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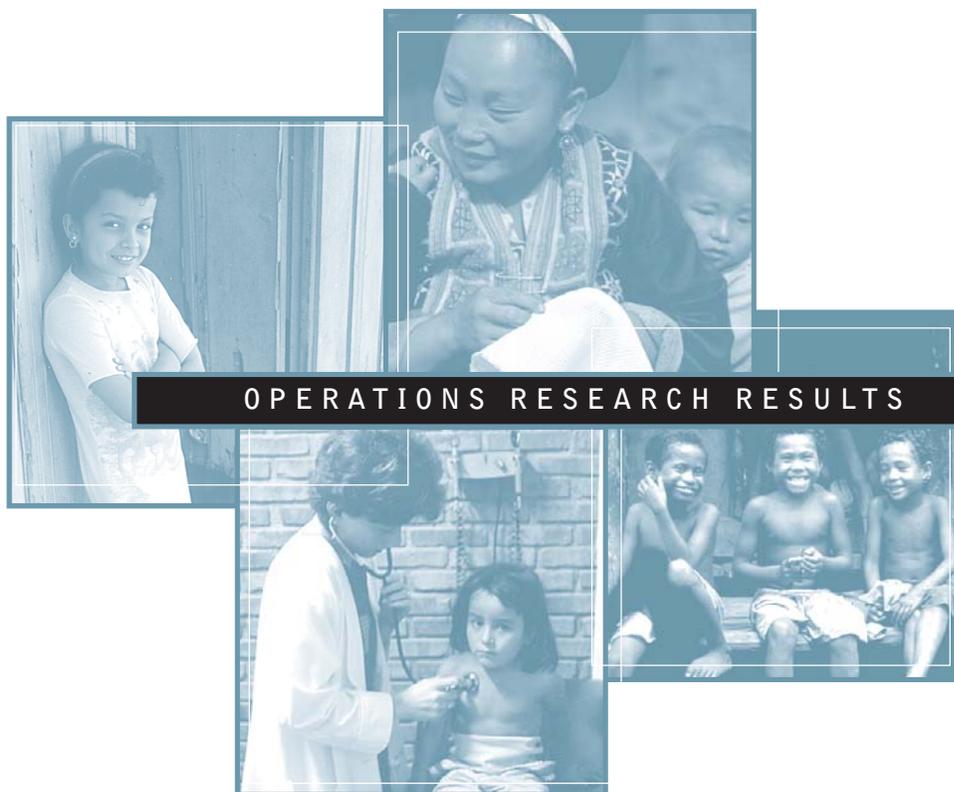
Client Communication Behaviors with Healthcare Providers in Indonesia

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Abstract

Patient participation in healthcare consultations can improve the quality of decision making and increase patients' commitment to the treatment plan. This study examines client participation, operationally defined as client active communication, during family planning consultations in Indonesia. Data were collected on 1,203 consultations in the provinces of East Java and Lampung. Sessions were audiotaped and the conversation coded using an adaptation of the Roter Interaction Analysis System (RIAS). Culturally acceptable ways for Indonesian clients to participate in consultations include asking questions, requesting clarification, stating opinions, and expressing concerns. Factors significantly associated with client active communication were, in order of importance, providers' information giving, providers' facilitative communication, providers' expressing negative emotion, client educational level, and province. The last suggests the influence of culture on client participation. The results suggest that a combination of provider training and client education on key communication skills could increase client participation in healthcare consultations.

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Client Communication Behaviors

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Young Mi Kim, Adrienne Kols, Christine Bonnin, Paul Richardson, and Debra Roter

I. Introduction

The quality and quantity of patients' communication with healthcare providers is critical to their ability to manage chronic conditions and may affect health outcomes (Greenfield et al. 1988; Kaplan et al. 1989; Orth et al. 1987). Studies have found that clients who articulate their needs, concerns, and symptoms during consultations are more likely to supply the information providers need to make an accurate diagnosis, select effective treatment, and offer appropriate advice. Clients who ask for information, for clarification, and for providers' opinions may gain a better understanding of their situation and would therefore be able to make well-informed decisions. As a result, they may have more confidence in and a greater commitment to the treatment plan (Cegala et al. 2000; Greenfield et al. 1985; Greenfield et al. 1988; Kaplan et al. 1989; Ong et al. 1995; Roter 1977; Roter et al. 1997; Stewart 1995).

Despite the importance of their participation, healthcare patients and family planning clients in both developed and developing countries generally play a passive role in consultations (Abdel-Tawab 1995; Kim et al. 1999; Roter and Hall 1992; Roter et al. 1998). Many factors contribute to limited client participation, including the social distance between client and provider and long-held medical conventions about doctor-patient relations. Differences in the medical knowledge, educational level, and socioeconomic status of provider and client create a highly unequal relationship between them (Freidson 1970). Clients tend to defer to providers' expertise and higher social standing. This inherently unequal relationship is reinforced by the conventional medical model of provider-centered care, in which doctors assume an authoritarian role (Henbest and Fehrsen 1992; Roter and Hall 1992).

