Technical Report 7: Study of the Effects of Technical Supervision Training on CBD Supervisors' Performance in Seven Regions of Ghana

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Abstract

Study of the Effects of Technical Supervision Training on CBD Supervisors' Performance in Seven Regions of Ghana

This quasi-experimental study measured the effects of technical supervisory training in two dimensions: over time and between cadres of workers. Using a delayed program strategy, one group of Ghanaian CBD supervisors were trained in "technical supervision" and compared with another group of CBD supervisors who had not yet received the same training.

Quantitative survey instruments measuring skills and knowledge were administered to the trained supervisors before and after training in the classroom and, four months later, a follow-up in the field to determine the effects of the training on supervisors' performance. The same data were collected from the control group before the training and four months later. In addition, quantitative and qualitative tools were administered to two groups of CBD agents-one group supervised by the trained supervisors and the other supervised by untrained supervisors-to measure the effects of the supervisors' training on those they supervise. These tools were administered before the training and four months following training. Results showed that the training greatly improved the performance of both the trained CBD supervisors *and* the CBD agents whom they supervise at the worksite. The experimental CBD supervisors not only surpassed the control group in mean skill indices following training but they maintained a high mean skill index four months after the training (90%) compared to the untrained CBD supervisor group (56%). This represents a 43% increase in skills between baseline and follow-up measures for the experimental group.

In addition to illustrating that this training improved the quality of CBD agents' work in the field, it also identified some areas which could be improved. At follow-up the mean knowledge index dropped below the level set for competent practice—a level which had been attained immediately following training. Though the training had a clear impact on the mean index of CBD agent performance-55% at baseline and 71% at follow-up, their mean skill indices did not attain the level required for optimal practice (80%). No differences in the skills of volunteer versus paid supervisors were identified. Issues affecting the work of CBD agents and their supervisors such as transportation, material support and pay are also discussed.

List of Acronyms

AIDS	**Acquired Immune Deficiency Syndrome**
CBD	**Community Based Distribution**
FP	**Family Planning**
FGD	**Focus Group Discussion**
GRMA	**Ghana Registered Midwives Association**
GSMF	**Ghana Social Marketing Foundation**
HIV	**Human Immuno Deficiency Virus**
IAE	**Institute of Adult Education**
IEC	**Information, Education and Communication**
IPPF	**International Planned Parenthood Federation**
IUD	**Inter Uterine Device**
MCH	**Maternal Child Health**
MOH	**Ministry of Health**
ORS	**Oral Rehydration Solution**
PHC	**Public Health Center**
PPAG	**Planned Parenthood Association of Ghana**
RH	**Reproductive Health**
STI	**Sexually Transmitted Infection**

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I. Introduction

1. Background and Problem Statement

The Planned Parenthood Association of Ghana (PPAG) is a non-profit, non-governmental organization affiliated with the International Planned Parenthood Federation (IPPF) and composed of both volunteer and paid staff. PPAG has several projects in seven of Ghana's ten regions, representing a varied program of clinic and non-clinic-based family planning/maternal child health (FP/MCH) services. These programs feature family planning, maternal and child health, pregnancy testing, sub-fertility counseling, immunization, and counseling on STI/AIDS prevention. PPAG's program of community-based distribution (CBD) of FP/MCH/PHC (primary health care) services was initiated in 1974 and today encompasses a network of 672 CBD agents and 59 CBD supervisors (27 staff and 32 volunteers) in all seven regions. CBD agents conduct information, education and communication (IEC) activities, make home visits, sell and resupply contraceptive pills and condoms, and in some areas provide first aid services.

In March 1996, a PRIME team in collaboration with representatives from the National Population Council (NPC), Planned Parenthood Association of Ghana (PPAG), Ghana Registered Midwives Association (GRMA), Ghana Social Marketing Foundation (GSMF), the Institute of Adult Education (IAE) and the Ministry of Health (MOH) conducted a comprehensive assessment of public and private sector organizations providing CBD services (PRIME Technical Report 3: 1996). The team critically assessed the performance (i.e., knowledge and skills related to FP/RH/PHC of CBD agents and their supervisors. It also identified the training and refresher training needs of potential trainee groups in preparation for a new PRIME training project.

Other training and service-related needs identified during the 1996 CBD assessment included: a national CBD strategy; dissemination of FP/RH service policies, standards and protocols; CBD worker training curricula; CBD supervisors protocols; a CBD supervisors training curriculum; a FP/RH curriculum for clinic-based midwives with a special focus on STI/HIV/AIDS diagnosis, treatment, prevention and training of trainers.

The assessment identified widespread performance problems in both the CBD agent and supervisor groups. In the CBD supervisor group, performance problems included:

- supervisors did not prepare supervisory plans (40%);
- supervisors did not write supervision reports (55.4%); and those written were generally not done correctly;
- supervisors did not hold monthly review meetings as planned (40%);
- supervisors were not able to explain a rationale for supervision (50%);
- supervisors did not keep up-to-date basic information on the catchment area of operations (66%); and,
- supervisors did not provide technical assistance or support those they supervisee (i.e., CBD agents).

External factors contributing to the CBD supervisors' performance problems that were identified during the assessment include:

- there are no references to technical supervision in supervisors' job descriptions (100%);
- there is no training in technical supervision;
- no adequate job aids exist to help supervisors provide technical supervisory support (100%);
- there had been no recent (in the last two years) supervisory refresher training in the administrative aspects of supervision (100%); and,
- there was anecdotal evidence to suggest that an additional factor, lack of an adequate means of transportation to carry out monthly supervisory visits (40%), played a role in supervisor under-performance.

In the CBD agent group, the following performance problems were identified:

- poor counseling skills (with a group mean score of 47%);
- borderline competence in first aid (a group mean score of 56%);
- lack of refresher training (100%);
- lack of technical supervision and a job aid for CBD service delivery (100%).

2. PRIME's Supervisory Training Intervention

On the basis of training and service needs identified during the March 1996 assessment, a PRIME training project was developed to complement the contributions of other agencies to the PPAG CBD program. The goal of the project was to improve the quality of reproductive health information, training and services of PPAG and GRMA through technical support of their training and supervision systems. To accomplish this, PRIME staff prepared a two week training in "technical supervision" through use of protocols.

The content of the training included RH/FP and supervisory skills. The areas covered under RH/FP include the CBD concept, clinical and non-clinical contraceptive methods, and issues related to gender and development, and family life education. Other RH/FP-related topics covered include STIs, including HIV/AIDS and infertility.

The participants witnessed demonstrations on how to supervise including various styles and techniques of supervision. During these sessions, participants trained in the use of the technical supervisory protocols. The protocols contained checklists on certain technical tasks which the supervisors are expected to perform. Among these were checklists for providing non-prescription contraceptive methods like the foaming tablet, condom and resupply of pills, as well as on the preparation and administration of oral rehydration solution (ORS). As part of the training, participants had field practice which afforded them the opportunity to organize supervisory visits among CBD agents using the protocols.

The participants instructed on how to prepare a supervisory report, as well as how to use supervisory data and results in making decisions and recommendations, which would help improve CBD agent performance.

The first training was conducted in June 1997 with 32 CBD supervisors. The study described in this report is an evaluation of the effects of the initial "technical supervision" supervisor training on their work capabilities and on those they supervise.

3. Study Purpose and Objectives

PRIME staff cited the following three reasons for undertaking this study on the effectiveness of training in technical supervision;

- Since a CBD supervision training impact study had not yet been undertaken by PPAG or in Ghana, the results would likely increase our collective understanding of how to design and support decentralized CBD supervisory operations in Ghana and clarify the role of training in such support.

- PPAG wanted to know whether it should continue its policy of using both staff (paid) and volunteer (unpaid) supervisors. The study would permit an assessment of whether there were any differences in the performance of these two groups after technical supervision training. The study results would lead to recommendations useful for PPAG decision making regarding human resources planning and development.

- Use of the new technical supervision curriculum in the training of CBD supervisors from other organizations implementing the national CBD service strategy was proposed. The effects of this new component of training should, therefore, be documented before widespread use.

The ultimate objective of this study was to evaluate the impact of the technical supervision training on the performance of CBD supervisory tasks and the quality of service and care provided by CBD agents. This study sought to answer the following specific questions:

1. Do CBD supervisors who receive training in "technical supervision" perform significantly better after training than they did before training?
2. Do CBD supervisors who receive training in "technical supervision" perform better in comparison with CBD supervisors who did not receive this training? And, if the trained group does not perform significantly better, why not?
3. If it is found that there is a significant difference in the performance of trainees within the newly trained CBD supervisor group, is there an association between this and either staff or volunteer status? What are the factors affecting CBD supervisor underperformance?
4. Do CBD agents demonstrate more technical competence in CBD as a result of the (new) technical training of their supervisors in comparison with CBD agents whose supervisors were not trained in the new technical supervision model? What changes occurred in the nature and quality of supervision following training according to CBD agents?

