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Participatory Supervision with Provider Self-Assessment Improves Doctor-Patient Communication in Rural Mexico

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FAX (301) 941-8427
www.qaproject.org



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Abstract

Preliminary research by the Mexican Institute of Social Security/Solidarity (IMSS/S) and the Quality Assurance (QA) Project in the state of Michoacan, Mexico, uncovered shortcomings in interpersonal communication and counseling among supervisors, doctors, and clients. IMSS/S implemented a pilot intervention that included participatory supervision and provider self-assessment. Over four months, specially trained supervisors added an hour of supervision on interpersonal communication and counseling (IPC/C) to regular site visits. Supervisors were assisted by job aids and engaged in a participatory manner with the doctors being supervised. The doctors, who had received IPC/C training, periodically audio-taped and self-assessed their own consultations as part of the intervention. The paper describes details of the intervention and includes sample forms.

The QA Project evaluated the impact of the pilot intervention on three indicators of IPC/C quality: providers' facilitative communication, their informative communication, and patients' communication. In a post-intervention sample of 60 doctors, the average number of facilitative and informative communications per consultation by doctors in the program group was significantly more than those by members of the control group (48.0 facilitative and 27.5 informative in program group; 30.0 facilitative and 16.6 informative in control group). In a pre-post panel analysis of 28 doctors, both the program and control groups improved markedly during the study, but gains were larger in the program than in the control group for both types of provider communications. The increase was significantly larger in the program group than the control group for facilitative communications but not for informative. No significant difference between program and control was found in patient communication. No single component of the intervention was responsible for the improvement; it resulted from the combination of activities.

Doctors appreciated the more supportive relationship with supervisors that resulted from the intervention and found that listening to themselves on tape was a powerful, although initially stressful, experience. The authors conclude that supportive supervision and self-assessment activities reinforced IPC/C training, prompted reflection and learning, and helped novice doctors improve their interpersonal communication skills. Doctors found the activities valuable.

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Participatory Supervision with Provider Self-Assessment Improves Doctor-Patient Communication in Rural Mexico

Young-Mi Kim, Maria Elena Figueroa, Antonieta Martin, Ricardo Silva, Sixto F. Acosta, Manuel Hurtado, Paul Richardson, and Adrienne Kols

I. Introduction

Studies in healthcare settings have explored how the quality of interpersonal communication and counseling relates to client satisfaction and health outcomes. Some studies have found that consultations that focus on patient concerns, comfort, and needs are more satisfying to patients and may produce better health outcomes than do consultations that center mainly on the physician's effort to diagnose and treat a health problem (Bertakis et al. 1991 and 1993; DiMatteo et al. 1993; Henbest and Fehrson 1992; Kaplan et al. 1989; Robbins et al. 1993; Roter et al. 1998a; Stewart 1984; and Young and Klinge 1996). A key interpersonal communication characteristic of patient-centered care is that the doctor talks less and listens more, prompting the patient to discuss concerns and express opinions (Roter and Hall 1992).

Increased client participation and more active communication should, in theory, lead to improved health outcomes for several reasons. First, providers can help a client choose the most appropriate treatment or contraceptive method when they know more about the client's needs and personal situation (Kim et al. 2000a and 2000b). Second, providers may identify and correct misunderstandings clients may have and reduce any unrealistic expectations, giving clients a better understanding of their options and information to make more realistic choices (Young and Klinge 1996). Third, clients may have more confidence in decisions in which they actively participated and may be more committed to following through on such decisions (Kaplan et al. 1989). Thus, greater client participation may help enhance clients' compliance and health outcomes. In family planning services, several studies have indicated positive association between the quality of client-provider communication and contraceptive use (Mensch et al. 1996; Abdel-Tawab 1995).

The need to improve the quality of interpersonal communication and counseling in reproductive health services has been documented through studies (Brown et al. 1995; Folch-Lyon et al. 1981; Miller et al. 1991; Vera 1993). Training has been the most common strategy to enhance providers' IPC/C performance in reproductive health in many countries. Studies have reported the effectiveness of training in enhancing health service providers' IPC/C performances in Nepal (Storey et al. 1998), Kenya (Kim et al. 1996; Kim et al. 1998; Kim et al. 1999), Trinidad (Roter et al. 1998b), Nigeria (Kim et al. 1992), and Indonesia (Kim et al. 2000a).

Good communication and counseling skills are especially important in rural areas of Mexico, where significant cultural differences separate indigenous peoples from doctors. To provide healthcare services to rural populations, the Mexican Institute of Social Security/Solidarity (IMSS/S) places final-year medical students at rural clinics. Typically, one of these resident doctors and a nurse staff a two-room clinic. Most resident doctors have urban

Abbreviations

IEC	Information, education, and communication
IMSS/S	Mexican Institute of Social Security/Solidarity
IPC/C	Interpersonal communication and counseling
QA	Quality assurance
RIAS	Roter Interaction Analysis System
STI	Sexually transmitted infection

backgrounds, are middle to upper class, and speak Spanish. In contrast, their patients typically come from a lower socioeconomic class and speak indigenous languages. While most resident doctors establish a good rapport with patients and take time to ask questions and explain matters, formative research shows that they are less skilled in listening to clients, encouraging them to speak, and responding to their individual needs (Kim 1999).

IMSS/S has introduced training in interpersonal communication and counseling (IPC/C) to narrow the communication gap between young resident doctors and rural patients. Experience elsewhere has shown, however, that one-time training does not ensure that health personnel apply new communication skills on the job and maintain them over time (Kim et al. 2000a and 2000b). At least two possibilities exist for cost-effective reinforcement of newly acquired IPC/C skills among resident doctors at IMSS/S clinics. One is to build on any routine supervision system already in place. Competent and experienced physician-supervisors already make regular one-day site visits to IMSS/S clinics to monitor technical standards of care. With training and appropriate tools, they could also assess IPC/C performance and provide direct feedback to resident doctors. The second possibility is to ask resident doctors to engage in self-assessment and self-directed learning, an approach that has maintained and improved health providers' communication skills in Indonesia, even without outside supervision and support (Kim et al. 2000a and 2000b).

In 1998–99, IMSS/S pilot-tested both of these approaches at rural clinics in the state of Michoacan, Mexico, using a design that was based on results from formative research (Kim 1999; Martin 1999). The Quality Assurance (QA) Project undertook a study of the impact of the Michoacan pilot, which was a combined intervention of supervision and self-assessment on the communication performance of resident doctors. This report documents the intervention and the study of its impact.¹

II. Study Objectives

1. Develop and test a self-assessment approach (including a job-aid and procedures for using it) for doctors to help them retain good IPC/C practices
2. Develop and test a participatory supervision approach for doctors and their supervisors focused on helping the doctors retain good IPC/C practices
3. Determine whether the combined supervision and self-assessment intervention helps doctors to apply newly learned communication skills on the job and to improve those skills over time
4. Identify which activities (supervision visits, audio-taped consultations, self-assessment, homework logs, and job aids) are effective and acceptable to doctors.