Both providers and clients tend to undervalue client participation. Doctors and other healthcare providers do not always appreciate the importance of the information clients have to offer and also underestimate clients' need for information and desire to participate (DiMattteo et al. 1994; Joos et al. 1993; Waitzkin 1985).   Although most clients want to know more about their condition than providers tell them and to discuss their concerns (Charles et al. 1997; Street 1991), clients fear that providers will dismiss or devalue their comments and questions. They also worry about taking up providers' time and lack the communication skills needed to deal with providers (Kim et al. 1997).

In Indonesia, local cultural norms reinforce the dynamic of client-provider interaction. Two basic principles permeate social life and influence the way people interact: conflict avoidance and respect (Magnis-Suseno 1987). The Indonesians' desire to maintain "rukun," or social harmony, and to avoid conflict results in a high-context communication style that is indirect, often ambiguous, and affectively neutral (Hall 1976). Indonesians' respect for people of higher status extends to healthcare providers and reinforces the authoritarian model typical of medical care. Clients are keenly aware of their lesser hierarchical position in the client-provider dyad and defer to providers both to show respect and avoid conflict. Thus, the cultural context hinders clients from freely voicing disagreement, concern, or confusion and limits them largely to responding to the provider (Kim et al. 2000a; 2000b).

Abbreviations	
IEC	Information, education, and communication
RIAS	Roter Interaction Analysis System

Over the past two decades, however, client-centered models of care and shared decision making have gained increasing acceptance among health professionals (Charles et al. 1997; Henbest and Fehrsen 1992; Ong et al. 1995; Roter 2000). These new approaches recognize that clients have valuable information to contribute to health consultations and that they have the right and the ability to make their own healthcare decisions. The client-centered approach to healthcare requires changes in client as well as provider behavior: clients must take greater responsibility for their care and increase efforts to communicate their interests and concerns to providers.

Despite the increased importance attached to client communication, few studies have examined client behavior. The limited data available suggest that clients participate in healthcare consultations in three ways: (a) by providing information to providers, (b) by asking questions or using other techniques to elicit information from providers, and (c) by verifying the information they receive. Many clients employ passive rather than active strategies to achieve these three goals, for example, waiting for cues from service providers before speaking (Cegala et al. 2000; Greenfield et al. 1985; Roter 1977; Street 1991).

The main objective of this study is to analyze the determinants of active communication in Indonesia, in order to devise client education and provider training interventions to encourage active client communication. Several factors have the potential to affect client communication. First, providers may or may not encourage the client to play an active role, either by asking questions or by using other verbal strategies, such as partnership building. Second, client characteristics, such as age, education, and ethnicity, may influence clients' willingness to speak out. Third, the context and content of the consultation may prompt client participation. For example, longer sessions may give clients the opportunity to speak, while the need to explain symptoms may give them the motivation. Our hypotheses are:

- Facilitative communication by providers that fosters dialogue and rapport will increase active communication by family planning clients
- Certain client characteristics will increase active communication, including higher education, older age, and non-Javanese ethnicity
- The rate—not just amount—of client active communication will be greater in longer sessions
- The more actively clients communicate, the more satisfied they will be with their level of participation

The work reported here grew out of a previous study by the Quality Assurance (QA) Project on client-provider communication in Indonesia [Kim et al. 2000a; 2000b]. The data collected for the previous study were reanalyzed for this report.

II. Methodology

Data were collected on 1,203 family planning consultations in Indonesia. Sessions were audiotaped and later coded to measure client and provider communication, providers and clients were interviewed, and clinic records were examined. Qualitative analysis was also employed: researchers reviewed the audiotapes and extracted verbatim examples of various types of communication. This analysis uses existing data that were collected over a six-month period to evaluate the impact of interpersonal communication and counseling training and reinforcement activities on client-provider interactions (Kim et al. 2000a; 2000b).

A. Study Sample

The study was conducted in two provinces, East Java and Lampung, which have a different ethnic make-up. Within each province, investigators selected three districts (*kabupaten*). Within these six districts, 191 public service clinics (*puskesmas*) were randomly chosen for the study. The clinics, 77 percent of

which were in rural areas, varied widely in size, staffing, and client flow. In clinics where only one provider attended family planning clients (the situation at the vast majority of clinics), that provider was invited to participate. In larger clinics, one or two providers who attended family planning clients were randomly selected. Each provider asked six family planning clients to participate in the study, two during each of three rounds of data collection. Over the course of the study, 21 clinics, 32 providers, and 62 clients were dropped when providers did not attend the training workshop or because data were incomplete. Data on 1,203 clients, who consulted 201 different service providers at 170 clinics, are analyzed here.

