



OPERATIONS RESEARCH SUMMARY

Quality Assurance Project II

Client Communication Behaviors: Indonesia

Background: Better communication between patients and providers may lead to better health outcomes. Research shows that clients who describe their symptoms and concerns are more apt to give providers the information needed for an accurate diagnosis, effective treatment, and appropriate advice. Unfortunately, it also shows that most providers tell clients less than they want to know, and providers remain passive in patient consultations, in part because of the social distance between clients and providers. Indonesian culture reinforces this dynamic with norms that accord higher status to health care providers, hindering clients from voicing their concerns and limiting their interactions to brief responses.

Methods: This study analyzed 1203 family planning (FP) consultations between nurses and female clients at 170 clinics in two Indonesian provinces.¹ Using the Rotor Interaction Analysis System, various aspects of each consultation were measured, including questions asked by both parties, technical information given and emotional support by providers (the latter termed “facilitative communication”), and relevant information about each client. Certain client comments, which relevant literature² indicated would increase a consultation’s productivity, were defined as “active” and included questions, social talk, expressions of opinion or concern, and requests for clarification. This study looked for statistical relationships between active client communication and other factors: client characteristics, provider characteristics and communication practices, and consultation duration.

Results

Clients accounted for about a third of the comments in the average consultation, but only 12% of their communication was active. Each consultation averaged about 5.7 active client comments, varying widely from 0 to 67. Table I shows the impact of different factors on active client communication, after accounting for all the other factors using multivariate analysis. Active client communication was very significantly higher in younger clients with more education. It was significantly higher in Lampung Province, which has a higher proportion of non-Javanese. Clients and providers who previously knew each other generated more active client participation. However provider experience with FP counseling and provider workload did not influence active client communication. Longer consultations produced more active comments from clients, but not significantly.

Table 2 shows the effect of different provider communication practices on active client communication, based on a linear regression that controlled for many other factors. More facilitative and informational comments by the provider are strongly related to more active client communication, but a provider who asks more biomedical and technical questions,

Table 1: Impact of characteristics of clients, providers, and clinics on the number of active client comments, based on a multivariate analysis of 1203 consultations

Factor	Value of Factor	Ave. number of comments /consultation	Significance
Client characteristics			
Education level	Primary or less	4.5	0.0001
	Secondary or more	6.6	
Age	Less than 30 years	6.2	0.0012
	More than 30 years	4.7	
Province	East Java (95% Javanese)	4.9	0.0001
	Lampung (64% Javanese)	6.7	
Satisfaction with participation ¹	Top quartile (client satisfied)	7.7	NS
	Low three quartiles (not satisfied)	5.1	
Provider/clinic characteristics			
Provider experience with FP	1–10 years	4.3	NS
	More than 10 years	4.2	
Familiar with client	Yes (not first visit with client)	5.3	0.0001
	No (first visit with client)	7.4	
Weekly client load at clinic	1–50 clients	4.2	NS
	More than 50 clients	4.2	
Duration of consultation	Top half (over 6.5 minutes)	3.3	0.0001
	Bottom half (under 6.5 minutes)	8.2	
Notes: [1] Client satisfied with own participation in consultation. NS = not significant.			

possibly to provide technical information, causes less active client communication. Expression of negative provider emotions increased clients' active communication. The number of instructions given by the provider was not a significant determinant of active client communication, although they were positively correlated. The other three factors in Table 2 all positively correlated with active client communication, but only client education was highly significant. The province was marginally significant, and client satisfaction with his/her participation was not significant, consistent with Table 1.

Table 2 shows the effect of different provider communication practices on active client communication, based on a linear regression that controlled for many other factors. More facilitative and informational comments by the provider are strongly related to more active client communication, but a provider who asks more biomedical and technical questions, possibly to provide technical information, causes less active client communication. Expression of negative provider emotions increased clients' active communication. The number of instructions given by the provider was not a significant determinant of active client communication, although they were positively correlated. The other three factors in Table 2 all positively correlated with active client communication, but only client education was highly significant. The province was marginally significant, and client satisfaction with his/her participation was not significant, consistent with Table 1.

Discussion

This study is important for its rigor and large sample; few similar studies have such a large sample. The findings suggest a direction for problem-solving policies in Indonesia, support some published research, and contradict other research and accepted beliefs. The fact that providers accepted and worked with even unusually assertive clients signals room for more active client participation in this country. But this will require that providers have more skills in communication, provide more technical information and instructions without asking technical questions, and more social talk without more overt types of facilitative communication. The strong association of client educational level and active communication recommends a search for ways to communicate effectively with less educated clients. Investigations of less jargon, low-literacy materials, client skill development, and more reciprocal client-provider relationships should occur.

The negative impact of provider questions on active client communication, although seemingly strange, nevertheless supports previous research of physician question-asking. However, the causal connection may be reversed here: providers may ask more questions to *overcome* client passivity rather than cause it. This and other issues raised in the study suggest that future research should address the *sequence* of comments as well as the frequency. This study observed five different types of active client communication—asking questions, seeking clarification, expressing opinions, expressing concerns, and engaging in social talk. Future research should probe them more deeply; for example, what mix of these types is most useful for less educated clients?

Table 2: Contribution of provider communication practices and other factors to the number of active client comments, based on a multiple linear regression¹ and 1203 consultations

Factor	Coefficient	Significance
<i>Provider communication practices</i>		
Number of facilitative comments	0.1	0.001
Number of informational comments	0.1	0.001
Biomedical/technical questions asked	- 0.1	0.001
Times negative emotion expressed	1.4	0.001
Instructions given	0.5	0.192
<i>Other factors</i> ²		
Client education	0.5	0.001
Province: proportion from Lampung	0.5	0.054
Client satisfaction with participation	0.3	0.184
Notes: [1] The linear regression also included, and therefore controlled for, client age, provider familiarity with client, duration of consultation, provider experience with FP, weekly client load of clinic, client complaints, client proportion of total communication. [2] See Table 1.		

¹ This summary is based on: Kim YM, Kols A, Bonnin C, Richardson P, and Roter D. 2002. Client Communication Behaviors with Healthcare Providers in Indonesia. *Operations Research Results* 2(9). Published for USAID by the Quality Assurance Project (QAP), Bethesda, MD. See also by the same authors: Client Communication Behaviors with Healthcare Providers in Indonesia. *Patient Education and Counseling* 45:59-68, 2001. The data reported here were collected as part of an intervention study reported in Kim YM, Putjuk F, Kols A, and Basuki. E 2000. Improving Provider-client Communication: Reinforcing IPC/C Training in Indonesia with Self-assessment and Peer Review. *Operations Research Results* 1(6). Published for USAID by the Quality Assurance Project, University Research Co., LLC, Bethesda, MD. QAP publications are available at www.qaproject.org.

² Hall J, Roter D, and Katz N. 1988. Correlates of Provider Behavior: A Meta-analysis. *Medical Care* 26: 657-75.

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