II. Methodology

1. Study Design

The study design is "quasi-experimental"-diagrammed as follows:

Diagram A:

Trained supervisors (E-group)	01	X	02	03
Untrained supervisors (C-group)	04		05	
CBD agents of trained supervisors	06			07
CBD agents of untrained supervisors	08 (Sample 1)			09 (Sample 2)

Where X= CBD Technical Supervision Training

Where 01 and 04 = Baseline and pre-training measures of knowledge and skills
Where 02 and 05 = Post-test measures of knowledge and skills
Where 03 = Follow-up measures of knowledge and skills on-the-job (four months after post-test).
Where 06 and 08= Baseline measures of knowledge and skills, qualitative data
Where 07 and 09= Follow-up of knowledge and skills, qualitative data (four months after post-test).

2. Sampling

In order to find a comparison group which was acceptable to managers of the CBD program, a "delayed program strategy" was used. All PPAG CBD supervisors were designated to receive the new technical supervision training, but the control group's entry into the supervision training program was delayed for a short period post-intervention in order to permit data gathering. This strategy ensured that all the supervisors would eventually benefit from the training, while the effectiveness of the training could be evaluated and improved if necessary.

The experimental group (E-group) consisted of a non-random sample of *all available staff* and *volunteer supervisors* from Ashanti, Brong Ahafo and Northern regions. These supervisors attended the first PRIME/PPAG supervision training course held in June 1997. The final E-group supervisor sample was 19.

The control group (C-group) consisted of a non-random sample of *all available staff and volunteer supervisors* from Greater Accra, Eastern and Western regions. The follow-up measure for the C-group constituted baseline for their own training, which began in November when the study data collection phase was concluded. The final C-group supervisor sample totaled 21.

A *stratified sample of CBD agents* selected for the study as follows: 3 staff and 2 volunteer supervisors were selected at random from the Brong Ahafo Region (one of the four experimental regions), and 3 staff and 1 volunteer were selected from the Eastern region (one of the three control regions), totaling 1. Then CBD agents-two agents per supervisor-were randomly selected. The final E-group CBD agent sample was 15. The final C-group CBD agent sample was 16. This sample was assessed pre-intervention. A second sample of CBD Agents was selected in the same way and assessed follow-up (For a list of the socio-demographic characteristics of the respondants, see appendix A).

3. Data collection techniques and instruments

Both quantitative and qualitative methods were used in this study.

The *quantitative* techniques included observing skills in the classroom and at the work site, verbal questioning, and written tests. They permitted quantification of the size of training-related performance changes. Four instruments were used to measure the study groups:

1. Baseline survey-PPAG CBD supervisors;
2. Baseline survey-PPAG CBD agents;
3. Instrument for evaluating CBD supervisor's Knowledge; and
4. Instrument for evaluating skills and performances.

The first two instruments consisted of verbal questions asked of the supervisors and the agents. Topics included personal characteristics, working conditions and relations between the supervisors and supervises. The third instrument was a written test to evaluate knowledge-the cognitive dimension of performance. It consisted of a combination of a forced choice and essay test. The fourth instrument involved observing supervisors conducting a supervisory visit with their CBD agents. During the observation, supervisors evaluated on their own performance of the following tasks: " handling and initial client visit;" "condom use demonstration;" "foaming tablet use demonstration;" and " demonstration of the preparation and use of ORS."

Qualitative techniques, such as semi-structured interviews and focus group discussions, were also used. The topics discussed in semi-structured interviews with CBD supervisors permitted exploration of variables that contribute to CBD supervisor under-performance. The focus group discussions (FGDs) with CBD agents explored their perceptions of the supervision they received before and after supervisor training, allowing a comparison between the nature and quality of supervision received before and after training. Special attention by the study team was paid to the translation of instruments and questions administered to the CBD worker group for whom English is not their primary language (*Study of the Effects of technical Supervision Training on CBD Supervisors' performance in Ghana: Qualitative assessment of CBD Agents in Brong Ahafo Region and Eastern Region: 1997*).

4. Study Schedule

This study took place between April and November 1997.

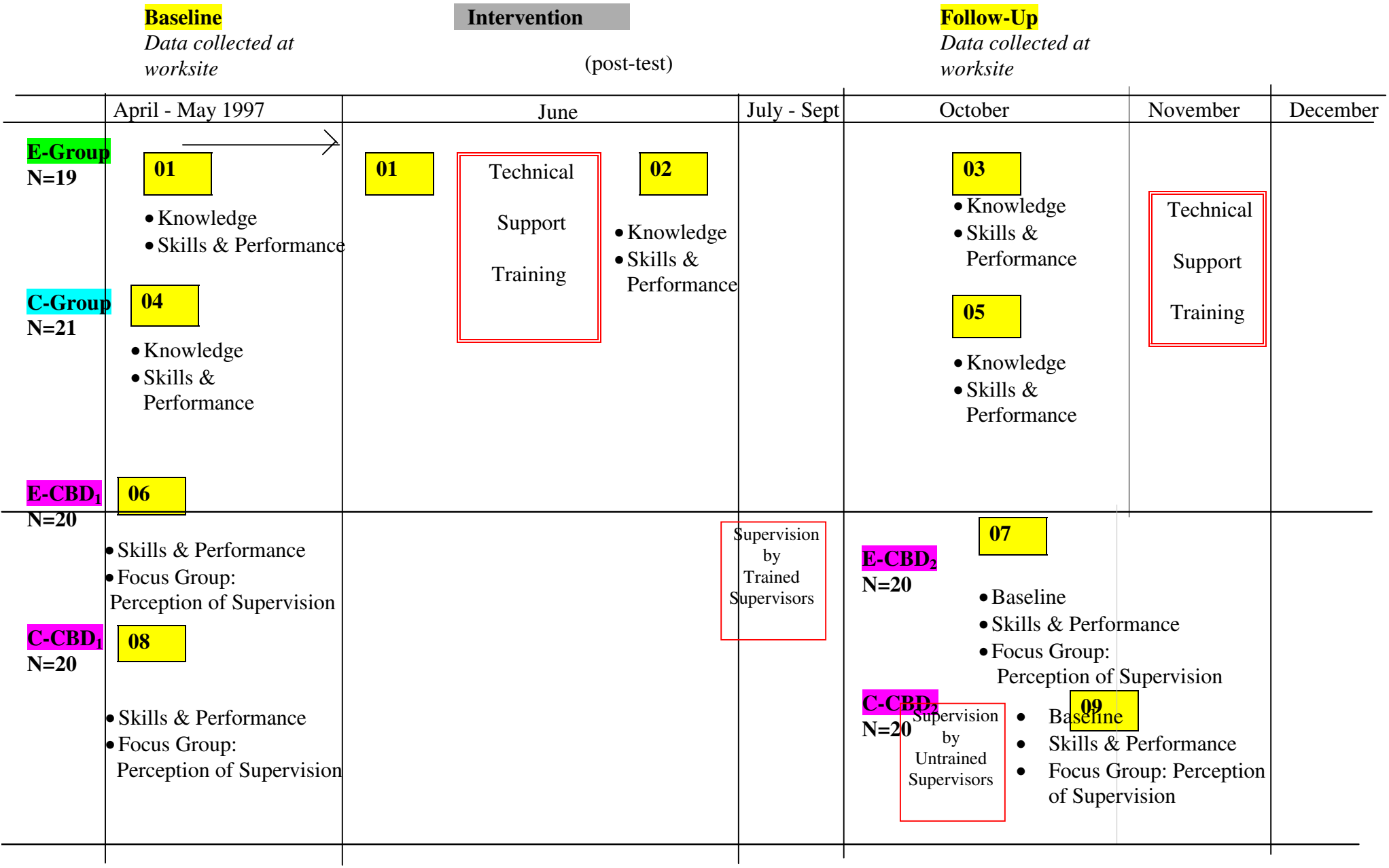
The *pre-intervention* measurement was conducted from April 28 to May 22, 1997 and consisted of both the baseline survey and the training pre-test. This was administered to both the E- and C-groups. During the same period, a separate set of tools was administered to E- and C- CBD-groups. The training workshop, or *intervention*, conducted in June 1997 with the E-group supervisors only, included both RH/FP content and technical supervision skills. The *follow-up* measurement was administered to both the E- and C-group supervisors and the E- and C-group CBD agents in October of the same year.

Both the experimental and control groups of CBD supervisors used a similar scheme of supervision following supervisory training of the experimental group. In other words, the only difference between the supervision received by the two groups of CBD agents is that the experimental group's supervisors received technical supervision training and were provided with supervision protocols.

The data collected from all these research activities were analyzed by a team from PRIME and the Research Unit of PPAG in November 1997. The team was composed of two consultants from INTRAH and three Research Officers from PPAG.

