

OPERATIONS RESEARCH SUMMARY

Training Reinforcement Improves Family Planning Counseling and May Be Cost-Effective

Summary

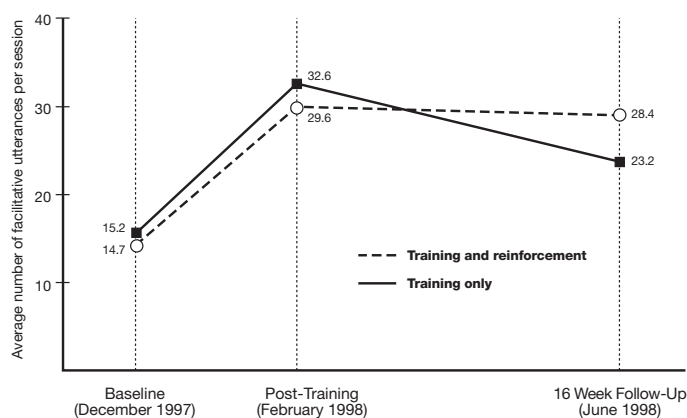
Good quality interpersonal communication and counseling (IPC/C) between healthcare providers and clients increases client compliance and improves health. However, providers need reinforcement to continue using newly learned skills. Of the many training reinforcement options, self-assessment and peer review not only keep providers' skills high but may be more cost-effective than training alone. Simple, affordable strategies should be considered to preserve the impact of training.

Background

Many women die during pregnancy or childbirth in Indonesia, where contraceptives are often prematurely discontinued. The government responded in part by initiating refresher training in IPC/C for community health clinic staff. However, research shows that trainees slowly stop using their new skills, in part because of lack of support from colleagues. This study tested two types of interventions—self-assessment and peer review—to measure their effectiveness and cost-effectiveness in retaining the use of skills over 16 weeks.

IPC/C training was given to 203 providers in 1997–98. Average consultation time almost doubled with training, increasing from 6 to 11 minutes. The average number of questions asked by clients per session also doubled, from 1.6 to 3.3, while providers used most of the added time to give additional information, advice and support.

Figure 1. Effect of Training and Reinforcement on Facilitative Communication by Providers



The increase in facilitative communication achieved by training was maintained in the reinforcement groups, but not in providers receiving training only.

Next, trainees were divided into three groups: Group 1 (control) received no reinforcement; Group 2 performed self-assessment exercises for the 16 weeks following training; and Group 3 performed the self-assessment exercises and attended peer review meetings for the same 16 weeks. The self-assessment exercises consisted of a series of eight forms, each covering a different IPC/C skill area. The forms prompted providers to reflect on the training and their behavior during consultations. Peer review consisted of weekly, 30- to 60-minute sessions where three or four providers discussed issues that emerged from the self-assessments.

All consultations were audiotaped and transcribed. Baseline data were collected before training; a second round of data collection occurred immediately after training; and a third round occurred after the 16-week interventions.



Results

With no reinforcement, Group 1's performance declined substantially between the second and third rounds of data collection. For instance, facilitative utterances (those that promote interaction between client and provider) declined from an average of 33 per session immediately after training to 23 after 16 weeks, although still higher than the 15 per session at baseline. Meanwhile, the average number of facilitative utterances by providers who used the reinforcement strategies (Groups 2 and 3) stayed about the same (29) over the 16 weeks. (See Figure 1.) The duration of consultations increased slightly in Group 1, from 9.7 minutes at round 2 to 10.4 minutes at round 3, while duration decreased in the reinforced groups from 11.5 to 9.7 minutes, apparently improving efficiency. Self-assessment plus peer review was more successful than self-assessment alone in maintaining facilitative communication. (See Table 1.)

Expert raters confirmed the finding that Groups 2 and 3 more often encouraged clients to ask questions, asked clients about their feelings, and asked clients to return if a problem arose. Informative utterances by providers (utterances that

Table 1. Impact of Training and Reinforcement on Family Planning Counseling

	Ave. Duration of Sessions (Minutes)			Ave. Facilitative Utterances per Session by Provider			Ave. Informative Utterances per Session by Provider		
	1	2	3	1	2	3	1	2	3
Data collection round	1	2	3	1	2	3	1	2	3
Group 1 (training only)	6.1	9.7	10.4	15.2	32.6	23.2	20.1	60.4	43.9
Group 2 (self-assessment)	5.1	9.9	8.8	13.6	28.7	24.9	30.9	55.8	34.6
Group 3 (SA + peer review)	5.8	13.1	10.6	15.8	30.4	32.0	27.3	57.9	42.7

Sample size: 203 providers, split roughly evenly among the three groups, with about two client sessions per provider per round.

provide information to the client) increased after training in all groups, but then dropped substantially by week 16, especially in Group 2. (See Table 1.)

Cost and Effectiveness

Costs totaled US\$ 90 per provider for IPC/C training. The 16-week self-assessment cost \$16 per provider; self-assessment plus peer review cost \$32. Cost per provider in Groups 1, 2 and 3 was \$90, \$106, and \$122, respectively.

Effectiveness was defined as the percentage gain in average utterances per session between the first and third data collection rounds. Each dollar spent on interventions led to percentage gains in facilitative utterances of 0.58 in Group 1, 0.78 in Group 2, and 0.84 in Group 3. The *marginal* gain in effectiveness per dollar spent for each additional intervention—training, self-assessment, peer review—was 0.58, 1.56 and 1.22 percent, respectively. The same dollar also yields gains in informative utterances; percentage gains in Groups 1, 2, and 3 were 1.32, 0.11 and 0.46, respectively, while marginal gains by intervention are confused by the decrease in Group 2 relative to Group 1.

Conclusion and Discussion

Self-assessment and peer review maintained provider counseling performance—especially supportive communication—for at least 16 weeks following training, while the performance of providers not receiving reinforcement dropped significantly. The decline in informative utterances between rounds 1 and 2 may have been because the self-assessment materials stressed facilitation and did not address information giving. These reinforcement strategies cost less in the short term than ongoing supervision and appear feasible in a low resource setting.

Future interventions should train all providers in a clinic and orient all staff to curriculum content. This would foster clinic-wide support for improved counseling. Such support could lower costs if it led to clinic space for peer review meetings. Also, media campaigns may help maintain improvement by raising client expectations about provider behavior.

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This summary is based on the *Operations Research Results* document, "Improving Provider-Client Communication: Reinforcing IPC/C Training in Indonesia with Self-Assessment and Peer Review" by Young Mi Kim, Fitri Putjuk (JHU/CCP), Adrienne Kols, and Endang Basuki. To order the *Operations Research Results* on which these findings are based, please access our Website: www.qaproject.org, or write to qapdissem@urc-chs.com.