III. Program

The supervision intervention was designed to reinforce doctors' previous IPC/C training and contribute to continuous improvement in their ability to communicate with patients. Each doctor attended a two-day IPC/C workshop at the beginning of his or her residency training and a half-day refresher course five months later. These workshops included instructions in using the doctor self-assessment forms (see appendix). Job aids were provided to doctors: sheets of

¹ A subsequent paper with further analysis of this intervention has been accepted for publication in the *International Journal for Quality in Health Care* (Kim et al. forthcoming).

information with descriptions of basic IPC/C skills, definitions, and examples of desired and undesired behaviors. Participating supervisors attended a three-day training course to learn how to use the Supervisor's Assessment Tool (see appendix) designed for this study and how to conduct IPC/C supervision. Intervention activities focused on six areas of client-provider communication, such as listening and being responsive to clients.

The intervention is called "participatory supervision" because responsibility for enhancing IPC/C skills was shared by supervisors and doctors, the latter of whom implemented a self-improvement strategy between supervision visits. Supervisors visited the doctors at one- to two-month intervals and engaged in discussions with doctors on their (doctors') efforts to use and improve in the six IPC/C areas.

A. Participatory Supervision

Before participatory supervision activities begin, supervisors take the lead in establishing a friendly and productive working relationship with the doctors they supervise so that both can work as partners to improve the quality of care. Supervisors try to create an atmosphere where doctors feel free to voice concerns and complaints, ask for advice, and make suggestions. To encourage a dialogue with doctors, supervisors:

- Seat themselves next to doctors rather than across a desk from them
- Look at and direct questions to both the doctor and the nurse when posing a question to which either could respond
- Ask doctors how their efforts to improve their IPC/C progressed during the previous month
- Encourage doctors to participate in conversations by asking whether they have questions or issues to raise and what else they would like to discuss
- Listen carefully to doctors and respond to their concerns
- Explain that they want to help doctors, not punish them
- Ask doctors for their opinions about problems, causes, and solutions
- Allow doctors to finish talking without interruption
- Use partnership language, e.g., "Let's review together . . ."
- Share their own experiences with doctors
- Show sympathy with the doctor's situation

The supervision intervention is a four-step process. The supervisor plays an important role during each step, working in partnership with the doctor. They work through all four steps of the process each visit.

Assess. In this step, the supervisor helps doctors assess their strengths and weaknesses and identify specific skills to improve. The six key IPC/C areas are active listening, interviewing, informing, responding to client needs, stimulating client participation, and expressing positive emotion. Each area is the focus of a section of the Supervisor Assessment Form, which lists specific communications behaviors essential to each area. Each behavior was identified as basic, intermediate, or advanced. (Please note that the forms in the appendix were modified to reduce space and publishing costs.)

In order to assess their strengths and weaknesses, the doctors audio-taped two of their consultations each month at two-week intervals. They listened to the tapes before the supervisor arrived to be prepared to discuss the recorded interactions. During the supervisor's visit, portions of one tape were played. While listening, the supervisor used the Supervisor

Assessment Form to measure the doctor's strengths and weaknesses.² The supervisor prompted the doctor to reflect on the quality of the interaction, discussed weak communication skills, and answered questions.

In order to assess a doctor's communication skills, both parties distinguished between the following four kinds of behavior:

- Desirable behaviors, which providers should maintain, increase, or improve
- Undesirable behaviors, which providers should decrease or eliminate
- New behaviors, which providers should try to add to their repertoire
- Neutral behaviors, which providers should acknowledge and accept

Supervisors graded each behavior on a continuum from poor to excellent, depending on how consistently and how completely a doctor executed the behavior.

Motivate. In the second step, the supervisors motivate doctors to change their behavior by helping them accept and appreciate the need to do so and identifying the benefits that would result. Change is always difficult, requiring one to admit to weaknesses, disrupting long-established habits and behavior patterns, and causing the discomfort and uncertainty of experimenting with new behaviors. The key task of motivating doctors to change requires that supervisors understand what makes doctors resist changing their behavior and what motivates them. Doctors will make a sincere effort to change their communication behavior only if they:

- Understand that some of their communication skills can be improved
- Accept that behavior change is necessary
- Appreciate the benefits of change

Supervisors discussed the benefits of better IPC/C skills with the doctors, noting, for instance, that such skills would contribute to clients' well-being (e.g., improved nutritional status of children). Better health outcomes, in turn, would lead to heightened respect and gratitude for doctors, greater community support for clinic maintenance, and community recognition. Improved communication skills also may attract more clients to the clinic, including adolescents and expectant mothers. Finally, improved skills have a positive influence on a doctor's job evaluation and hence on his or her career advancement.

Plan behavioral goals. In this step, the supervisor and doctor agree on the doctor's IPC/C priorities for the coming months and develop specific, concrete goals for behavior change. An assessment of a doctor's communication skills typically found multiple weak areas. Since it is impossible to work on everything at once, the doctor and supervisor worked together to set priorities, using the Supervisor Assessment Form as a guide. Supervisors explained the relative importance of different skills and urged doctors to master the basic skills before advancing to intermediate and, later still, advanced skills.

² Basing the assessment on an audio-tape, rather than on direct observation of a consultation, has several advantages. You can replay important sections and stop the recording whenever you wish to make notes; you can listen to portions of the consultation together with the provider; and you can review the tape at your convenience. The disadvantage is that audio-tapes lack information about nonverbal communication between provider and client.

The supervisor and doctor converted these goals into a concrete plan of action for the month, which they recorded in the homework log. The action plans specified what the doctor should do differently, including:

- What words and gestures he/she should use more or less often
- What new communication behaviors he/she should try
- When to use these behaviors
- How often to use them

For example, Skill Area 5, Know How to Inform, addresses the need to ensure that clients understand doctors' explanations. Doctors can ensure such understanding by engaging in two concrete behaviors: (a) using information, education, and communication (IEC) materials (e.g., charts, photographs, and models) to clarify discussions, and (b) asking clients whether they understand the information. A doctor's plan of action for the month might be to show clients IEC materials (e.g., the risk assessment form for prenatal clients, and anatomical models and pictures of contraceptive methods for family planning discussions) and asking clients to repeat instructions ("Please tell me how you will take this medicine.") and whether they have questions.