Diagram B charts the study schedule.

Diagram B. Study Schedule: Data Collection Points, Groups & Tools



5. Data Processing and Analysis

A. *Data processing*: A coding system for computer analysis was developed when instruments were designed. For all open-ended questions, a coding manual was developed immediately after returning from the field. Data coding and entry were done by clerks under the supervision of the computer specialist. Data processing was essentially done by computer using microcomputers and the software programs *Epi-Info 6* and *Excel*; and manually, especially in the case of questions related to supervisor knowledge.

B. *Quantitative Data Analysis*: The knowledge index, skills index, specific task index and the selection of a cut off score on knowledge and skills were computed.

Knowledge index: Each trainee was evaluated on each of the 21 knowledge questions. The index is expressed in percentages and denotes the level of knowledge of the trainees relative to the maximum number of points attainable on the test.

Specific task index and *Skills index*: Specific tasks were rated according to a checklist without rating categories. The person being observed was rated on whether they did or did not perform a specific task-related behavior (the rater checked yes or no). For each task, an INTRAH panel decided whether a particular behavior was essential for competant practice. A "yes" for those behaviors was given a double score (2). The skills index consisted of relating the sum of scores per *specific task* to the maximum obtainable number of points. The index is expressed in percentages and denotes the trainee's level relative to the maximum number of points attainable on the test.

Cutoff scores: In order to set the minimal level of knowledge and skills (in percentages) for a person to be considered competent to practice in the profession, a cut off score was set. The skills and knowledge cut off scores were fixed at 80% and 75% of the maximum number of attainable points, respectively.

C. *Analytic treatment of group means:*
A t-test for paired data was run to determine if there has been a significant change in the E-group between pre-testing (baseline survey and pre-test prior to training) and post-testing (post-training test and follow-up measurement). The t-test for unmatched groups was run to determine whether there were statistically significant differences between the E-group and C-group mean scores on knowledge, skills and performance.

D. *Analytic cross tabulation of performance scores and other variables:*
Cross-tabulations were run to explore relationships between variables (e.g., skills and staff or volunteer status, knowledge and educational background). Statistics were calculated to clarify the extent to which variables were associated.

E. Qualitative data analysis:

Data from open- and closed-ended questions were grouped into categories, and the number of respondents giving particular reasons or answers were added together and compared with each other. These data and results from the focus group discussions were used in the interprtation of other quantitative data on supervisors performance.

III. Results

1. Training Effects on Supervisors' Knowledge and Skills

The knowledge and skills of CBD supervisors were tested three times over the course of this study (baseline, post-test and follow-up) using the same instruments. Baseline and post-test data are discussed in this section and represent the degree to which CBD supervisors understood and were able to demonstrate skill in the classroom setting.

A. *Mean Knowledge Index; Baseline and Post-test*

The *mean knowledge index* is expressed in percentages and denotes the level of knowledge of the trainees relative to the standard (see above for calculation). The mean knowledge index is used in this study to measure the general knowledge level of supervisors and to evaluate the immediate effects of the training on the experimental group (see appendix E for instrument).

The baseline data show that, prior to the training, the supervisors had limited knowledge of technical supervisory procedures, counseling techniques, and communication, as well as of medical issues, such as contraceptive methods, STD/AIDS prevention and malaria treatment. Before the training, the overall mean knowledge index for both the E- and C groups was 31.8% indicating that on average, the knowledge level of all supervisors was less than one-third of the standard.

The mean knowledge index did not vary much by supervisor characteristics including control and experimental status, region, paid or volunteer status, educational level, CBD experience or gender. For example, it was only 5 percentage points higher on average among full-time supervisors than among their part-time counterparts. Previous experience as a CBD agent also did not appear to be a predictor of knowledge. Not surprisingly, the one characteristic which did appear to affect the mean knowledge index was educational level . At the outset of the study, the more educated supervisors (post-secondary) demonstrated appreciably higher knowledge levels (10 points higher on average) than their less educated counterparts (less than secondary).

Table A: Baseline *Mean Knowledge Index* of CBD Supervisors by Selected Characteristics

Characteristics	Number of Respondents	Mean Knowledge Index (%)
Control/Experimental		
Control	**21**	**31.0**
Experimental	**19**	**32.6**
Region		
Greater Accra	6	33.3
Western	10	31.0
Eastern	5	28.0
Ashanti	9	34.4
Brong Ahafo	6	35.0
Northern	4	25.0
Status		
Full-time	23	33.9
Part-time	17	28.8
Education		
Less Than Secondary	11	27.3
Secondary	16	29.4
Post-Secondary	13	36.9
Ever Been CBD		
Yes	10	29.0
No	30	32.0
Sex		
Male	20	31.5
Female	20	32.0

A.2. Knowledge of Selected Supervisory Tasks

Among other deficiencies, the supervisors had little knowledge of selected supervisory skills. By the end of the training, however, the mean *knowledge index* increased significantly to 88.4% ($t = 17.639$/ $p<0.001$), 13.4% higher than the required level to practice (see table B).

Table B: Knowledge of Selected Supervisory Tasks: *E-Group*

Indicator	Baseline	Posttest
Able to identify at least two tasks not involved in technical supervision	15.8	68.4
Knew appropriate supervision technique for at least four major CBD tasks	0.0	84.2
Knew what *democratic style* implies in supervision	63.2	84.2
Knew the components of a monthly supervisory plan	0.0	73.7
Knew three critical activities to be executed in preparation for a supervisory meeting	5.3	89.5
Knew the six steps of a counseling session	10.5	78.9
Named three ways by which AIDS is spread	42.1	100.0
Correctly stated two important storage conditions for contraceptives	42.1	94.7
Knew how to check the expiration dates of condoms	21.1	94.7
Knew how to treat an adult suffering from malaria	26.3	94.7
Knew what a woman who forgot to take her pill for one day should do	72.2	94.7
Knew the purpose of feedback in supervision	36.8	94.7
Knew the characteristics of useful and effective feedback	5.3	78.9
Mentioned three positive non-verbal cues	10.5	94.7
Mentioned at least four verbal communication skills	0.0	79.0
Mentioned ORS as a first approach for a diarrhea victim	73.7	100.0
Knowledge Index	**32.6**	**88.4**
Percent (Number) Above Cut-off Point (i.e,. 75%)	0.0 (0)	100.0 (19)

The table demonstrates some specific gains in *supervisory knowledge* made by the E-group of supervisors through training. For example, prior to the technical supervisory training, none of the E-group supervisors were able to state four major CBD tasks. By the end of the training, 84.2% could mention at least four. The training helped to sharpen the trainees' knowledge about the steps involved in counseling as well. At the end of the training, approximately 79% of the trainees could list the six steps (GATHER) of a counseling session, compared with only 10.5% at the pretest. Finally, the training helped to improve their knowledge about effective communication skills. Before the training, only 10.5% of the E-group could identify three positive non-verbal cues, whereas, after the training, 94.7% could do so.

B. *Mean Skills Index: Baseline and post-test*

The baseline assessment showed that in addition to weaknesses in knowledge, supervisors were also weak in demonstrating many of the routine tasks they are expected to perform in the role of supervisor. This was particularly true of their ability to prepare monthly and supervisory visit plans, their ability to demonstrate how to conduct a supervisory visit and, use the foaming tablet. No respondent attained the cutoff score of 80%. Both the *mean skills index* and the *task-specific indices* indicated no notable difference in demonstrated skills between the E- and C- groups at the baseline.

The *mean skills index* of the E-group increased from 62.6% at the baseline to 94.7% at the posttest, representing a gain of more than 30 percent points—putting all of the E-group supervisors well above the 80% cut-off point. The gain in skills level as a result of the training was statistically significant (t= 13.139/p<0.001).

The *task-specific indices* also improved drastically after the training (table C). Each of these indices is discussed below.

Table C: *Task-Specific Index* of CBD Supervisors - Baseline, Post-test: *E-group*

Task	Baseline	Post-test	t-test/level of significance
Conduct of Supervisory Visit	48.4	93.2	13.31/**
Handling Initial Client Visit	64.7	90.5	7.39/**
Condom Use Demonstration	68.4	97.4	8.90/**
Foaming Tablet Use Demonstration	57.4	92.6	7.72/**
Demonstration of the Preparation and Use of ORS	76.3	97.9	5.35/**

* = p< 0.05

** = p< 0.01

The index measuring the supervisor's ability to state how to conduct a supervisory visit increased from 48.4% of the standard at the baseline to 93.2% at the post-test. Though the E-group supervisors were relatively skilled at handling a supervisory visit even before training their post-test score showed a significant improvement, 64.7% to 90.5%. Significant gains were made in their ability to demonstrate condom, oral contraceptive tablet and ORS use.