All of the providers were women; only 3 percent had never been married; and almost all had children. Most (93 percent) were midwives, while the remainder were nurses (Table 1). The providers were responsible for a wide range of health services in addition to family planning, and 45 percent spent less than half their time on family planning. There were significant differences in the work experience and qualifications of providers working in East Java and Lampung. Providers in East Java were older, had more years of experience offering family planning services, served more clients, had a greater range of job responsibilities, and were more likely to be nurses than their colleagues in Lampung (Table 1). In addition, providers in East Java were almost all Javanese, while more than half of providers in Lampung represented another ethnic group.

Table 1. Percentage Distribution of Selected Provider Characteristics, by Province

Provider Characteristics	Province		
	East Java (n=109)	Lampung (n=92)	Total (n=201)
Age**			
<25	0.9	13.0	6.5
25–34	34.9	53.3	43.3
35–44	33.0	16.3	25.4
45+	31.2	17.4	24.9
Ethnic group**			
Javanese	99.1	46.7	75.1
Others[1]	0.9	53.3	24.9
Qualifications**			
Midwife	83.5	100.0	91.0
Nurse	16.5	0.0	9.0
Years of family planning experience**			
1–10	31.2	63.1	45.8
1–20	34.0	22.8	28.4
21+	36.8	14.1	25.9
Number of clients served per week**			
0–25	14.7	34.8	23.9
26–50	28.4	32.6	30.4
51+	56.9	32.6	45.8
Number of job responsibilities*			
<8	33.9	51.1	41.8
8–10	25.7	20.7	23.4
11+	40.4	28.3	34.8

Notes: * p≤ .05; ** p≤.001; 1 = Other ethnic groups include Madurese, Oganese, Minangos, and Bantenes

Clients were chosen randomly on the day of data collection, so they mirrored the general family planning population: all but two were women, 99 percent were married, 70 percent had at least two living children, and 55 percent were aged 25–34 (Table 2). Most (57 percent) had at least a junior high school education. This education level is slightly higher than national levels for women of the same age, reflecting the fact that family planning users in Indonesia are better educated than their peers. Three-fourths (76 percent) were continuing clients, more than half of whom were returning for routine check-ups and resupply; the rest came to the clinics because they had a problem with their method. Clients in Lampung were more ethnically diverse, somewhat younger, and better educated than those in East Java.

B. Data Collection and Analysis

Data were collected from four sources: provider interviews, audiotaped family planning counseling sessions, client exit interviews, and clinic observations. Prior to data collection, providers and clients signed a confidentiality and voluntary participation consent form, and their names were not known to those performing the analyses. Data from all three rounds of data collection were analyzed together.

Table 2. Percentage Distribution of Selected Client Characteristics, by Province

Client Characteristics	Province		
	East Java (n=651)	Lampung (n=552)	Total (n=1203)
Age*			
<25	15.7	17.6	16.5
25–29	26.9	34.2	30.2
30–34	25.0	23.4	24.3
35–39	16.9	15.4	16.2
40+	15.5	9.4	12.7
Reason for visit			
New client	22.3	26.6	24.3
Continuing client, no problems	43.6	44.6	44.1
Continuing client, has problems	34.1	28.8	31.7
Education**			
None	8.3	3.3	6.0
Elementary	37.9	35.1	36.8
Junior high school	20.3	26.3	23.0
Senior high school	28.7	31.5	29.9
University and higher	4.8	3.8	4.3
Ethnic group*			
Javanese	95.0	63.7	80.8
Others[1]	5.0	36.3	19.3
Contraceptive method used**			
Pill	9.1	23.9	15.7
Injectable	21.8	33.9	27.5
Intra-uterine device (IUD)	31.0	22.1	27.1
Implant	24.4	8.7	17.1
Tubal ligation	4.6	0.9	2.9
Other	4.8	7.8	9.8

Notes: * $p \leq 0.01$; ** $p \leq .001$; 1 = Other ethnic groups include Madurese, Oganese, Minangos, and Bantenes.

The audiotaped consultations were coded using an adaptation of the Roter Interaction Analysis System (RIAS), which has been used extensively in both developed and developing countries (Abdel-Tawab 1995; Kim et al. 1999; Roter et al. 1997; 1998). The adaptation was based on an earlier client-provider interaction study in Indonesia, conducted by the same investigators, which reviewed 38 videotaped counseling sessions (Kim et al. 1997). The coders were Indonesians who understood the local language and received special training in the RIAS system.

RIAS assigns one code to each utterance made by a client or provider, based on its content. An utterance is a complete thought, usually a phrase or sentence. The code guide used here included 47 mutually exclusive codes, most of which could apply to either provider or client utterances. Examples of codes are: "gives medical information," "asks open-ended family planning question," "shows concern or worry," and "states opinion." Coders used a computerized data entry screen to assign codes to each utterance while listening to the audiotapes.