To help doctors understand what they should do, supervisors sometimes showed them examples of desirable and undesirable behaviors from job aids developed for the intervention and/or discussed how specific behaviors affect clients. The supervisor and doctor also collaborated to identify and decide how to overcome obstacles to change. For example, if the doctor lacked necessary materials or did not know the appropriate vocabulary, the supervisor could provide it. These discussions also sometimes helped doctors overcome less tangible problems, such as feeling uncomfortable discussing sex with adolescents.

Practice new skills and modify behaviors. In the fourth and final step, the doctors try to modify their own behavior and, if necessary, seek further help and suggestions from the supervisor. After the supervisory visit, the doctor becomes responsible for implementing the action plan and modifying his or her behavior. The supervisor had helped by urging the doctor to:

- Think about his or her behavioral goals during each consultation
- Write a reminder and keep it on his or her desk for the next month
- Persist despite feeling awkward at first
- Reflect daily on how well he/she is achieving the goals, what obstacles remain, and how to make things better
- Notice how clients are reacting to the changed behavior
- Be prepared to discuss the outcome during their next supervisory visit

Instructions to the supervisor. At their training session, supervisors were given the following instructions:

1. During the course of your regular supervisory visits to medical units, help doctors improve the quality of their IPC/C skills by conducting a series of exercises, including:

- Rating each doctor's IPC/C performance on the Supervisor Assessment Form
- Conducting a structured IPC/C exercise with the doctor
- Reviewing the doctor's efforts to improve his/her IPC/C skills over the previous month
- Reviewing an audio-tape of a doctor's consultation

- Offering constructive feedback
 - Helping the doctor create an action plan
2. Every time you visit a medical unit, complete one Supervisor Assessment Form for each doctor. Begin by filling in the date, facility name, and doctor name on both the audio-tape and the form. Then select which skill areas you plan to rate. To make the assessment form more flexible, blank spaces are under each skill area where you may write in additional IPC/C behaviors. This allows you to modify the form to fit the situation and the doctor's abilities. Additional skills are listed on the cue card (job aid).
 3. To complete the assessment of an audio-taped consultation, play the tape. As you listen, circle the numbers of any IPC/C behaviors listed on the form that pose a problem. You might circle an undesirable behavior that the doctor engaged in (e.g., interrupting the client), a desirable behavior executed poorly (e.g., a partial or confusing explanation), or a desirable behavior that the doctor omitted (e.g., failing to respond to a client's question or concern). Stop the tape at any time and replay sections if necessary. Whenever there is an incident or comment that you want to bring to the doctor's attention, note it on the form. Refer to these notes later while giving feedback to the doctor.
 4. After listening to the entire tape, rate the doctor's overall performance in each skill area by circling a number on the five-point scale: the higher the number, the better the doctor's performance. Base your rating both on your overall impression of the consultation and on how many IPC/C behaviors you circled as problems.

Completing the circle. Improving IPC/C skills is a continuous process and does not end with the supervisor's visit. Between visits, supervisors were encouraged to call providers to offer advice and suggestions. When the supervisor returned for another visit, he reviewed the doctor's achievements (referring back to the homework log) and re-assessed his or her strengths and weaknesses. The supervisor and doctor began again with the first step in the process: listening to a freshly taped consultation, completing the assessment form, and discussing weak areas. The cycle is repeated at each supervisory visit, because there is always room for improvement.

B. Doctor Self-Assessment

The purpose of self-assessment in this program was self-learning and self-improvement, not grading doctors' performance. Doctors were taught to self-assess using audio-taping and self-assessment forms. Each was asked to audio-tape two of his or her own consultations per month, and to listen to the tape and complete the self-assessment for that consultation immediately afterward.

Training in the use of the tape recorders was straightforward and accomplished without difficulty. Each doctor in the study received a tape recorder and a supply of tapes. They had no problem using them to record or listen to their consultations; however, mechanical breakdowns reduced the effective sample size of the study.

Six different Doctor Self-Assessment Forms were developed (see appendix), one for each of the IPC/C skill areas listed above. Doctors could complete one of the self-assessment forms in about half an hour. Like the Supervisor Assessment Form, the doctor self-assessment forms classify IPC/C behaviors as basic, intermediate, or advanced, depending on their level of difficulty. When developing an action plan, doctors were asked to give first priority to basic behaviors and

then proceed to more advanced behaviors after mastering the basic ones. The goal was to address two of the six skill areas each month.

The self-assessment forms had four sections as summarized in Figure 1; please recall that the forms have been modified for this report; Figure 1 reflects longer forms used in the study.

Figure 1 Organization of Doctor Self-Assessment Forms

Section	Description	What Providers did
Checklist	This section lists several key provider IPC/C behaviors (both desirable and undesirable) from one of the skill areas. It also has blank lines for other behaviors. The rating scale is: 0 Did not do it 1 Could have done better 2 Did well Two client behaviors are also listed.	After a consultation the doctor rated how well he or she performed each behavior by indicating a score of 0 to 2 in the appropriate box ("I didn't do it," "I could have done better," or "I did ok."). They listed other behaviors in the blank lines when appropriate. They also checked off how frequently ("rarely," "sometimes," or "often") the client engaged in the two behaviors listed.
Reflections	This section has several open-ended questions about the doctor's experience during the consultation in terms of his or her behavior, motivation, reasons, and feelings.	Doctors reflected on the session and recorded their answers to the questions.
Plan of action	This section has space for the doctor to write two behavioral goals for the following weeks, along with concrete ideas on how to achieve them.	Doctors selected two high-priority behavioral goals and wrote down specific plans for carrying them out.
Outcomes	This section allows doctors to record the results of their action plans.	After trying out their action plans, doctors checked how well their efforts went and write comments on whether they achieved their goals.

IV. Research Method and Participants

The main evaluation compares post-intervention measures in control and intervention groups. A secondary evaluation examines both pre- and post-intervention measurements in the control and intervention groups among a subgroup of physicians. This secondary panel analysis allowed us to estimate a more conservative measure of the intervention's impact by taking into account changes in control group performance during the intervention period. Quantitative data comes from three sources: audio-taped consultations, patient and provider interviews, and observations of consultations. Focus group discussions and unstructured observations and interviews were conducted to collect qualitative data to help explain the study's findings. The key dependent variables are doctor facilitative communication, patient participation, and patient satisfaction. Measurements were taken over a four-month period.

In the control group, supervisors were not trained in IPC/C supervision or supplied with IPC/C assessment tools but made their usual visits to clinics. Researchers asked the two supervisors in the control group to be on a waiting list so as not to contaminate the experiment. Doctors in the control group received training but not intervention materials, including tape recorders and job aids.