In sum, the training had the immediate effects of increasing the participants' ability to demonstrate knowledge and supervisory skills in the classroom. The indices attained average levels of 88.4% and 94.7% for knowledge and skills,

respectively. Every participant scored above the cutoff point for both knowledge and skill. The next section discusses the integration and application of the supervisor's technical training at the work site.

2. Training Effects on Supervisor's Performance in the Work Setting Four Months after Training

Trainee's on-the-job performance was measured four months after the training with the same instruments used in the baseline and posttest survey, i.e., measuring both knowledge and skills. This set of data represents a test of the trainees' ability to integrate and apply what they learned through the technical supervisor training, on-the-job. In other words, it represents movement from "knowledge and skills" demonstrated in the classroom to "performance" of knowledge and skill in the service environment. CBD supervisor's perceptions of program factors inhibiting their performance on-the-job are included to contextualize the quantitative data on performance following training.

A.1. Mean Knowledge and Skill Indices as a Measure of Performance

As expected, there was no appreciable difference between the control groups' baseline and follow-up *mean knowledge index*. The experimental group, however, did exhibit a significant change. The E-group supervisor's mean knowledge index increased by more than 100% according to the follow-up data (t= 6.667/p<0.001) (see table D). There was only a slight decrease between post-test and follow-up measures of the mean knowledge index 88.4% to 66.8% significant at the (t=4.68/p<0.001). Some specific areas in which the supervisors have lost some of the competence gained during the training include preparation for a supervisory meeting, preparing a monthly plan, and, appropriate supervision techniques for specific CBD agents' tasks.

Table D: Supervisors' *Mean Knowledge Indices* at Baseline, Post-test and Follow-up by Control/Experimental Status

Characteristics	N	Mean Knowledge Index			
		Baseline	Post-test	Follow-up	
		1	2	3	2&3
Control	21	30.5	N/A	32.9	
Experimental	19	32.6	88.4	66.8	t=4.68/*
		t=0.48/n.s.			

* = p<0.05
** = p<0.01
n.s. = not significant

Due to the small sample size caution is warranted in interpreting socio-demographic characteristics in terms of indices. Never-the-less, if we consider the supervisors of the experimental group alone, we can see that the gain in

knowledge level between the baseline and the follow-up appears to be larger among some categories of supervisors than among others. Not surprisingly it appeared that the categories of supervisors who exhibited the greatest improvement in knowledge were also those who manifested the highest knowledge levels at the baseline. These categories included the supervisors from Brong Ahafo, and Ashanti (i.e., those from the Northern region appeared different) and those with post-secondary education. However, by the time of follow-up, differences by these characteristics were negligible; i.e., not statistically significant.

Table E: Supervisors' *Knowledge Index* at Baseline and Follow-up: *E-Group Only*

Characteristics	**N**	**Knowledge Index**			
		Baseline	***Post-test***	***Follow-up***	
		1	**2**	**3**	**2&3**
Sex					
Male	9	32.2	88.9	65.6	*
Female	10	33.0	88.0	68.0	*
Region					
Ashanti	9	34.4	92.2	60.0	
Brong Ahafo	6	35.0	86.7	80.0	
Northern	4	25.0	82.5	62.5	
Education					
Less than secondary	7	28.6	84.3	64.3	*
Secondary	5	30.0	92.0	54.0	*
Post-secondary	7	37.1	90.0	78.6	*
Status					
Full-time	12	34.2	87.5	69.2	
Part-time	7	30.0	90.0	62.9	

* = P< 0.05
** = P< 0.01

Besides the differences between E- and C-group in the mean knowledge index, there was also a significant difference between the mean skills index of supervisors who underwent training and of those who did not (Chart A). As expected, the C-group demonstrated no significant difference in the mean skills index at baseline and follow-up (56.6% and 56.2% respectively). The E-group however demonstrated considerable improvement.

The follow-up data showed that the overall *mean skills index* of the E-group increased significantly from 62.6% of the standard at the baseline, to 90% (t = 10.4/ p<0.001). This overall index measure represents a net gain in the skills level four months after the training. Recall that at baseline none of the E-group supervisors attained the 80% cutoff point. At the follow-up, *all of them* achieved a higher level than that established for competent practice. Compared to the post-test results, there was a slight depreciation of the skills acquired during the training, and the residual level remains high (from 94.7% to 90.0% p < 0.05). The wide difference between the E- and C-groups follow-up indicates training success in increasing the knowledge and skills of the supervisors.

Table F: <u>Supervisors' Mean Skill Indices at Baseline, Post-test and Follow-up by Control/Experimental Status</u>

Characteristics	N	Mean Skills Indices			t-test
		Baseline	Post-test	Follow-up	
Control	21	57.6	N/A	56.2	
Experimental	19	62.6	94.7	90.0	t=2.45/*
t-test		t=1.59/n.s.			

* = p< 0.05
** = p< 0.01
n.s. = not significant

Table G: Overall *Skill Index* of CBD Supervisors by Selected Socio-Demographic Characteristics: *E-group only*

Characteristic	N	Baseline	Post-test	Follow-up	t-test Post-test and Follow-up
Sex					
Male	9	57.8	93.3	91.1	t=0.85/n.s.
Female	10	67.0	96.0	89.0	t=2.46/**
		t=2.42/**	t=1.14/n.s.	t=0.68/n.s.	
Status					
Full-time	12	63.3	95.0	90.8	t=1.70/n.s.
Part-time	7	61.4	94.3	88.6	t=1.73/n.s.
		t=0.42/n.s.	t=0.29/n.s.	t=0.70/n.s.	
Education					
Less than	7	62.5	95.7	88.6	t=2.17/**
secondary	5	68.0	94.0	90.0	t=1.0/n.s.
Secondary	7	60.0	94.3	91.4	t=0.87/n.s.
Post-secondary		F=1.19/n.s.	F=0.19/n.s.	F=0.30/n.s.	

* = p< 0.05
** = p< 0.01

Prior to the training, as indicated by the baseline results, slight differences in the performance of skills in the work place could be observed by sex, CBD experience and by education. Specifically, women performed better than men and the secondary educated, better than others. After training all socio-economic differentials in skills found at the outset of the study disappeared; i.e., they were not detectable in follow-up surveys. It interesting to note that there is no indication that part-time supervisors have a lower level of skills than their full-time counterparts (t=0.703 /n.s.)**.**

A.2. Task-specific Indices as a measure of Performance: Experimental Group
Table F shows the trend of some *task-specific indices* at different surveys for the E- group only. There were large gains made in the task-specific performance.

The conduct of a supervisory visit (1) *specific-task mean* index gained more than 40 percentage points between the baseline survey and the follow-up survey four months after the training; 48.4 % and 90% respectively. The most significant gains were in the supervisor's ability to make the agent feel at ease, communicating with him or her about the purpose and organization of the visit, recording pertinent information on appropriate instruments during the supervision, and, conveying the implications of the observed strengths and weaknesses to the agent (Table H.1 in Appendix H). The quality of exchange between the supervisor and the CBD agent during a supervisory visit had, in consequence,

significantly improved. The CBD agents reported these positive changes in the quality of exchange (see section 3) by making reference to better communication about purpose and organization of the supervisory visit, better feedback through discussion, more attention to technical supervision, and spending more time together.

Table H: *Task-Specific Index* of CBD Supervisors' Performance at Baseline, Post-test and Follow-up: *E-group only*

Task	Base-line	Post-test	t-test/level of significance	Follow-up	t-test/ level of significance
	1	2	1-2	3	2-3
1. Conduct of Supervisory Visit	48.47	93.30	13.31/*	90.01	1.46/n.s.
2. Handling Initial Client Visit	64.77	90.60	7.39/*	86.40	1.61/n.s.
3. Condom Use Demonstration	68.46	97.49	8.90/*	90.09	3.07/**
4. Foaming Tablet Use Demonstration	57.48	92.70	7.72/*	86.90	2.54/**
5. Demonstration of the Preparation and Use of ORS	76.3	97.9	5.35/*	94.2	2.18/**

* = $p < 0.05$
** = $p < 0.01$
(See Appendix H for tables for individual sub-task scores for each of the 5 tasks.)

Four months after the training the supervisors were able to handle an initial client visit (2) much better. The index was 86.3%, compared to 64.7% at the baseline. Prior to the training, the trainees were skilled in establishing rapport with the client, treating him or her with courtesy, and listening. The training increased the supervisors ability to elicit the clients' understanding of family planning methods and where to get services, inform the client of all available methods and the ones for which they qualify, and help clients make a choice in this regard. In other words, after the training, the participants were better able and thus more likely to help their clients make an informed and appropriate contraceptive-related decision.