Based on a qualitative analysis of these and other family planning consultations in Indonesia, the investigators grouped the 47 RIAS codes into the categories listed in Table 3, which reflect naturally occurring patterns of communication behavior. The analysis of clients' utterances focuses on active communication, which allows the client to participate in the consultation and help shape its direction.

Table 3. Provider and Client Communication Categories for Coded Transcripts

Clients	Providers
Active Communication	**Facilitative Communication**
Asks questions	Asks lifestyle and psychosocial questions
Shows concern	Gives information and counsels on lifestyle and
Engages in social talk	psychosocial issues
Seeks clarification	Builds partnership with clients (self-disclosure,
States opinion	checks for understanding, asks for opinion,
	states opinion, etc.)
Other Communication	Expresses positive emotion (approval, empathy,
Gives medical, family planning, and	concern, reassurance)
routine information	Shows agreement or understanding
Gives lifestyle and psychosocial	Makes personal or social remarks
information	
Shows agreement or understanding	**Information Giving**
Laughs (nervous or happy)	Gives information on medical and family planning
Miscellaneous (transition words,	issues
unintelligible, gives instructions)	Counsels on medical and family planning issues
	Other Communication
	Asks medical, family planning, and routine
	questions
	Gives instructions
	Expresses negative emotion (disapproval, criticism)
	Miscellaneous (transition words, mechanical
	repetition, unintelligible)

Table 4 presents examples of each of the five types of client active communication . Most involve volunteering, eliciting, and verifying information. However, this analysis also includes personal/social conversation as a form of active client communication. While it may not direct the content of a

consultation, social conversation indicates that the client feels comfortable with the provider and that her conversation is less constrained. Cronbach's Alpha statistic, measuring internal consistency of client active communication is high (0.77).

Table 4. Examples of Client Active Communication

Behavior	Example
Asks questions	C: Ma'am, I want to ask you…
	P: Yes…
	C: I am about to have my first child, haven't given birth yet. I want to ask about injections…or which FP method can be used…so that it doesn't affect my health,…so I can breast-feed my (future) baby?
States concern	P: Do you have any complaints, since you started injections?
	C: The first time, I didn't get my period. This time, the second time, that's why I am here, I feel…tight in my belly, like that I haven't had my periods, . . . so I am afraid I could be pregnant, Ma'am…
Engages in social talk	C: Assalam alaikum...
	P: Walaikum salaam…
	C: Excuse me, Ma'am. May I see the midwife?
Seeks clarification	P: But after 5 years, you should have [the implants]...
	C: Checked....
	P: Removed.
	C: Oh, removed...
	P: Yes, removed after 5 years...
States opinion	P: If you have varicose veins, with injections you'll have even more.... You should be inserted instead [with an IUD]
	C: Yes...but I want injections. If not the injections, then the pill...like that.

Notes: C is client, and P is provider. Three periods ("…") represents the speaker pausing, not text deleted from the conversation.

The analysis of provider communication focuses on provider facilitative communication, which consists of six communication behaviors believed to promote an interactive relationship with the client by fostering dialogue, rapport, and client participation (Table 3, "Facilitative Communication"). Facilitative communication shows that providers take an interest in clients' personal circumstances and concerns and that they want to hear what clients have to say. Cronbach's Alpha for provider facilitative communication is 0.67. Other important categories of provider communication are information giving and asking medical and family planning questions.

Satisfaction with participation. A subjective measure was used for this study, derived from client exit interviews. Clients were read a series of statements and given a choice of four responses: strongly agree, agree, disagree, strongly disagree. Three items were combined to assess clients' satisfaction with how much they participated in the consultation just ended: whether clients (a) spoke as much as they wanted to, (b) had the chance to say what they wanted to, and (c) asked all the questions they wanted to. For the purposes of analysis, clients' responses were tabulated on a five-point scale, with five indicating strong agreement and one indicating strong disagreement. Statistical testing found that internal consistency was high: Cronbach's Alpha was 0.84.

Multiple regression analysis. Linear regression was used to test the significance and relative importance of the independent variables for the explanation and prediction of client active communication. The dependent variable was client active communication, which included the five communication behaviors listed in Table 3. Independent variables included the ten categories of client communication listed in Table 3 along with client education and satisfaction with participation. Seven other variables were entered in the regression model for control purposes: client age, province, familiarity with the provider, length of consultation, proportion of client utterances, provider experience offering family planning services, and client load. As Table 5 shows, many of these were significantly associated with client active communication during bivariate analysis.