A. Study Sample

The Zamora region where the study was conducted is divided into seven supervision zones, with one supervisor overseeing each zone. One zone was excluded from the study because the high proportion of Indians in the population made it quite different from the rest. The remaining six zones were randomly distributed into control (two zones) and experimental (four zones) groups. This analysis uses data from a larger study conducted by IMSS/S involving 631 patients, 82

resident doctors, 33 general practitioners, and 115 nurses drawn from all 115 rural clinics in the six supervision zones. The present study focused on a subset of resident doctors for whom complete data exist, including audio-tapes, observations, and interviews. Post-intervention data are available for 60 doctors from 60 clinics scattered across all six supervision zones, with data on 157 cases. Matching pre- and post-intervention panel data are available for a subset of 28 doctors: 21 from the program group and 7 from the control group: 71 cases in all. Sample sizes are in Table 1.

Table 1 Sample Sizes

	Pre-Intervention			Post-Intervention		
	Program	Control	Total	Program	Control	Total
Post-Intervention Cross-sectional Analysis						
Cases	--	--	--	95	62	157
Doctors	--	--	--	36	24	60
Supervisors	--	--	--	4	2	6
Pre-Post Panel Analysis						
Cases	57	18	75	54	17	71
Doctors	21	7	28	21	7	28
Supervisors	4	2	6	4	2	6

B. Dependent Variables

The first dependent variable is doctor facilitative communication, that is, communication that promotes an interactive relationship between patient and doctor by fostering dialogue, rapport, and patient participation. It includes the following behaviors: partnership building, expressing recognition, discussion of personal and social issues, expression of positive emotions, and asking or giving information on lifestyle and psychosocial issues. Four of the intervention's six IPC/C content areas were pertinent to facilitative communication: listening, being responsive, promoting patient participation, and expressing positive emotions.

The second dependent variable is patient active participation, which refers to patient behaviors that indicate high involvement in the consultation. It consists of the following five behaviors: asking questions, asking for clarification, expressing an opinion, expressing concerns, and discussing personal and social issues. In this study, more active communication by patients is interpreted as an improvement.

To measure doctor facilitative and patient active communication, researchers used an adaptation of the Roter Interaction Analysis System (RIAS), which assigns a code to each utterance (a phrase or complete thought) made by a doctor or patient so that the utterances may be grouped into categories for analysis (Roter 1997). RIAS has been used extensively in both developed and developing countries, and the studies where it has been used have reported adequate inter-coder reliability (Kim et al. 2000a; Roter et al. 1998b; van den Brink-Muinen et al. 1999). This

adaptation of RIAS was based on a brief interaction analysis of 15 consultations recorded earlier in the study. The coders were three Mexican physicians who had special training in the RIAS system. They assigned one of the 48 mutually exclusive codes to each utterance, using a computerized data entry screen, while listening to the audio-tapes. They were blind to the intervention status of the doctors.

Patient satisfaction with the doctor is the third dependent variable. It is based on data from patient interviews, during which patients were asked: Does the doctor care about your health? Is the doctor interested in what you think? Is the doctor interested in what you feel? Patients used a three-point scale (0 = no, 1 = a little, 2 = a lot) to respond to each question. Their responses to all three questions were summed to measure satisfaction. The combined scale thus runs from 0 to 6, with a higher number indicating greater satisfaction. (A score of 6 would indicate that the patient had rated a doctor 2 [“a lot”] for all three questions.)

C. Characteristics of Study Participants

Most of the patients were married (84 percent), women (80 percent), and had at most a primary education (81 percent). The age of the patients, but not their marital status, sex, or educational level, varied with the purpose of the visit. About half (48 percent) of the patients came for general medical services, such as colds, stomach pain, and diabetes; their average age was 51. A third (34 percent) came for reproductive health services: prenatal care, family planning, sexually transmitted infections (STIs), and adolescents counseling; their average age was 22. About a fifth (18 percent), usually mothers, brought a child to be immunized or treated for illness.

The average age of the resident doctors was 25, with 64 percent male and 36 percent female. The supervisors were all male, full-time physicians, with an average age of 37. They had an average of seven years' experience providing supervision for IMSS/S.

V. RESULTS

A. Doctors' Implementation of and Views about the Intervention

Supervisors. On average, doctors in the program group had 1.7 IPC/C supervision sessions (about one every two months), each lasting about an hour. During most visits, supervisors and doctors reviewed the homework log together (1.4 times). In focus group and individual discussions, doctors reported that supervisors offered them more and better feedback on communication and counseling issues after the intervention began (Martin 1999). Doctors also noted changes in supervisors' interpersonal communication: supervisors began working with the doctors as partners, listening to their ideas, and engaging them in discussion, and expressing more appreciation of doctors' efforts. While doctors praised supervisors for being kind, accessible, and not scolding, some wanted more time with supervisors and more specific feedback from them.

Doctors. Doctors audio-taped an average of 7.2 consultations—just under the eight tapes they were asked to make—and performed an average of 23.1 self-assessments, about four in each of the six IPC/C skill areas. Thus, doctors listened to each tape several times, assessing a different skill each time. Each self-assessment and self-learning session, including listening to an audio-taped consultation, took 30–60 minutes. Nearly all doctors (97 percent) reported using the job aid regularly and found it useful. Doctors reported using the homework log 8.6 times, on average, as part of their self-improvement efforts.

Doctors initially found the self-assessment process stressful, especially those who did not receive written self-assessment forms and instructions (Martin 1999). The doctors worried about asking patients for permission to record the session; they were afraid of hearing their own mistakes on tape; they were anxious about following the steps laid out in the job aid; they felt nervous and self-conscious while the taping was going on; and they were anxious about sharing the tapes with supervisors. With repetition, however, doctors became proficient at self-evaluation and found that listening to themselves on tape was a powerful, eye-opening experience. The tapes helped them recognize their strengths and weaknesses and stimulated motivation to improve.

Doctors felt that patients noticed and responded to the changes in their interpersonal communication. Doctors indicated that patients appreciated the additional time spent on talking about their problems, opened up more, and were more likely to make return visits. Doctors also found it more satisfying to view a patient in a larger context, as a person, rather than as a diagnosis. They reported that their new communication skills improved not only their interactions with patients but also their relationships with nurses, supervisors, community members, friends, and family. They felt the intervention had contributed to their personal as well as their professional life and would continue to do so.

B. Impact on Communication Behaviors

Facilitative communication by doctors. Doctors in the program group outperformed those in the control group during the post-intervention round, with an overall average frequency of facilitative communication of 47 utterances per session compared with 30 for the control group ($p < .001$). Even after controlling for the purpose of the visit, the sex of the doctor, and the length of the session, there was a significant difference between the program and control ($\beta = .28$, $p < .001$). As Table 2 shows, doctors in the program group performed significantly better than those in the control group on four of the six types of facilitative communication: partnership building (12.7 versus 7.2, $p < .001$), acknowledgment (12.4 versus 6.3, $p < .001$), expressing positive emotions (5.7 versus 2.9, $p < .01$), and giving lifestyle/psychosocial information (5.0 versus 3.5, $p < .05$).