The supervisors were also better skilled at demonstrating the use of the condom (3) following training. This task-specific index rose from 68.4% to 90%. Observers noted significant improvement in instructing clients when and how to

remove the device from the penis after use. Only 63.2% of the trainees demonstrated the correct procedure at the baseline, whereas at the follow-up, 94.7% did (Table H.3 in Appendix H). In addition, though trainees were slightly more apt to stress the use of a new condom with each act of intercourse, the performance of this instruction was far from adequate. Less than two-thirds (63.2%) mentioned this point at the baseline, and only a few more (68.4%) did so follow-up. Considerably more supervisors linked the use of condoms with the prevention of sexually transmitted diseases at follow-up (78.9%) than prior to training (15.8%). The demonstration of the foaming tablet (4) improved considerably from 57.4% at the baseline to 86.8% at the follow-up. Some task-specific activities, however, remained weak four months after the training. For example, supervisors tended to exclude instructions designed to maximize the effectiveness of the device, specifically explaining to the woman that she should wait for at least six hours before washing the vagina. Also neglected were instructions to use a condom with the foaming tablet to increase its effectiveness.

The training improved the likelihood that supervisors would correctly demonstrate the preparation and use of ORS (5). Four months after the training, 94.2% of supervisors were incorporating all the following instructions in their supervisory visits. After the training, the participants were more likely to wash their hands prior to preparing ORS, ask the client to throw away unused ORS after 24 hours, and tell the client to drink other fluids available at home in addition to ORS (see Appendix H).

B. CBD Supervisors' perceptions about program factors influencing performance.
To contextualize the qualitative measures of performance supervisors from both the experimental and control groups were interviewed in the baseline survey about their perceptions of factors influencing their ability to perform their jobs. Supervisors identified a number of factors (listed below) which they say make their work more difficult, if not impossible at times:

- *transportation*
- *lack of pay and incentives*
- *lack of materials and supplies (see table I)*

This section discusses each of the factors.

Table I: Factors Perceived As Demotivational By Supervisors Follow-up Data

Factor	Percent Reporting	
	Control	Experimental
Transportation Difficulties	85.7	57.8
Dissatisfaction with Incentive Package/Per Diem Payment	52.3	26.3
Lack of equipment and supplies	23.8	36.8

Transportation

Collectively, supervisors identified transportation as the single biggest obstacle they face in carrying out their duties as CBD supervisors. About 58% of the experimental group and 86% of the control group said they had problems with transportation. Much of the CBD supervisor's job is carried out in the field where the CBD agents and their clients live. Reliable transportation is therefore essential to the performance of their duties. Supervisors reported using various forms of transportation including bicycles, motorcycles, cars and commercial forms of transport such as taxis. Even though money spent by the supervisors on transportation is suppose to be reimbursed by PPAG, the majority (85.7% of the C-group, and 73.7% of the E-group) were not satisfied with the means of transport available to them and some said they were not consistently reimbursed for travel.

Table J: Transportation Facility Available to Supervisors

Indicator		Percent Indicating	
		Control	Experimental
Transportation Available:	Yes	47	84
Type of transportation :	Car Bicycle Motor bike Taxi	20 0 10 70	6.3 25.0 37.5 31.2
Who takes charges of transport facility?:	PPAG Supervisor	100 0	93.7 6.3
Is transport means always available?:	Yes No	70 30	100 0 0
Is transport means satisfactory?:	Yes No	14.3 85.7	26.3 73.7

In focus group discussions CBD agents corroborated their supervisors' observations about transportation difficulties being a hindrance to their supervisors performance of their duties. In addition, focus group discussion revealed that these problems were exacerbated by the rainy season, often preventing transport of their supervisors to the field. Some agents said that meetings they had scheduled with supervisors had to be postponed several times due to their supervisor's transportation problems. For example one CBD agent said the following about her full time supervisor:

> "When Auntie Vick was my supervisor, she used to come with public transport. But getting transportation to our area is not easy, so she finds it difficult coming to our area as promised." [E-group]1

1 Bracketed terms following quotes from focus group participants indicate the study group, experimental or control, of the CBD agents' supervisor.

Another E-group participant cited vehicle breakdown and rain as a major reason for his full time supervisor's transportation difficulties:

> "My supervisor for instance uses an old motor-bike which easily breaks down, and, when it rains, he parks it." [E-group]

During the focus group CBD agents concluded that in addition to private transport, public transport also breaks down much more often during rainy season.

Dissatisfaction with Pay and Incentives
Another important concern of supervisors is the absence of a satisfactory incentive package and the failure to pay per diem on some trips made by supervisors.

For example two CBD agent focus group participants made similar observations about their part time supervisors:

> "My supervisor has complained bitterly about non-payment of his T and T [per diem] for routine visits." [C-group]

> "...he faces transportation problems because payment of his T and T is sometimes delayed yet he comes to us and helps us when we need him" [C-group]

More than half (52%) of the supervisors in the control group and one quarter (26.3%) of those in the experimental group were discontent with their existing incentive package. Not surprisingly, upon further investigation it was found that nearly all those who were discontent were volunteers.

Lack of Equipment and Supplies
Supervisors also observed that material support was inadequate at times and hindered their job performance. Table K outlines the percentages of supervisors reporting specific supply problems.

Table K: Availability of Materials to Supervisors - Follow-up

Materials	Percent Reporting they had:	
	Control	Experimental
1.Contraceptives samples	80.9	100.0
2.Contraceptives stock	85.7	78.9
3.First aid drugs and materials	9.5	5.2
4.ORS	9.5	10.5
5.Monthly report forms	66.7	68.4
6.Register	38.0	36.8
7.Financial report forms	19.0	57.8
8.Statistical forms	28.6	36.8
9.Office supplies	38.0	47.0
10.Sales book-keeping	38.0	63.0
11.Supervisory protocols/documents/guides	4.7	73.7
12.Reference manuals or notes	42.9	73.7
13.Visual aids	61.9	94.7

The majority of the supervisors had contraceptive supplies in stock (85.7% control, 78.9% experimental). There were, however, some important materials that many of the supervisors lacked. For example, only about one-tenth of the supervisors had supplies of oral rehydration salt while less than one-tenth had first aid drugs and materials. Other important materials not available to many of the supervisors, especially those in the control group, were reporting-schedules and relevant reference materials. Supervisory protocols were distributed during the training of the E-group supervisors, which explains the absence of this item in the C-group.

* * *

In sum, the performance of the trained supervisors improved drastically as a result of the training, with every participant attaining the cutoff point on the skills index at the post-test and at follow-up . Four months after the training, the mean skills level of the trained supervisors attained 90% of the maximum possible score, a gain of almost 30 percentage points compared to the baseline data. This gain in skills was statistically significant for both the general skills index as well as the task-specific indices, indicating that all the trained supervisors are currently performing above the standard for competent practice. Though this assessment of performance in the work place four months after the training showed a net gain in performance there are persisting areas of weakness revealed in detail through the task-specific sub-task measures. There was also a slight decrease in supervisors knowledge index at follow-up. There does not appear to be any socio-demographic factor that significantly influence the performance of the supervisors, provided they are well trained. Indeed, training appears to be a leveler that eliminates, to a considerable extent, any inadequacies in knowledge and skills experienced by some

socio-demographic groups as a result of their particular characteristics. In addition, supervisor's status—volunteer versus paid—appeared to have no bearing on an individual's skills but—as will be discussed below —it is a demotivational factor which ultimately may impact performance. Reliable transportation, satisfactory incentive package and equipment and supplies remain problematic for many supervisors and also are addressed below.

3. Impact of the Supervisors' Training on their CBD Agents: Four Months Following Training

This section discusses the ways the CBD supervisor training affected the performance of CBD agents in the field four months following training. The perceptions of CBD agents regarding qualitative changes in supervision and program factors influencing performance are discussed.

A. *Effects of supervisory training on CBD performance on-the-job: Mean Skills Index*

The effects of the technical supervision training on CBD agent performance was measured by observing a sample of CBD agents performing selected technical tasks in the field, one month prior to and four months following the training.

Some social factors which could have affected the skills of the CBD agents such as the status of their supervisor (full-time or part-time) and the geographical distance between the CBD and the supervisor, did not appear to have significant effect on the agents' mean skills index score (see table L). In addition, educational level did not have a significant effect on skills index scores. For these reasons this study considered CBD agents a homogenous group and a second comparison sample was drawn to test changes in CBD skills four months after the intervention. This was done to avoid logistical problems and a high drop-out rate.

Table L: Baseline Mean Skill Indices of CBD Agents by Selected Characteristics

Characteristics	Number of Respondents	Mean Skills Level (%)	t-test/ level of significance
Status of supervisor			
Full-time	19	50.5	1.77/n.s.
Part-time	21	56.7	
Education			
Less than secondary	27	54.4	0.556/n.s.
Secondary and post-secondary	14	52.3	
Distance from supervisor			
Less than 10 miles	26	54.2	0.36/n.s.
10 miles or more	14	52.9	

n.s. = not significant

The following tasks were observed: demonstration of condom and spermicide use; preparation and administration of ORS; re-supplying clients with oral contraceptive pills; and (for the follow-up survey only) interviewing new clients seeking contraceptive services (see appendix D, F and G for instruments).

