Client is breastfeeding (%)	29

Data Source: Client exit interview, Situation Analysis conducted December 1999 – March 2000.

Table 3. Provider characteristics

Characteristics	N=69
Average age of provider [standard deviation]	46.9
Provider's highest level of school attended (%)	
College	100
Provider is Catholic (%)	83
Provider is married (%)	93
Average age of provider's youngest child [standard deviation]	13.7
Provider wants (more) children (%)	1.5
Provider discussed family planning w/ husband/partner (%)	92
Provider is currently using family planning method (%)	66
Provider underwent training	51
Average number of years working at this clinic [standard deviation]	15.8
Average number of years providing family planning services [standard deviation]	17.8
Provider works in BHS clinic	63.8

Data Source: Provider interview, Situation Analysis conducted December 1999 – March 2000.

Table 4. Quality of care from observations of CPI

Variables	N=232
NEEDS ASSESSED	
Provider asked if client wanted to space/limit	21%
Provider asked if client was breastfeeding	9%
Provider asked about clients' sexual relations	6%
Provider asked if client discussed FP w/ husband/partner	12
Mean Needs Assessed Index (0-4)	0.48 [0.868]
At least one need assessed	31%
CHOICE by method client decided on (reported at exit)	
Provider mentioned an alternative method (to the one the client was given)	
Method given	
Pill	9%
IUD	18%
Injectable	19%
Condom	44%
Mean	16%
Provider did not promote a method	93%
Mean Choice Index (0-2)	1.10 [0.426]
At least one choice given	95%
MATERIALS PROVIDED	
Provider used an IEC method	13%
Provider gave client leaflet	10%
Mean Materials Provided Index (0-2)	0.23 [0.524]
At least one material provided	18%
CONTINUITY	
Provider told client when to return	79%
Provider told client where to go for re-supply	72%
Mean Continuity Index (0-2)	1.51 [0.800]
At least one mechanism for continuity provided	81%
INTERPERSONAL COMMUNICATION	
Provider consistently gave full attention/eye contact to client	63%
Provider consistently showed respect	91%
Provider consistently listened & encouraged speak up	82%
Mean Interpersonal Communication Index (0-3)	2.36 [0.901]
At least one interpersonal communication used	94%
Quality Index (0-13): Observation [standard deviation]	5.69 [2.200]

Data Source: Observation of client-provider interactions, Situation Analysis conducted December 1999 – March 2000.

Table 5. Quality of Care from exit interviews with clients

Variables	N=232
Client reported provider discussed possibility of switching	32%
Client reported provider told about another place to obtain method	14%
Client reported provider told when next visit will be	76%
Client felt that received info wanted	91%
Client felt that consultation time was right	85%
Quality Index (0-5): Client exit [standard deviation]	2.99 [1.030]
Quality Score (0-1): Client exit [standard deviation]	0.60 [0.206]

Data Source: Client exit interview, Situation Analysis conducted December 1999 – March 2000.

Table 6. Coefficients for linear regression models predicting the effect of characteristics on observed CPI: by sub-indices

Linear Regression Estimates	Needs assessed	Choice	Materials provided	Continuity	Interpersonal Communication
Provider characteristics					
Age	-0.009	-0.012	0.024	-0.039	-0.029
	(0.017)	(0.008)	(0.015)	(0.024)	(0.028)
Attended college	--	--	--	--	--
Catholic	-0.298	-0.104	0.180	-0.642**	0.031
	(0.229)	(0.076)	(0.119)	(0.181)	(0.278)
Married	--	--	--	--	--
Age of youngest child	-0.011	0.009	-0030	0.011	-0.014
	(0.022)	(0.007)	(0.020)	(0.017)	(0.019)
Want more children	-0.826**	-0.305*	-0.307*	0.016	-03.229
	(0.237)	(0.126)	(0.156)	(0.362)	(0.431)
Discussed family planning w/ partner	-0.469	0.048	0.096	-0.185	-0.899
	(0.512)	(0.133)	(0.164)	(0.327)	(0.505)
Using family planning method	-0.094	-0.125	0.049	0.155	0.028
	(0.181)	(0.078)	(0.095)	(0.188)	(0.253)
Underwent training	0.343*	0.034	0.301**	0.208	0.313
	(0.137)	(0.065)	(0.084)	(0.172)	(0.209)
Year working in clinic	0.009	0.000	-0.002	0.013	0.053**
	(0.012)	(0.005)	(0.007)	(0.018)	(0.018)
Years providing family planning	-0.007	-0.008	-0.006	0.022	-0.052*
	(0.014)	(0.006)	(0.008)	(0.024)	(0.023)
Works in BHS clinic	-0.014	0.010	0.034	-0.010	0.051
	(0.138)	(0.067)	(0.080)	(0.191)	(0.208)
Client characteristics					
Age	-0.008	-0.013*	-0.014	-0.018	-0.010
	(0.012)	(0.006)	(0.008)	(0.012)	(0.015)
Attended high school	0.006	-0.061	-0.074	0.057	-0.164
	(0.118)	(0.055)	(0.070)	(0.145)	(0.125)
Attended college	-0.199	-0.097	-0.245**	-0.252	-0.109
	(0.201)	(0.010)	(0.091)	(0.247)	(0.229)
Catholic	-0.100	0.050	-0.012	0.295	0.109
	(0.176)	(0.074)	(0.077)	(0.162)	(0.174)
Married	--	--	--	--	--
Age of youngest child	-0.007	-0.014	0.009	0.010	-0.025
	(0.028)	(0.014)	(0.015)	(0.022)	(0.023)
Wants more children	0.258	-0.189*	0.049	0.042	-0.002
	(0.148)	(0.080)	(0.088)	(0.133)	(0.131)
Discussed family planning with partner	0.279	0.155	-0.164	-0.307	0.164
	(0.341)	(0.109)	(0.118)	(0.199)	(0.580)
Number of living children	0.010	-0.004	-0.025	0.007	0.002
	(0.047)	(0.022)	(0.029)	(0.052)	(0.047)
Breastfeeding	-0.054	-0.026	0.030	0.015	0.032
	(0.130)	(0.069)	(0.085)	(0.101)	(0.108)
N	232	232	232	232	232
Prob. >F	0.000	0.001	0.000	0.000	0.003
R-squared	0.128	0.118	0.266	0.196	0.238