Table 2 Average Frequency of Provider Utterances per Consultation, by Control and Program Group (Post-Intervention Data)

Doctor Communication Category	Control (Cases=60)	Program (Cases=95)	Significance ¹
Facilitative	29.7	47.2	p < .001
Partnership building	7.2	12.7	p < .001
Acknowledgement	6.3	12.4	p < .001
Personal/social conversation	8.7	10.1	ns ²
Positive emotion	2.9	5.7	p < .01
Lifestyle/psychosocial information	3.5	5.0	p < .05
Lifestyle/psychosocial questions	1.1	1.3	ns
Informative	16.8	28.1	p < .001
Medical planning information and counseling	16.7	27.2	p < .001
Family planning information and counseling	0.1	0.9	p < .05
Questions	21.5	23.5	ns
Transition words	4.4	12.1	p < .001
Instructions	3.9	6.9	p < .001
Negative emotion	1.0	1.3	ns
Total utterances	77.3	119.1	p < .001

Notes. 1. After controlling for familiarity with provider, length of the consultation session (in minutes), doctor’s sex, and consultation purpose (reproductive health, child healthcare, or general medicine). 2. “ns” means not significant.

The panel study confirms the intervention’s impact on facilitative communication. While doctors’ facilitative communication improved markedly over time in both groups, the gains were greater in the program group: levels of facilitative communication rose 240 percent in the program group (from 13.7 to 46.6, $p < .001$) and 123 percent in the control group (from 15.2 to 33.9, $p < .001$) (Table 3). In anecdotal reports, doctors and supervisors said the initial IPC/C training, daily practice with patients, weekly outreach services in the community, and supervision had helped doctors become better communicators. Since the control group also attended IPC/C training, received routine supervision, and learned from their growing experience with patients, it is no wonder that their levels of facilitative communication increased as well.

Multiple regression analyses were conducted to determine which components of the intervention were most effective. These analyses controlled for: (a) the purpose of the visit, which varied between the two data collection rounds and between control and intervention groups, (b) the sex of the doctor, which was associated with levels of facilitative communication, and (c) the length of the session, which varied widely. When the impact of each component on facilitative communication was assessed separately, a significant positive association was found with the

number of supervision visits received ($\beta=.25$, $p<.001$), the number of sessions audio-taped ($\beta=.20$, $p<.01$), the number of self-assessments performed ($\beta=.19$, $p<.01$), and the number of times the homework log was used ($\beta=.13$, $p<.05$). (We could not assess the impact of the job aid, since all doctors reported using it frequently.) Only the number of supervision visits remained significant, however, when all of the intervention components were entered in the regression ($\beta=.20$, $p<.05$).

Table 3 Average Frequency of Doctor Communication per Consultation, by Control and Program Group (Pre-Post Panel Data)

Doctor Communication Category	Control Group				Program Group			
	Pre (n ¹ =18)	Post (n=17)	P.Pt. ² Gain	Sig. ³	Pre (n=57)	Post (n=54)	P.Pt. ² Gain	Sig. ³
Facilitative	15.2	33.9	18.7	**	13.7	46.6	32.9	***
Partnership-building	3.3	7.6	4.3	**	2.7	12.0	9.3	***
Acknowledgement	5.6	8.8	3.2	ns	5.3	12.8	7.5	***
Personal/social conversations	1.8	10.3	8.5	**	1.8	10.6	8.8	***
Positive emotion	0.1	4.0	3.9	**	0.1	5.2	5.1	***
Lifestyle/psychosocial information	2.7	2.3	-0.4	ns	2.5	4.6	1.9	**
Lifestyle/psychosocial questions	1.7	0.9	-0.8	ns	1.4	1.2	-0.2	ns
Informative	7.6	17.1	9.5	**	7.7	26.0	18.3	***
Medical planning information and counseling	7.5	17.0	9.5	**	7.6	25.3	27.7	***
Family planning information and counseling	0.1	0.1	0.0	ns	0.1	0.7	0.6	*
Questions	11.7	16.4	4.7	*	11.9	24.1	12.2	***
Transition words	6.9	8.2	1.3	ns	7.9	11.1	3.2	**
Instructions	5.3	3.6	-1.7	ns	5.9	7.5	1.6	ns
Negative emotion	0.2	1.6	1.4	ns	0.1	1.5	1.4	***
Total utterances	46.7	80.9	33.2	***	47.2	116.5	69.3	***

Notes: 1. “n” is number of cases. 2. P.Pt. = percentage points. 3. * = $p<.05$, ** = $p<.01$, *** = $p<.001$, “ns” means not significant; sig. means significance.

Information giving by doctors. Following the intervention, doctors in the program group provided 67 percent more biomedical and family planning information and counseling utterances than those in the control group (28.1 versus 16.8), and this difference was significant even after controlling for other factors ($\beta=.26$, $p<.001$) (Table 2). The panel study found significant pre-post increases in both groups: information giving increased from 7.7 to 26.0 in the program group, and from 7.6 to 17.1 in the control group (Table 3). After controlling for other factors, these increases were significant both in the program ($\beta=.44$, $p<.001$) and control groups ($\beta=.42$, $p<.01$), but the difference in the amount of increase between the two groups was not significant. RIAS coding precludes our measuring the quality of information provided, such as its accuracy and relevance.

Multiple regression analyses found a somewhat different pattern of associations between individual intervention components and information giving than was found for facilitative communication. After controlling for other factors, just two components had a significant impact: the number of times the homework log was used ($\beta=.18$, $p<.01$) and the number of audio-tapes made ($\beta=.17$, $p<.01$), while the number of supervision visits was of borderline significance ($\beta=.14$, $p=.052$). Once all of the intervention components were entered in the regression, none of the individual components remained significant.

Impact on patients' communication. The frequency of patient active communication did not differ significantly between the program and control groups in the post-intervention data (13.3 versus 11.4, not significant). The panel study shows that the frequency of patient active communication increased dramatically over the study period but at the same rate in both the program (from 2.4 to 12.7, $p<.001$) and control groups (from 2.6 to 13.0, $p<.01$). The increase in patients' active communication may have been due to doctors' greater experience with clients and the increased length of the sessions, rather than the intervention.

Impact on session duration. There was no significant difference in the average duration of the consultation in the program and control groups post-intervention (13.4 and 11.8 minutes, respectively). However, the number of utterances of all kinds per session was significantly greater in the program than the control group (196 versus 128, $p<.001$) at the end of the study, and both doctors and clients contributed to the disparity. In other words, both doctors and clients in the program group uttered more thoughts per minute than their peers in the control group. It was noted above that the number of the facilitative and informative utterances per consultation were both higher in the program than in the control. Thus, this analysis of the post-intervention data shows that the disparity between the program and control groups in the *number* of facilitative and informative utterances was due to a higher *rate* (utterances per minute) of facilitative and informative utterances and not to longer consultations in the program group.