Table 5. Frequency of Client Active Communication by Selected Characteristics (n = 1,203)

		Frequency	ANOVA Significance Level
Client education	Primary or less	4.5	.0001
	Secondary or more	6.6	
Client age	<30 years	6.2	.0012
	≥30 years	4.7	
Province	East Java	4.9	.0001
	Lampung	6.7	
Client familiarity with provider	Yes	5.3	.0001
	No (first visit with provider)	7.4	
Length of consultation	Top half (>6.5 minutes)	3.3	.0001
	Bottom half (<6.5 minutes)	8.2	
Client utterances as percentage of total	Top half	4.7	.0002
	Bottom half	6.2	
Provider experience offering family planning services	1-10 years	4.3	ns
	>10 years	4.2	
Client satisfaction with her own participation	Top 25% (rating 4.3+)	7.7	ns
	Bottom 75% (rating <4.3)	5.1	
Weekly client load at clinic	1-50 clients	4.2	ns
	>50 clients	4.2	

III. Findings

A. Client Active Communication

Clients had a one-third share of the total conversation during family planning consultations. On average, 12 percent of their communication was active, which is equivalent to 5.7 of the average 49 client utterances per consultation. However, levels of client active communication varied widely between consultations, ranging from 0 to 67 utterances. The percentage distribution of client active communication (Table 6) shows that it consisted mostly of questions (44 percent) and social talk (25 percent), but the frequency of utterances in each category varied widely.

Table 6. Frequency and Percentage Distribution of Client Active Communication Behaviors (n = 1,203)

Type of Active Communication	Frequency		Percentage Distribution
	Mean	**Range**	
Asks question	2.68	0–47	43.9%
States concern	0.44	0–11	7.6%
Engages in social talk	1.22	0–49	25.0%
Seeks clarification	0.66	0–15	9.0%
States opinion	0.72	0–9	14.6%
Total Active Communication	**5.72**	**0–67**	**100.1%**

Percentage data are subject to error due to rounding.

A qualitative analysis of the audiotapes found that most of the clients' *questions* concerned contraceptive side effects and symptoms: the effect of contraceptives on breastfeeding, the results of physical exams such as blood pressure and weight, whether women could have their intrauterine (IUD) removed early if desired, and when and where to return for resupply and check-ups. The next most common category, *social talk*, consisted largely of greetings. Clients' *opinions* covered a broad range of topics, although the benefits of using contraceptives and method preferences were recurring themes. Requests for *clarification* usually regarded instructions for taking the pill or returning for check-ups. Most of the *concerns expressed* came from women using or considering an IUD, who worried whether the IUD would limit their physical activity or interfere with sex.

Figure 1. Composition of Active Communication for Low to High Active Communication Clients (Frequencies)
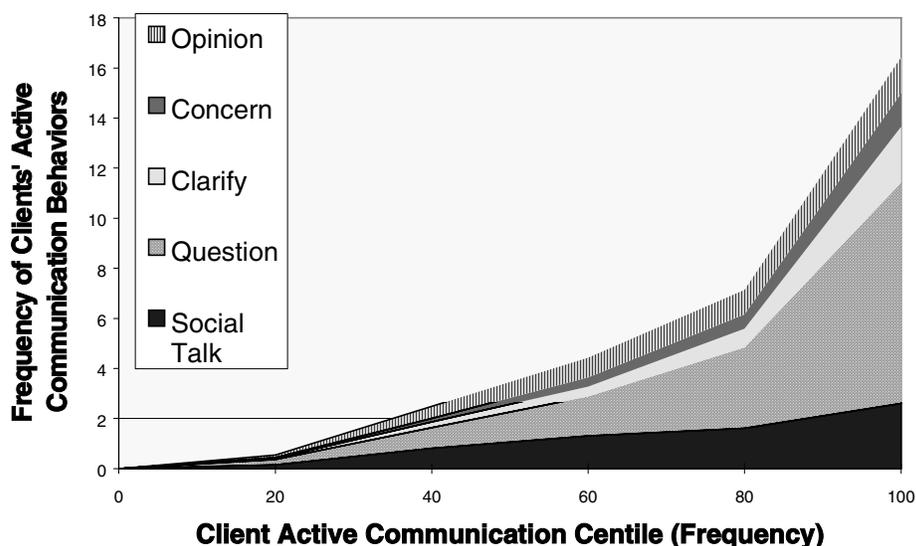
Note: The bands in the chart are in the same order top to bottom as the key to the left.

In order to compare the behavior of more and less active clients, clients were divided into quintiles by their level of active communication. Figure 1 plots the frequency of specific types of active communication for each quintile. Question asking and, to a lesser extent, seeking clarification are

relatively more important among active clients. This suggests that these two behaviors should be stressed when trying to move clients from lower to higher levels of client participation.