When CBD agents whose supervisors did receive training (E-group CBD agents) were compared to CBD agents whose supervisors did not (C-group CBD agents), exposure to technical training proved an important factor positively influencing CBD agents' skills level (see Table M). The E-group CBD agents improved significantly between the baseline and the follow-up; the overall mean skills index increased from 55.5% at the baseline to 71.1% at follow-up (t=4.4149/p<0.001).

Table M: CBD Agents' *Skill Index* at Baseline and Follow-up by Control/Experimental Status

Characteristics	N	**Skills Index**		
		Baseline (sample 1)	Follow-up (sample 2)	t-test
Control	20	52.0	45.0	1.70/n.s.
Experimental	20	55.5	71.1	4.42/*
t-test			6.34/*	

* = $p < 0.05$
** = $p < 0.01$
n.s.= not significant

The skills indices on selected-tasks measured at baseline and follow-up are provided in Table N. As the table demonstrates, all of the task-specific indices of CBD agents supervised by the newly-trained supervisors improved significantly, although they did not reach the level considered necessary for competent practice (80%). Several areas of weakness were revealed in the follow-up measures and these are discussed below.

Table N: *Task-specific Skill Index* at Baseline and Follow-up - *E-Group CBD Agents*

Task	Baseline (sample 1)	Follow-up (sample 2)	t-test/ level of significance
(1) Condom Use Demonstration	59.5	73.7	2.98/**
(2) Foaming Tablet Use Demonstration	49.5	62.1	3.69/**
(3) Demonstration of the Preparation and Use of ORS	60.5	77.9	2.54/*
(4) Pill resupply visit	53.5	74.7	3.93/**
Overall Skills Index	**55.5**	**71.1**	**4.42/****

* = $p < 0.05$
** = $p < 0.01$

(see Tables 1-5 in Appendix I for detailed scoring on task-specific sub-task mean scores).

CBD agents failed to perform the following critical sub-tasks in their *demonstrations of condom use* (Table 1) at the baseline: explaining when the penis has to be removed from the vagina (63.4%), explaining how to remove the penis (56.1%) and emphasizing the need to use a new condom for every intercourse (46.3%). At follow-up these areas of weakness persisted registering 57.9% and 57.9%, respectively.

Demonstration of the foaming tablet (2) was similarly poor at baseline. CBD agents often failed to explain how to insert the tablet into the vagina (24.4%), how long to wait after intercourse before washing the vagina (12.2%) and observe the client repeat the demonstration (2.4%). Performance of the first sub-task improved considerably after training (63.2%), but the agents almost always neglected to tell the client to wait for six hours after intercourse before washing the vagina; only 26.3% mentioned this point at follow-up. Observing clients repeat the demonstrations (15.8%).

At baseline many CBD agents fell short in *demonstrating the preparation and use of ORS* (3) for the following reasons: most (87.8%) of the CBD agents did not wash their hands prior to carrying out the task; more than half (56%) did not specify that unused ORS should be thrown away after 24 hours; nor did they explain the frequency and amount of ORS to be given to a child with diarrhea. At follow-up, most CBD agents explained the frequency and amount of ORS to be given (94.7%), but the majority still failed to wash their hands prior to the demonstration of the preparation of ORS (63.2%). Many of the agents also failed to emphasize the need to continue giving other fluids in addition to ORS (57.9%) and to throw away unused ORS after 24 hours (31.6%)

During visits with clients seeking *oral contraceptive pill resupply* (4) at baseline, CBD agents often failed to do the following sub-tasks: asking the client what she would do if she missed a pill (28.3%), check the clients' eligibility for the pill (9.8%) and encouraging the client to continue taking the pill regularly (45.0%). The last two sub-tasks improved considerably after the supervisors' training (to 53.8% and 68.4%, respectively), however, many of the E-group agents still neglected to inquire (at follow-up (36.8%) about what the client would do if she misses one pill.

The follow-up questionnaire contained additional questions on how the CBD agents handled *an initial visit for contraceptive services*. These questions were not included in the baseline questionnaire. The impact of the training on this task is assessed by comparing the skills of the CBD agents in the control group with that of their counterparts in the experimental group. As can be seen from Table I.5 in Appendix I, the CBD agents under trained supervisors performed much better in this task than those under untrained supervisors. The task-specific mean skill index was 88.9% for the E-group CBD agents, and 60.5% for the C-group

CBD agents. The difference between the two groups was statistically significant: t = 5.087, significant at the 1% level. There were important differences in the skills of the specific sub-tasks. For example, the CBD agents supervised by a trained supervisor were significantly more likely than their counterparts under untrained supervisors to check the client's eligibility prior to dispensing a contraceptive method. The former were more likely to give an overview of prescription family planning method and to provide correct information on the chosen method.

B. *CBD agents' perceptions of supervisors' performance and program factors influencing performance*

To put the quantitative measures of CBD agent performance discussed above in context, CBD agents were surveyed at baseline and follow-up on a range of issues (see Appendix D for instrument). Twenty CBD agents from each of the two study groups, experimental and control, were surveyed. At follow-up, CBD agents were invited to participate in focus group discussions regarding their supervisors' performance (see Appendix G for the focus group guide). Four focus groups were held, 2 in the Eastern region (control N=16) and, 2 in the Brong Ahafo region (experimental N=15). In evaluating CBD perceptions of their supervisors, focus groups facilitators paid special attention to eliciting CBD agents' perceptions on differences between staff versus volunteer supervisors and changes in the quality of supervision following training.

The qualitative data suggested several, somewhat overlapping themes, which will be used to discuss the findings of the focus groups and surveys. They include;

- *transportation*
- *equipment/supplies*
- *office support*
- *supervisory visits*
- *motivation and incentives*

Supervisory visits is quite a large topic and therefore is divided into several sub-topics; rapport, communication, frequency and duration of visits, technical training support.

Transportation

"It came out clearly" according to those conducting the focus groups, "that the frequency of visits by supervisor or regular interaction between agents and supervisors was not based on whether the supervisor was full time or part time. It had to do more with the geographic between the CBD agent and their supervisor.

While CBD agents were understanding about the impracticality of frequent visits by supervisors who lived far from them, they were less understanding about the failures on the part of PPAG to produce a reliable transportation plan for the rainy

season and consistent payment of per diems, factors which they said caused repeated postponement of monthly supervisory visits.

Supplies and equipment
CBD agents agreed that supervisors delivered contraceptive supplies in a timely manner when they were able. However, they also said that communication and/or transportation problems often interfered.

Another area of concern, characterized by some CBD agents as a "source of friction" between them and their supervisors, was the "frequent" substitution of one contraceptive product for another. "When they are given new products" they said, "sales are affected." This is because they then have to start promoting new product(s) in their community. For example, a CBD agent of a full time supervisor elaborated on the matter as follows;

> " At times after clients have accepted a particular method like Koromex and they are used to it, the supervisor will come with a new method like Gynol...We then have to start all over again...Sales don't go fast" [C-group]

Others said that they sometimes do not receive information on the new products, for example the mechanism of action and the efficacy of the drug. Lack of such information hinders their ability to promote and sell the new product in their communities.

CBD agents also said that equipment which had been promised to them by PPAG had never been distributed. For example, two CBD agents under full time supervisors commented as follows:

> "During our training, we were promised some I.D. cards and badges, but this has not been fulfilled." [E-group]

> "...Simple things like the penis models have not been supplied to us since our training in 1994. How do they expect us to work?" [C-group]

Bicycles, Wellington boots, rain coats, flash lights, provision of TV monitors and decks for community screening of IEC material were among the items they said were promised, but not uniformly provided to the CBD agents. In addition, token allowances, spare parts for bicycles, financial support to purchase first aid drugs and instituting annual awards for CBD agents were things which they said would motivate them to better perform their work.

When agents learned that their counter-parts in other regions had been supplied with bicycles and even seed money for the procurement of first aid drugs,

emotions were further raised. For example, one focus group participant, a CBD agent of a part-time supervisor said the following:

> "I know that some regions and even some districts in my region [Eastern] have received their bicycles, but some of us have not received ours and instead of them keeping quiet, they keep promising us anytime we meet them. This is not fine at all. We are adults." [C-group]

The focus group facilitators felt that the failure on the part of PPAG to fulfill these promises was a source of demoralization for the CBD agents.

Office support

The work of CBD agents often requires the support of supervisors and office staff between visits. For example, when a problem arises with a particular client, when supplies or information are needed or when a supervisor is needed to supply a client with an injection, an agent must go to the central office for support.