* p<0.05 **p<0.01.
Clustered by provider
Standard error in parenthesis
Data Source: Observation of client-provider interactions, Situation Analysis conducted December 1999 – March 2000.

Table 7. Coefficients for linear regression models predicting the effect of characteristics on observed CPI

Linear Regression Estimates	Model 1		Model 2	
	Coefficient	**Standard Error**	**Coefficient**	**Standard Error**
Provider characteristics				
Age	-0.065	0.060		
Attended college	--			
Catholic	-0.833	0.580		
Married	--			
Age of youngest child	-0.035	0.055	-0.076	0.043
Want more children	-1.650	0.905	-0.489	0.693
Discussed family planning w/ partner	-1.409	1.055	-1.315	1.127
Using family planning method	0.013	0.570	-0.014	0.621
Underwent training	1.199**	0.451	1.157*	0.494
Year working in clinic	0.073	0.044	0.042	0.045
Years providing family planning	-0.051	0.062	-0.063	0.064
Works in BHS clinic	0.0714	0.478	0.175	0.480
Client characteristics				
Age	-0.062*	0.031		
Attended high school	-0.235	0.328		
Attended college	-0.901	0.577		
Catholic	0.342	0.392		
Married	--			
Age of youngest child	-0.027	0.068	-0.031	0.064
Wants more children	0.157	0.340	0.227	0.341
Discussed family planning with partner	0.128	0.902	-0.093	0.670
Number of living children	-0.010	0.111	-0.089	0.098
Breastfeeding	-0.003	0.233	-0.044	0.255
Social distance				
Age distance			0.029	0.033
Education distance			0.440	0.269
Religion discordance			0-.151	0.415
N	211		211	
Prob. >F	0.0005		0.0014	
R-squared	0.2388		0.1922	

* p<0.05 **p<0.01.
Clustered by provider
Data Source: Observation of client-provider interactions, Situation Analysis conducted December 1999 – March 2000.

Table 8. Coefficients for linear regression models predicting the effect of characteristics on Client-reported CPI

Linear Regression Estimates	Model 1		Model 2	
	Coefficient	**Standard Error**	**Coefficient**	**Standard Error**
Provider characteristics				
Age	0.023	0.017		
Attended college	--			
Catholic	0.023	0.297		
Married	--			
Age of youngest child	-0.009	0.018	-0.007	0.016
Want more children	-0.112	0.361	0.006	0.283
Discussed family planning w/ partner	-0.112	0.314	0.004	0.309
Using family planning method	-0.298	0.181	-0.244	0.218
Underwent training	0.350*	0.145	0.372*	0.147
Year working in clinic	0.019	0.019	0.020	0.018
Years providing family planning	-0.021	0.025	-0.020	0.024
Works in BHS clinic	0.156	0.162	0.119	0.166
Client characteristics				
Age	-0.043*	0.020		
Attended high school	-0.115	0.166		
Attended college	-0.025	0.241		
Catholic	0.062	0.203		
Married	--			
Age of youngest child	0.014	0.029	0.007	0.028
Wants more children	0-.061	0.189	-0.017	0.201
Discussed family planning with partner	0-.669	0.347	-0.643*	0.270
Number of living children	0.131*	0.065	0.089	0.049
Breastfeeding	0.049	0.139	0.059	0.129
Social distance				
Age distance			0.022	0.013
Education distance			0.032	0.126
Religion discordance			-0.083	0.185
N	211		211	
Prob. >F	0.0211		0.0165	
R-squared	0.1476		0.1210	

** p<0.05 **p<0.01; Clustered by provider; Data Source: Client exit interviews, Situation Analysis conducted December 1999 – March 2000.