The more education clients had, the more actively they participated in consultations. On average, clients with at least a secondary education made 6.6 active utterances per session, compared with 4.5 for those with no education or only a primary education (p<.0001) (Table 5). Even after controlling for all variables in the multiple regression model, education remained strongly and significantly associated with levels of client active communication (p<.0001) (Table 7). Clients with at least a secondary education more often asked questions (3.2 versus 2.0, p=.0001), engaged in personal and social talk (1.4 versus 1.0, p=.007), stated their opinions (0.8 versus 0.6, p=.0001), and expressed concerns (0.5 versus 0.3, p=.0001) than less educated clients. Asking for clarification did not differ by educational level (0.7 versus 0.6, p=.7740).

Table 7: Multiple Regression Analysis of Client Active Communication (n = 1,203)

Variable	Coefficient	Standard Value (β)	Significance (p)
Client education	0.5	.082	.001
Province (Lampung)	0.5	.042	.054
Provider facilitative communication (combined)	0.1	.315	.001
Give psychosocial, lifestyle information	0.0	.006	.805
Psychosocial, lifestyle questions	0.0	.005	.804
Build partnership	-0.0	-.040	.108
Express positive emotion	0.2	.093	.001
Show agreement, understanding	0.1	.101	.001
Personal, social talk	0.7	.284	.001
Give biomedical/technical information	0.1	.404	.001
Biomedical, technical questions	-0.1	-.195	.001
Negative emotion	1.4	.090	.001
Instructions	0.5	.024	.192
Client's satisfaction with her participation	0.3	.02	.184

Notes: R^2=.66, F (21, 1179) = 109.4, p <.0001)

Controlling for client's age, client's familiarity with provider, length of the consultation session (in minutes), client utterances as percentage of total combined provider and client utterances, provider's experience with offering family planning services (in years), number of clients seen per week at clinic, and whether client had complaints about her current contraceptive method.

Clients in Lampung had higher levels of active communication than clients in East Java (6.7 versus 4.9, p=.0001) (Table 5). This disparity remained significant in the multiple regression analysis even after controlling for the many factors that differed between the two provinces (Table 7). Clients more often asked questions (3.0 versus 2.4, p=.0185), engaged in personal/social talk (1.4 versus 1.0, p=.0011), stated opinions (0.9 versus 0.5, p=.0001), asked for clarification (0.8 versus 0.5, p=.0001), and expressed concerns (0.5 versus 0.4, p=.0234) in Lampung than East Java.

Bivariate analysis found that although the *number* of client active utterances increased as the length of the session increased, the *proportion* of client active utterances remained the same. Clients averaged 8.2 active utterances in longer sessions (sessions greater than the medium of 6.5 minutes), compared with 3.3 active utterances in shorter sessions (p = .0001). However, the proportion of client active communication was 12 percent regardless of the length of the session. Furthermore, session length was not significant in a multivariate analysis controlling for other variables. Thus, our concern that clients might feel rushed and unable to speak actively during shorter sessions is not supported.

Clients' were generally satisfied with how much they participated in the consultation: their ratings were skewed toward the high end of the five-point scale and averaged 4.1. Client satisfaction ratings were highly congruent with their actual levels of active communication (data not shown), suggesting that clients had an accurate grasp of how much they participated.

B. Provider Communication

Providers had a two-thirds share of the total conversation during family planning consultations. The largest part of their communication, 43 percent, consisted of giving information about medical and family planning matters (Table 8). On average, this is equivalent to 41.6 of the average 96 provider utterances per consultation, but the number ranged from 0 to 305 utterances. Another 28 percent (or 24.2 utterances, on average) of their communication was facilitative, although this too varied widely, ranging from 0 to 179 utterances in a single consultation. Partnership building and showing agreement/ understanding were the most common types of facilitative communication. Providers also asked an average of 14.8 (range 0 to75) medical and family planning questions per session.

Table 8. Frequency and Percentage Distribution of Provider Communication Behaviors (n = 1,203)

	Frequency		Percentage
Provider Communication Type	**Mean**	**Range**	**Distribution**
Partnership-building	7.62	0–47	9.5%
Agreeing, showing understanding	5.45	0–81	6.0%
Giving information on lifestyle and psychosocial issues	4.76	0–58	4.9%
Positive emotion	3.48	0–36	4.2%
Personal and social conversation	1.56	0–62	2.1%
Asking questions on lifestyle and psychosocial issues	1.30	0–19	1.7%
Total Facilitative Communication	**24.17**	**0–179**	**28.4%**
Giving information on biomedical and family planning matters	41.62	0–305	43.2%
Asking questions on biomedical and family planning matters	14.75	0–75	20.1%
Giving instructions	2.31	0–20	3.5%
Expressing negative emotion	0.12	0–3	0.1%
Miscellaneous (unintelligible, others, repetition)	4.08	0–58	4.6%
			99.9%

Note: Percentage data are subject to error due to rounding.