The focus group results suggested that the CBD agents under part-time supervisors are more likely than those under full-time supervisors to be generally dissatisfied with the quality of assistance received from the office staff. This is because unlike the CBD agents under full-time supervisors who could see their supervisors at the PPAG office when there is an urgent need to do so, the agents under part-timers do not have anybody in the office to attend to them.

Two CBD agents of part-time supervisors made the following comments regarding office support:

> "Sometimes if you go to the office for help, they would not assist you but will rather ask you to go and see your supervisor. They will also not pay your T and T (per diem) to you." [C-group]

> "On a number of occasions I have traveled to the central office for help only to be told to go and see my supervisor and that was the end." [C-group]

CBD agents said that this approach is impractical because often they will have to travel to contact their supervisor, who may be difficult to locate or involved in other activities.

Supervisory visits

Rapport: On the whole, CBD agents described their supervisors in favorable terms; as supportive, receptive, kind, accommodating and considerate. They observed that their supervisors always "have time for us." CBD agents did not perceive supervisors' status as a factor affecting their performance. In general, this relation is not affected by the supervisors' status, age, sex or occupation.

Frequency of supervisory visits: According to the survey, full-time supervisors appeared to conduct supervisory visits more regularly than part-time supervisors. Actually, 80% of the CBD agents supervised by full-time staff compared with only 47% of their counterparts supervised by part-time staff stated that they were usually supervised twice or more times a month. This difference is, undoubtedly, related to differences in availability by status.

The findings of the follow-up FGDs did not corroborate this observed difference between full-time supervisors and part-time supervisors. However, they suggested that the distance between the supervisor and the CBD, and the availability of means of transportation, are more important than the supervisor's status in determining the frequency of supervisory visits.

Communication: Although supervision observed was usually conducted at the CBD agent's home or workplace, the CBD agent was not always informed by the supervisor in advance of their visit. At baseline, only two-fifths of the CBD agents in the experimental group and one quarter of those in the control group reported at baseline that they were always given an advance notice of the supervisor's visit by their supervisor. In addition, when advance notice was given, the message rarely contained information on how the supervision would be done and what materials would be required. Most often the message simply contained information on the date of the visit and what would be supervised.

Following training, E-group CBD agents were more frequently informed in advance about a supervisory visit, 68.4% compared to 40% prior to the training (see table J-1. in Appendix J). They said that prior notices tended to contain information other than the date of the visit and the activity to be supervised. Specifically they contained information about how the supervision will be done and what was needed.

Following training, strategies changed for providing feedback. At baseline, verbal instructions and written comments were common. Following the training, however, CBD agents reported that supervisors more often chose to discuss feedback with them (73.7%).

Technical Support: At baseline, CBD agents said they had received effective supervision on a limited number of topics, including FP concepts and methods, management of supplies, demonstration of spermicide use and counseling steps. The topics which were typically not covered in supervisory visits at baseline included first aid, condom use, preparation of ORS, and record-keeping.

The CBD agents in the experimental group appear to have received effective supervision on a wider range of subjects at follow-up. E-group supervisors tended to cover first aid, demonstration of condom use, demonstration of spermicide use,

demonstration of ORS preparation, and record-keeping with CBD agents following the training.

The objective measures of CBD performance indicate that there was an improvement in E-group CBD agents work-site skills following training. The majority of E-group CBD agents perceived some change in their supervisors following training however the group agreed that they desired more technical training. One CBD agent of a full-time supervisor for example, asked for review of the use of basic equipment and new contraceptives:

> "Some of us do not have an idea about how the thermometer or the sphygmomanometer works. We don't have updated knowledge about contraceptives like Norplant and the female condom." [C-group]

Another CBD agent under a full-time supervisor made the following observation about the changing needs in her community, changes requiring additional training:

> "These days there are a lot of abortion cases in our communities involving teenagers; some of them come to us after undergoing an abortion. But we don't know what to tell them." [E-group]

Post abortion care, prenatal counseling, adolescent sexuality, Norplant™, female condoms and IUDs were topics of interest mentioned by CBD agents during focus group discussions.

In addition, one CBD agent under a full-time supervisor suggested that information be presented to them in an appropriate manner, so they could each understand the content fully:

> " If you don't come to the office here to read something, we do not get much information...some of us cannot read and understand the technical language. That is why we need more refresher courses." [E-group]

Motivation and Incentives

The agents were very interested in the issues of motivation as it affected them. The agents were unanimous in saying they would be motivated by visits from high-ranking officials. They agreed that when they are introduced to the communities within which they operate by PPAG officials, they get more motivated and win the respect of community members.

In addition, high profile visits by supervisors were seen by CBD agents as a status booster for them within their communities. For example, one CBD agent of a full-time supervisor in the experimental group declared that his supervisor now spent more time with him:

> "My supervisor goes out with me whenever she visits me and this makes me feel good because community members see me as an important person." [E-group].

This observation was supported by other CBD agents of a full-time supervisor, who said the following regarding the desirability of supervisory visits:

> "We expect them to pay us regular visits. When they do that, it enhances our image in the communities." [C-group].

> "The visits from our supervisors are good. The last time our officers came to my village, I had more clients than previously." [E-group]

Visible CBD agent identifiers like uniforms and badges also increased their status and credibility in the community, they said.

The issue of competition relating to motivation was raised by a CBD agent under a full-time supervisor. He said that a community health nurse in his area was competing for his work in the community:

> "Clients only come to buy condoms from us, so organizing home visits is difficult because the women are always going to the Community Center (MCH/FP) these days." [E-group]

Yet another topic was introduced during focus group discussions by two other CBD agents, one under a full-time and the other under a part-time supervisor. They suggested that providing first aid drugs would help them win the confidence of some community members:

> "The provision of first aid drugs will be a big motivation to us because when you visit a client and you administer first aid to a sick child, you win the confidence of the client." [C-group]

> "I really feel sad whenever I am on my home visits and I find a child in need of first aid, but which I cannot help because I lack the necessary drugs." [E-group]

In sum, not only has the training has had an impact on supervisor performance and also has affected the performance of the CBD agents whom they supervise in the field. The data suggests that supervisors have had contact with their CBD agents since training, but they also have imparted some of the knowledge and skills gained through the training. Though the overall skill indices improved, E-group CBD performance did not reach the standard required for competent practice. The task-specific indices revealed in detail the areas of weakness which will require attention in future training. CBD agents raised some of the same performance-hindering issues as their

supervisors, regarding transportation, supplies and equipment. CBD agents under part-time volunteer supervisors had more difficulty getting supervisory and office support between supervisory visits. Rapport between agents and supervisors was generally good and communication improved between the E-group CBD agents and supervisors following training. CBD agents indicated a strong desire for more technical training on a variety of topics.

IV. Discussion and Recommendations

The training in "technical supervision" was designed to address performance problems of Community Based Distribution (CBD) supervisors and agents identified through the 1996 assessment of PPAG's community based distribution program in Ghana (PRIME: 1996). The purpose of this evaluation of the training was three fold. First, to evaluate the effectiveness of technical supervisory training and curricula itself, and, if it was found to be an effective means of addressing the performance problems overall, to suggest improvements before expanding the training program to other regions. The second purpose was to gather information to clarify the role of training to support PPAG's decentralized CBD service delivery system. Finally, the study gathered information from which to make recommendations to PPAG human resources department regarding the use of full-time (paid) and part-time (volunteer) supervisory staff in the future.

1. Effectiveness of supervisory training

Did the training in technical supervision improve CBD supervisors' performance? CBD supervisor performance problems identified in the 1996 CBD program assessment (PRIME: 1996) included:

- supervisors did not prepare supervisory plans (40%);
- supervisors did not write supervision reports (55.4%); for those who wrote them they were generally not done correctly;
- supervisors never held monthly review meetings as expected (40%);
- supervisors were not able to explain at least a rationale for supervision (50%);
- supervisors did not keep up-to-date basic information on the catchment area of operations (66%); and,
- supervisors did not provide technical assistance or support to their supervisees (i.e., CBD agents).

This study found that the on-the-job performance of the trained supervisors improved overall as a result of the technical supervisory training. Four months after the training, the mean skill indices of the supervisors who received the training increased significantly, from 62.6% at the baseline to 90% at follow-up. The supervisors who were not trained on the other hand remained approximately the same on mean skill indices, 57.6% at baseline and 56.2% at follow-up. The performance improvements among the trained supervisors were evident to varying degrees in all supervisory tasks targeted in the training; conduct of a supervisory visit, handling an initial client visit, condom use demonstration, foaming tablet use demonstration, and, demonstration of the preparation and use of Oral Rehydration Salts (ORS). Of concern however, was the drop in mean knowledge index of the trained supervisors following training. While remaining well above baseline (32.6%), trained supervisors' mean knowledge indices dropped from 88.4% at the post-test to 66.8% at the follow-up, below the required level for optimal practice (75%).