The panel study found that the average consultation duration increased from 7.0 to 13.3 minutes ($p<.01$) over the four-month study period in the program group and from 6.3 to 9.8 minutes ($p<.001$) in the control group: a 6.3-minute increase in the program group versus 3.5-minute increase in the control group. Thus, in contrast to the post-intervention cross-sectional analysis, the panel data analysis showed that the disparity between the program and control groups in the amount of increase in the number of facilitative and informative utterances appears to be largely due to the disparity in the increase in consultation duration.

Qualitative impressions of the counseling sessions suggest three possible explanations for these results. First, doctors in the program group reduced the amount of time spent in silence during

consultations while they wrote notes in the patient's chart. Second, doctors paused more frequently to allow clients to speak, increasing the rate of turn taking in the conversation. Third, doctors limited their tendency to lecture and kept their utterances short, allowing a more participatory style of communication. The intervention stimulated all three of these changes.

VI. DISCUSSION

This study demonstrates that a combination of supportive supervision and self-assessment can reinforce IPC/C training, help doctors apply newly learned skills on the job, and contribute to continuing improvement in doctor-patient communication. In particular, the intervention increased providers' expressions of partnership building, positive emotions, and showing agreement and understanding. These increases in facilitative communication, along with the more rapid exchange of utterances during the consultations, suggest that doctors adopted a more client-centered, less authoritarian approach to care, which researchers have found produces better health outcomes (Greenfield et al. 1988; Kaplan et al. 1989; Ong et al. 1995; Roter et al. 1997; Stewart 1995).

There was no quantifiable change in patient active communication, such as asking questions or expressing concerns. However, doctors reported that their new communication skills improved their relationships with patients and helped patients to open up more.

Traditional approaches to supervision tend to be limited, usually assessing staff performance and holding underperforming individuals accountable. However, the participatory supervision intervention reported here was rooted in new, supportive approaches to supervision that broaden the supervisor's responsibilities to include coaching, motivating, empowering, and assisting staff members to solve problems and improve care (Ben Salem and Beattie 1996; Lammerink 1994; QAP forthcoming). One widely accepted model of clinical supervision lists three primary functions for supervisors: (a) *normative*: ensuring that staff adhere to standards, (b) *formative*: facilitating learning and professional development by staff members, and (c) *restorative*: providing emotional support to and ensuring the personal well-being of staff members (Bowles and Young 1999, Kilminster and Jolly 2000).

Self-improvement activities were designed to extend the impact of supervision visits, which occur infrequently (once every two months, on average) and allocate only one hour to IPC/C. Research points to the importance of reflection for professional decision making and adult learning (Teasdale 2000). Reflective practice requires actively observing events as one takes action and later reflecting on those observations so that one can better understand and learn from experience. While supervisors can and do prompt reflection (Kilminster and Jolly 2000), this study demonstrates that listening to yourself on audio-tape also stimulates reflection, self-assessment, and self-learning. Doctors found listening to their tapes to be a powerful experience and concluded that self-criticism was a more compelling motivator than outside criticism. While healthcare providers in Indonesia had successfully performed IPC/C self-assessments without using audio-tapes, relying on memory alone was difficult, and providers were not as deeply moved by the process (Kim et al. 2000a and 2000b).

Supervision and self-assessment activities and materials were designed to complement each other, so it is difficult to single out the effectiveness of any one component of the intervention. In fact, the results suggest the importance of the multiple, reinforcing components to promote self-learning and behavioral change. Doctors valued every element of the intervention: the supervision visits, homework log, job aid, audio-tapes, and self-assessment. The self-assessment

process (including the audio-tapes) occurred four times more often than the supervision visits and took much more of their time, which may have caused the doctors to emphasize self-assessment during focus group discussions. However, they also asked for more time with and feedback from supervisors.

Focusing this study on resident doctors offered both benefits and challenges. Because they had just finished training and had not yet established patterns of communication with patients, these young doctors may have been more open to the influence of the intervention than veteran healthcare providers. Indeed, two studies of nurses in the United Kingdom found that clinical supervision, including its educational component, had a far greater impact on the least experienced and most junior nurses (Kilminster and Jolly 2000; Teasdale et al. 2001). However, it can be difficult to assess the impact of an intervention on doctors just entering practice because their skills rapidly improve with experience. The panel study enabled us to distinguish between the impact of the intervention and doctors' naturally steep learning curve, since both control and intervention doctors had the same IPC/C training, routine supervision, and level of experience with patients.

Partnership supervision also may not be suitable for all settings. Above all, it requires that a functioning supervision system be in place. Because IMMS/S already had competent and experienced supervisors making regular visits to rural clinics, it was relatively easy to add IPC/C supervision to their responsibilities. In many developing countries, however, supervisors are few, poorly trained, and lack transportation to routinely visit facilities (Ahmed et al. 1994; Combarry et al. 1999; Valadez et al. 1990). Even in developed countries, the costs of time and training pose a barrier to supervision of clinical personnel (Kilminster and Jolly 2000; Teasdale 2000). When the supervision system is not fully functioning, alternative approaches—self-assessment, reflective diaries, and peer review—become more attractive (Kim et al. 2000b; Teasdale 2000). Yet the Mexican experience points to practical limitations here as well. While audio-taping consultations was an effective learning tool, IMMS/S found it difficult to supply tape recorders to scattered rural clinics and maintain them in working order once the intervention was scaled up.

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APPENDIX
Doctor Self-Assessment Forms³
Skill Area 1: Know How to Listen

Date: _____

Facility: _____

Name: _____

Instructions: Think about the consultation you just listened to and reflect on the way you acted. Mark your impression of whether you used each of the behaviors listed below in the corresponding column. Be honest with yourself in evaluating your performance.

Skill Area 1: Know How To Listen			
Desirable Provider Behavior	I Did It	I Didn't Do It	Does Not Apply
1. Concentrate on what the client says.			
2. React to the client's gestures and expressions.			
3. Say "Hmmm," "Oh, I see!" etc. to show that you are listening.			
4. Listen to his/her complete response.			
5. Paraphrase the client's key ideas.			
6. Sum up what you have said before moving on to another subject.			
Undesirable Provider Behavior			
1. Interrupting the client when s/he speaks			
2. Talking without looking at the client			

Questions for Reflection. (1) Why is it important not only to listen carefully to the client, but also to show the client that you are listening? (2) How can you show that you are paying close attention to her or him? (3) Referring to the desirable behaviors that you marked as "I didn't do," Why didn't you do each of these behaviors? What were the obstacles for you? Would you like to try each of these behaviors? How would you go about doing so? When would you do it? (4) Referring to the undesirable behaviors that you marked as "I did it," Why did you do each? Would you like to reduce or eliminate such behavior? How would you go about doing so? What obstacles do you anticipate?