According to the multiple regression model, certain types of provider communication had a stronger influence on client active communication than any client characteristics. The single strongest factor was providers giving biomedical and technical information (β = .41, p<.001) (Table 7). The more information a provider supplied, the more actively the client participated. While the combined category of provider facilitative communication was strongly associated with client active communication (β = .31, p<.001), it was due primarily to three components: expressing positive emotion, showing agreement

or understanding, and engaging in social talk. In fact, social talk followed closely behind total facilitative communication as a predictor of client active participation (β = .28, p<.001). Providers' expression of negative emotions, such as criticism and disapproval, was also linked with client participation, perhaps because clients recognized providers' caring intentions.

After adjusting for other variables, some components of provider facilitative communication did not prove to be consistently associated with client active communication, including giving lifestyle and psychosocial information, asking questions about psychosocial and lifestyle issues, and partnership building. Asking questions on biomedical and technical matters was negatively associated with client active communication; that is, the more such questions were asked, the less clients participated.

In Figure 2, clients are divided into quintiles by their overall level of active communication, and the frequency of provider facilitative communication for each group is plotted. As the overall level of client active communication rises, so does provider facilitative communication, but the various types of facilitative communication do not increase equally or at the same point. The frequency of showing agreement increases consistently across the graph. However, increases in partnership building are more evident at lower levels of client participation, while increases in giving lifestyle and psychosocial information are more evident at higher levels of client participation. These results suggest that providers focus on partnership building with passive clients and on psychosocial and lifestyle information with active clients.

Figure 2. Composition of Provider's Facilitative Communication by Increasing Levels of Clients Active Communication (Frequency)
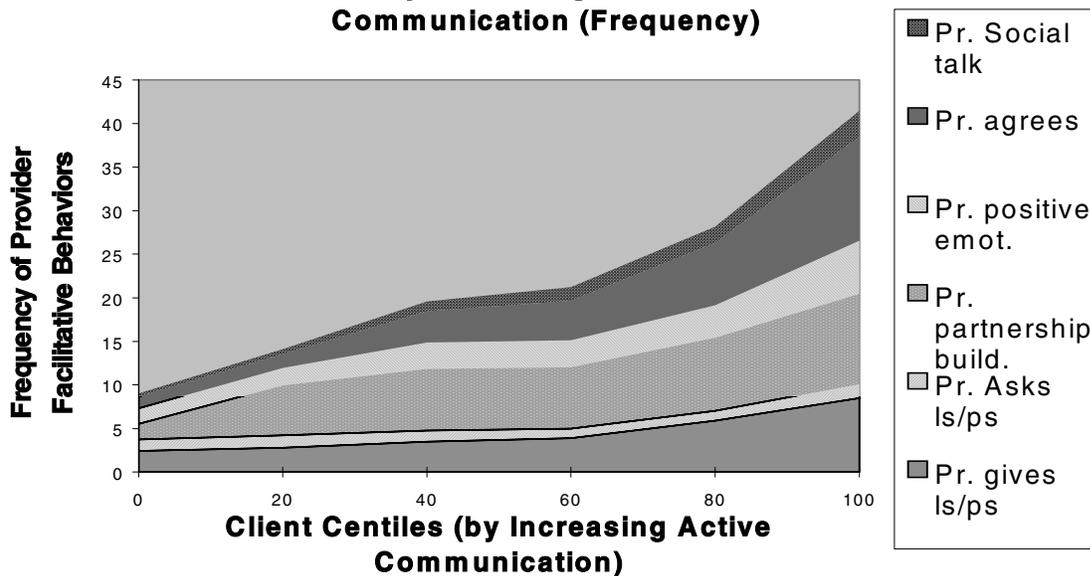
Notes: "Pr" represents "provider" and "ls/ps" represents "lifestyle and psychosocial information"

The bands in the chart are in the same order top to bottom as the key to the right.

IV. Discussion

A. *Maximizing Client Active Communication*

Despite the generally low levels of participation, clients did actively participate in consultations in at least five different ways: by asking questions, seeking clarification, expressing opinions, expressing concerns, and engaging in social talk. The first four promote a fuller exchange of information between client and provider, while the fifth builds rapport that may encourage clients to talk freely. The fact that

providers "accepted" the behavior even of unusually assertive clients shows that above-average active client communication is permissible within the Indonesian cultural context and that room exists for increased client participation.

Providers' influence over the communication dynamic proved more important than clinic and client characteristics. However, while providers accepted active client behavior, they rarely prompted it. The solution may be provider training: the intervention study that generated this data set found that provider training and reinforcement increased provider facilitative and client active communication (Kim et al. 2000a, 2000b).