³ These forms have been reformatted for publication in this *Operations Research Results* report. The actual form is available from the QA Project at the address on the inside cover or this report and from our website: <www.qaproject.org>.

Doctor Self-Assessment Forms
Skill Area 2: Know How to Interview

Date: _____

Facility: _____

Name: _____

Instructions: Think about the consultation you just listened to and reflect on the way you acted. Mark your impression of whether you used each of the behaviors listed below in the corresponding column. Be honest with yourself in evaluating your performance.

Skill Area 2: Know How To Interview			
Desirable Provider Behaviors	I Did It	I Didn't Do It	Does Not Apply
1. Begin the consultation with open questions.			
2. Ask the purpose of the visit.			
3. Identify the client's feelings.			
4. Reflect on the feelings of the client to find an answer.			
5. Interpret feelings and concerns together with the client to assist him/her to make decisions.			
6. Ask the client what s/he knows about the subject of the consultation (his/her illness, method, pregnancy).			
7. Probe about his/her beliefs and myths.			
Undesirable Provider Behaviors			
1. Asking more than one question at a time			
2. Not asking questions to clarify what the client wants to say			
3. Not asking the client if s/he needs anything more before ending the consultation			

Questions for Reflection: (1) Were you interested in getting more information about the specific illness being treated? If you were interested, which aspect: environment, beliefs, culture, the client's health habits? How could you have elicited this information from the client? (2) Are there any desirable behaviors that you did not use? If so, do you think that it is necessary to practice them? Why? (3) Of those that you used, why did you use them? What is the benefit to you? What is the benefit for the client? (4) Thinking about the desirable behaviors, can you identify which factors favor or limit using each? What can you do to change the factors that limit your ability to practice interviewing? (5) Thinking about the undesirable behaviors, what factors influence the practice of these behaviors? What can you do to reduce or eliminate them?

Doctor Self-Assessment Forms
Skill Area 3: Know How to Inform

Date: _____

Facility: _____

Name: _____

Instructions: Think about the consultation you just listened to and reflect on the way you acted. Mark your impression of whether you used each of the behaviors listed below in the corresponding column. Be honest with yourself in evaluating your performance.

Skill Area 3: Know How To Inform			
Desirable Provider Behavior	I Did It	I Didn't Do It	Does Not Apply
1. Use words the client can easily understand.			
2. Explain illness, treatment, management, and possible risks of not following recommendations.			
3. Use visual aids or print materials to explain things to the client.			
4. Make sure the client understands and remembers what s/he should do.			
5. Clarify information as many times as necessary.			
6. Inform and agree with the client when the next appointment will be.			
7. Ask the client to come back if s/he doesn't improve with treatment.			
8. Remind the client to attend training sessions about pertinent topics.			
Undesirable Provider Behavior			
1. Giving information that is not relevant to the client's consultation			
2. Giving fragmented or incomplete information about the illness, treatment, risks			

Questions for Reflection: (1) Do you think you should come to an agreement with the client about the medical treatment? Why? (2) What are the advantages of explaining the ailment to the patient? (3) Of the desirable behaviors, are there any you did not use? If so, do you think that it is necessary to practice them? Why? (4) Of those that you used, why did you use them? Is there a benefit to you? To the client? (5) Of the desirable behaviors, can you identify which factors favor or limit use of the behaviors you would like to practice? What can you do to change the factors that limit your ability to practice informing clients? (6) Thinking about the undesirable behaviors, what factors influence the practice of these behaviors? What can you do to reduce or eliminate them?

Doctor Self-Assessment Forms

Skill Area 4: Know How to Respond to the Client's Needs

Date: _____

Facility: _____

Name: _____

Instructions: Think about the consultation you just listened to and reflect on the way you acted. Mark your impression of whether you used each of the behaviors listed below in the corresponding column. Be honest with yourself in evaluating your performance.

Skill Area 4: Know How to Respond to the Client's Needs			
Desirable Provider Behavior	I Did It	I Didn't Do It	Does Not Apply
1. Respond opportunely to client's concerns.			
2. Respond concretely to all the client's questions. Refer him/her to educational sessions for more information.			
3. Ask relevant questions about the client's needs.			
4. Respond positively to client's complaints, comments, or opinions.			
5. Remind him/her of things s/he didn't do, without scolding (don't use words like "stupid," "lazy," and "dirty").			
Undesirable Provider Behavior			
1. Ignoring the client's complaints, comments, and/or opinions without giving them importance			
2. Giving incomplete answers to the client			
3. Criticizing the client's opinions, not letting him/her express him/herself in his/her own way			

Questions for Reflection: (1) Do you think that the client was satisfied with your answers to his/her questions, concerns, or worries? Why do you think that? (2) How important do you believe it is for the treatment that you be available and willing to attend to the client's needs? Why do you think that? (3) Of the desirable behaviors, are there any you did not use? If so, do you think that it is necessary to practice them? Why? (4) Of those that you used, why did you use them? Is there a benefit to you? To the client? (5) Can you identify which factors favor or limit the use of desirable behaviors you would like to practice? What can you do to reduce or eliminate those factors? (6) Thinking about the undesirable behaviors, what factors cause the practice of these behaviors? What can you do to reduce or eliminate those factors?

Doctor Self-Assessment Forms

Skill Area 5: Know How to Stimulate the Client's Participation

Date: _____

Facility: _____

Name: _____

Instructions: Think about the consultation you just listened to and reflect on the way you acted. Mark your impression of whether you used each of the behaviors listed below in the corresponding column. Be honest with yourself in evaluating your performance.

Skill Area 5: Know How To Stimulate the Client's Participation			
Desirable Provider Behavior	I Did It	I Didn't Do It	Does Not Apply
1. Tell the client s/he may ask any questions during the consultation.			
2. Do not permit interruptions during the consultation (do not allow other people to come in).			
3. Ask the client to tell you more about what s/he is talking about.			
4. Explain to the client that s/he has a shared responsibility to resolve the problem (prenatal care booklet, reproductive risk, vaccination).			
5. Congratulate the client for coming for services in a timely way.			
6. Look at the client when talking with him/her.			
7. Get agreement from the client to write in his/her chart, but tell him/her that s/he may speak at any time.			
8. Offer to talk with members of the client's family to help the client with his/her problem.			
9. Ask the client to bring other people who need attention and who are reluctant to come to the health facility.			
Undesirable Provider Behavior			
1. Keeping the radio volume very high			
2. Writing when you or the client talks			
3. Asking another question without waiting for the client to respond to the previous one			

Questions for Reflection: (1) Why do you think that some clients do not participate much during consultations? How could you improve the feeling of shared responsibility with your clients? (2) Of the desirable behaviors, are there any you did not use? If so, do you think that it is necessary to practice them? Why? (3) Of those that you used, why did you use them? Is there a benefit to you? To the client? (4) Thinking about the desirable behaviors, can you identify which factors favor or limit the use of desirable behaviors you would like to practice? What can you do to reduce or eliminate those factors? (5) Thinking about the undesirable behaviors, what factors cause the practice of these behaviors? What can you do to reduce or eliminate those causes?