Provider training must be based on an accurate understanding of client behavior and the consequences of provider communication rather than commonly held assumptions. Contrary to expectations, the types of provider communication most strongly linked with client active participation were giving medical and family planning technical information and social talk—not the more overtly facilitative categories of provider communication. The fact that Indonesian providers often give family planning clients sketchy, inadequate information may have increased the importance of information giving, while the impact of social talk suggests that building rapport with clients is more important than prompting them to speak.

Asking questions had, if anything, a negative impact on client active communication, and there was little difference in how clients responded to open-ended and closed-ended questions. This confirms a meta-analysis of communication studies that found that physician question-asking was negatively related to patient recall and compliance (Hall et al. 1988). These are important findings because asking questions is the primary tool providers use to prompt clients to speak, and many training programs urge providers to switch from closed- to open-ended questions. Although questions do give clients an opportunity to speak, they may also reinforce the unequal hierarchical relationship between provider and clients. Asking questions puts providers firmly in control of the content and direction of the interaction, while clients are conditioned to respond briefly and passively. However, it is also possible that question-asking does not cause client passivity, but rather results from it: faced with inarticulate clients, providers may increase the number of questions they ask in order to obtain needed information.

Experimental studies in developed countries suggest that brief client education interventions can teach clients how to take advantage of the opportunities they have to speak, encourage them to articulate their thoughts and feelings, and help them formulate questions (Cegala et al. 2000; Roter 1977; Socha McGee and Cegala 1998). However, training clients in communication skills cannot succeed—and may even backfire—if providers are not also trained. For example, an intervention encouraging clients to ask questions will likely fail if providers do not reward and reinforce this client behavior. Such an intervention might even prompt negative responses from providers: research suggests that untrained providers may feel uncomfortable, irritated, and frustrated by trained clients' efforts to assert their interests or ask questions. Building on the results of this study and prior provider training, the investigators are designing a waiting room intervention that will give family planning clients 15 minutes of training in basic communication skills immediately before they see a provider.

B. Overcoming Educational and Cultural Barriers

Client education proved to be a stronger factor than age or income in predicting client active communication. Less educated clients experience a greater social distance from service providers than do better educated clients, which may strengthen the deference to authority that is such a marked element of Javanese culture. Less educated clients also may have weaker communication skills and more limited experience in dealing with authorities. When clients say little and ask few questions, however, providers may assume that they cannot understand technical information and are not interested in making informed decisions. As a result, providers may give less educated clients less information and expect less input from them. This, in turn, may further dampen these clients' motivation to speak. Thus, low client

education may set up a complex reciprocal relationship that limits the exchange of information (Pendleton and Bochner 1980; Pratt et al. 1957; Roter and Hall 1992).

If providers are to offer less educated clients the same quality of care as better educated clients, this cycle must be broken. Providers should make a special effort to give less educated clients a full range of information by using low-literacy information, education, and communication (IEC) materials; avoiding technical jargon; and checking that clients understand their explanations. Providers also should assume that every client has something valuable to say.

Provincial differences in client active communication suggest the importance of culture in shaping client-provider interaction: active communication by clients was greater in Lampung, where both clients and providers were less uniformly Javanese. Interventions, whether directed to providers or to clients, must take account of local cultural values. Asking providers and clients to undertake behaviors that contradict accepted norms are doomed to failure.

C. Implications for Future Research

Client and patient behavior is an under-explored area in developed as well as developing countries. Audiotaping overcomes the most critical shortcomings of the structured observations that have been widely used to investigate client-provider interaction. The presence of a tape recorder during a consultation is less disruptive than that of an observer. It captures client and provider communication in equal detail. And it produces an empirical record that assures greater confidence in the accuracy and objectivity of data and allows for reliability verification of coding. However, analyzing audiotapes has some practical and theoretical limitations. Long hours and special training are required to review and code the tapes, and even complex coding schemes do not always capture the many dimensions of human interaction or even the behavior of interest.

Refining the operational definition of client participation—and revising the coding scheme accordingly—may help capture the subtleties of client behavior. Rather than labeling all medical and family planning information giving as passive client behavior, for example, a more sensitive scheme might subdivide these utterances into those initiated by the client (active) and those prompted by the provider (passive) (Kim et al. 1997). Prompted information could be further subdivided, depending on whether clients offer minimal information (passive) or volunteer additional information (active) (Kim et al. 1999). In a similar fashion, other researchers have begun classifying client questions by their intentions and functions as well as their content (Cegala et al. 2000; Socha McGee and Cegala 1998). Examining utterances in sequence, rather than looking at their frequency, may shed new light on how providers and clients interact.

Stronger research designs also will help us better understand client communication behaviors. An experimental study design could determine whether the association between provider communication and client behavior rises to the level of a causal relationship. Collecting data on outcome behaviors, such as clients' prompt return for scheduled check-ups or contraceptive continuation rates, would allow researchers to test the link between client communication behavior and health outcomes. In addition, research is needed to test provider training and client education interventions designed to increase client participation.

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