Doctor Self-Assessment Forms
Skill Area 6: Know How To Express Positive Emotions

Date: _____

Facility: _____

Name: _____

Instructions: Think about the consultation you just listened to and reflect on the way you acted. Mark your impression of whether you used each of the behaviors listed below in the corresponding column. Be honest with yourself in evaluating your performance.

Skill Area 6: Know How to Express Positive Emotions			
Desirable Provider Behavior	I Did It	I Didn't Do It	Does Not Apply
1. Establish an open relationship of mutual trust (creates a pleasant environment).			
2. Share feelings with the client and act according to the severity of the case.			
3. Use calming words with the client.			
4. Encourage the client to continue healthy behaviors.			
5. Use a friendly tone of voice and facial expressions.			
6. Raise self-esteem, praise the client.			
7. Show interest in the client's personal or social matters.			
Undesirable Provider Behavior			
1. Being disinterested in the client's feelings (worries, suffering)			
2. Not offering moral support when the client expresses his/her problems			
3. Not adapting to the age, language, or circumstances of the client.			

Questions for Reflection: (1) In your opinion, why do some providers avoid sharing feelings with clients? (2) What are, in your opinion, the advantages for the client of sharing positive feelings during the consultation? Do you think doing this takes a lot of time? (3) Of the desirable behaviors, are there any you did not use? If so, do you think you should? Why? (4) Of those that you used, why did you use them? Is there a benefit to you? To the client? (5) Thinking about the desirable behaviors, can you identify which factors favor or limit using those that you would like to practice? What can you do to change the factors that limit your ability to express positive emotions? (6) Thinking about undesirable behaviors, what factors cause the practice of these behaviors? What can you do to reduce or eliminate those causes?

Supervisor Assessment Form⁴

Date: _____

Facility: _____

Name of provider: _____

Instructions: Using a scale of 1 (lowest) to 5 (highest) grade each behavior listed. Write your grade or "NA" (not applicable) in the "grade" column. After grading all the behaviors for a particular skill, determine the average grade for all the behaviors under that skill and write it in the grade box for "average of all behaviors."

Skill Area 1: Know How to Listen	
Behavior	Grade
1. Sits face to face with the client.	
2. Concentrates on what the client is saying.	
3. Reacts to the client's gestures and expressions.	
4. Listens to his/her full response.	
5. Uses expressions like "Hmm," "Oh," and "OK"	
6. Paraphrases.	
7. Sums up.	
<i>Average Grade for Know How to Listen:</i>	

Skill Area 2: Know How to Interview	
Behavior	Grade
1. Initiates the consultation with open questions.	
2. Asks what that client wants from the consultation.	
3. Identifies the client's feelings.	
4. Reflects on those feelings.	
5. Interprets feelings and doubts together with the client to help him/her make decisions.	
6. Asks the client to clarify what s/he wants to say. Doesn't guess.	
7. Asks if there are any other concerns before ending the session.	
8. Asks the client what s/he knows about the subject of the consultation (illness, method, pregnancy).	
9. Asks more than one question at once.	
10. Finds out about the client's myths and beliefs.	
<i>Average Grade for Know How to Listen</i>	

⁴ Forms have been reformatted for publication here. The actual form is available from the QA Project at the address on the inside cover or this report and from our website: <www.qaproject.org>.

Supervisor Assessment Form (Continued)

Skill Area 3: Know How to Respond to Client's Needs	
Behavior	Grade
11. Responds opportunely to client's concerns.	
12. Responds concretely to all the client's questions. Refers him/her to educational sessions for more information	
13. Asks relevant questions about the client's needs.	
14. Responds positively to client's complaints, comments, or opinions.	
15. Leans toward the client to show interest and concern.	
16. Uses facial expressions and a tone of voice that show interest in the client.	
17. Does not criticize the client when s/he says what s/he thinks.	
18. Does not scold (don't use words like "stupid," "lazy," and "dirty")	
19. Lets the client explain in his/her own way.	
<i>Average Grade for Know How to Respond</i>	

Skill Area 4: Know How to Stimulate Client Participation	
Behavior	Grade
20. Tells the client s/he may ask any questions during the consultation.	
21. Does not permit interruptions during the consultation (do not allow other people to come in).	
22. Asks the client to tell you more about what s/he is talking about.	
23. Explains the procedures to help the client understand that s/he has a shared responsibility.	
24. Explains to the client that s/he has a shared responsibility to resolve the problem (prenatal care booklet, reproductive risk, vaccination).	
25. Congratulates the client for coming for services.	
26. Looks at the client when talking with him/her.	
27. Gets agreement from the client to write in his/her chart, but tell him/her that s/he may interrupt or ask questions at any time.	
28. Offers to talk with members of the client's family to help with his/her problem.	
29. Asks the client to bring other people who need attention and who are reluctant to come to the health facility.	
<i>Average Grade for Know How to Stimulate Client Participation</i>	

Supervisor Assessment Form (Continued)

Skill Area 5: Know How to Inform	
Behavior	Grade
1. Uses words the client can easily understand.	
2. Explains illness, management, and possible risks of not following recommendations.	
3. Explains treatment, management, and possible risks of not following recommendations.	
4. Uses visual aids or print materials to explain things to the client.	
5. Makes sure the client understands and remembers what s/he should do.	
6. Clarifies information as many times as necessary.	
7. Informs and agrees with the client when the next appointment will be.	
8. Asks the client to come back if s/he doesn't improve with treatment.	
9. Reminds the client to attend training sessions about pertinent topics.	
<i>Average Grade for Know How to Inform</i>	

Skill Area 6: Know How to Express Positive Emotions	
Behavior	Grade
30. Establishes an open relationship of mutual trust (creates a pleasant environment).	
31. Shares feelings with the client and acts according to the severity of the case.	
32. Uses calming words with the client.	
33. Encourages the client to continue healthy behaviors.	
34. Uses a friendly tone of voice and facial expressions.	
35. Adapts to the age or language of the client.	
36. Raises self-esteem, praises the client.	
37. Shows interest in the client's personal or social matters.	
<i>Average Grade for Know How to Inform</i>	