There did not appear to be any socio-demographic factor that significantly influenced the performance of the supervisors, provided they were well trained. Indeed, training appears to be a leveler that eliminates, to a considerable extent, any inadequacies in knowledge and skill of socio-demographic groups as a result of their particular characteristics.

Even more affirming were the measured effects of the training on a second cadre of workers, the CBD agents who work directly with clients. The following performance problems were identified with the CBD agent group (PRIME:1996):

- poor counseling skills (with a group mean score of 47%);
- borderline competence in first aid (a group mean score of 56%);
- lack of refresher training (100%);
- lack of technical supervision and a job aid for CBD service delivery (100%).

At follow-up the skill level of CBD agents whose supervisors participated in the technical supervision training improved significantly. The overall skills index increased from 55.5% at the baseline to 71.1% at the follow-up. Though the E-group[2] CBD agents did not quite reach the cut-off level for fully competent practice (80%), the change suggest that the trained supervisors imparted some of the knowledge and skills gained at the training during routine visits.

Though some of the E-group CBD agents said they had noticed some positive changes in their supervision following training, the majority agreed that they would like even more "technical training" from supervisors on a broader range of topics such as post-abortion care, pre-natal counseling, adolescent sexuality, Norplant™, female condoms, IUDs, and all new contraceptive products introduced into their communities.

Recommendations:

- PPAG should evaluate the feasibility to include additional topics (such as post-abortion care, pre-natal counseling, adolescent sexuality) in the technical supervision training.
- PPAG needs to critically assess the reasons for the decrease in knowledge indices of the trained supervisors at follow-up.
- PPAG should periodically assess supervisors' performance on basis of which to develop supervision refresher training.
- In addition to the supervisory protocols, PPAG should develop and make available other job aids to all supervisorsin order to maintain knowledge levels.
- Regional program managers should use every opportunity (monthly meetings, supervision visits, etc.) to identify weaknesses and provide on-the-job training to supervisors.

2 Experimental group

2. Role of training to support PPAG's decentralized CBD service delivery system.

How does the data assist in clarifying the role of training in supporting the decentralized CBD program?

As discussed above, the training proved to be effective means of improving not only the job performance of CBD supervisors but also of those CBD agents whom they supervise. Thus, training of supervisors in technical supervision is an effective way to train in a decentralized system, especially if refresher training is provided to supervisors on a regular basis.

Interestingly, CBD supervisors and agents pointed to similar systemic issues over which they have no control; lack of transportation, supplies and equipment, and satisfactory incentives. The majority of CBD supervisors, 86% of the control group and 58% of the experimental group, reported transportation difficulties. In addition, 24% of C-group and 37% of E-group reported a lack of equipment and/or supplies. Obviously these matters cannot be addressed through training, but none-the-less hinder CBD supervisors' and agents' performance.

On the issue of transportation, the findings of the focus group discussions suggested that the distance between the supervisor and the CBD agent, and the availability of means of transportation are more important than the supervisor's status in determining the frequency of supervisory visits. In addition the qualitative data also suggests that though these problems occur year round, they mainly occur during rainy season.

The source of the contraceptive and other supply problems were not revealed in this report but require further investigation. Frequent substitution of brands of contraceptive products without prior notice seems to affect the sales and cause frictions between the CBD agents and their supervisors.

Another area of concern outside of training was the dissatisfaction expressed--by volunteer CBD supervisors in particular-- over the lack of allowances provided by PPAG (52% C-group and 26% E-group). PPAG should explore ways to improve the incentive package particularly for volunteers.

Recommendations

- The supply problem created by the lack or inadequate transportation means may be addressed by planning ahead for rainy season and providing three to six months of supplies to the agents.
- PPAG should develop a plan for the provision of reliable transportation to the supervisors, and reimburse travel expenses immediately after travel.
- PPAG should consider decentralizing the part-time supervisors even further.
- As a possible solution to the issue of changing brands of contraceptive products,

PPAG should consider delaying the changes in brands until such time appropriate information can be supplied by the CBD agents to the clients regarding the product.

- PPAG should provide consistently the equipment promised to CBD agents i.e., the rain coats, flash lights, Wellington boots, TV monitors and decks for community screening, teaching aids, bicycles, and ID cards.
- PPAG should explore ways to improve the incentive package particularly for volunteers.

3. Use of full-time and part-time supervisory staff.

The findings/conclusion above raises the question, should PPAG use paid or unpaid CBD supervisory staff in the future?

The study shows that the work site performance of the newly trained supervisors did not vary significantly by full-time (paid) or part-time (volunteer) status, nor by sex, region, or education for that matter. Indeed training appears to level out the performance of all newly trained supervisors. Considering the expressed dissatisfaction of these valued volunteer CBD supervisors over transportation, incentives and institutional support, further information is needed to clarify the sources and degrees of their dissatisfaction. And then, various approaches should be explored to motivate them and retain them on duty.

Recommendations

- PPAG should reimburse travel expenses immediately after travel.
- PPAG should consider decentralizing further and appoint volunteer supervisors to supervise only those CBD agents living in their immediate vicinity. This may require training more part-time supervisors but could eliminate travel time, travel allowance and communication problems mediated by office staff. In turn the burden of travel could be placed on a full time paid coordinator for the volunteer supervisory staff.
- PPAG should consider appointing a full-time coordinator in each regional office. This is especially important for the provision of support to CBD agents under part-time supervisors between supervisory visits.
- PPAG ought to devise an effective means of monitoring the activities of these coordinators to ensure that effective supervision of the supervisors is done.

REFERENCES

1. *PRIME technical Report 3: Assessment of Community-Based Distribution in the Republic of Ghana*, April 1996.

2. *Study of the Effects of technical Supervision Training on CBD Supervisors' performance in Ghana: Qualitative assessment of CBD Agents in Brong Ahafo Region and Eastern Region*. . RINCON Rural Information and Communication Network, Mr Mark Asare and Mr. K.G. Osae. 1997

3. *PRIME Evaluation and Research Plan,* Volumes I-III. PRIME Office of Evaluation and Research Chapel Hill, NC. 1998.

Socio-Economic Characteristics Of Respondents

Appendix A

A. Supervisors

As specified, a total of 40 supervisors were retained for the baseline and the follow-up analysis. The sample was made up of equal numbers of male and female supervisors (see Table 1). Moreover, there were 21 people (52.5%) from the control group and 19 people (47.5%) from the experimental group. The distribution of the supervisors by region shows that the Western region has the highest representation with 10 people while the Northern region has the least representation with only 4 people.

More than half of the supervisors (23 or 57.5%) were full-time staff while 42.5% were volunteers. All the supervisors had at least middle school education while about two thirds had at least secondary education. Not many of the supervisors (25%) had previous CBD experience. The length of service as a CBD supervisor varies between 10 and 78 months with an average of 41 months.

A large proportion (52.5%) of the supervisors was aged 40 years or more. The average age was 41.1 years. There are no significant differences in the age composition, education or length of CBD supervisory experience between the experimental and the control group.

B. CBD Agents

Information on the socio-economic characteristics of the CBD agents interviewed at the baseline and at the follow-up are presented on Table 2.

At the baseline, the sample of CBD agents was made up of approximately equal representation of male and female, and control and experimental groups. Ten of the CBD agents interviewed during the baseline survey came from the Ashanti region while 9 each came from Greater Accra and Western regions. The regions with the least representation were Eastern and Northern with 4 respondents each.

The age of the agents varied between 20 and 68 years with an average of 39.4 years. Indeed, the majority (78%) was aged 35 years or more. Almost all the CBD agents have had some form of schooling while the majority had at least the level of middle school education. The number of years of experience as a CBD agent varied between one year and seven years. The mean length of experience was 3.83 years. The follow-up sample was similar in many respects to the baseline sample (see Table 2). The composition of the two samples was identical with respect to control/experimental status, sex, region, age and education. The only area where the two samples were slightly different was in respect of length of CBD service. The baseline sample contained relatively fewer people with less than 3 years of experience than the follow-up sample. The average length of CBD service was 4.1 years among the follow-up respondents compared with 3.8 years among the baseline respondents.

Table A.1: Socio-Economic Characteristics of Sampled Supervisors

	N=	%
Control/Experimental		
Control	21	52.5
Experimental	19	47.5
Region		
Gt.Accra	6	15.0
Western	10	25.0
Eastern	5	12.5
Ashanti	9	22.5
Brong Ahafo	6	15.0
Northern	4	10.0
Age		
<35 years	5	12.5
35-39	14	35.0
40-44	7	17.5
45-49	10	25.0
50 +	4	10.3
Sex		
Male	20	50.0
Female	20	50.0
Education		
Middle school	13	32.5
Secondary school	14	35.0
Post-secondary	13	32.5
Previous CBD Experience		
Yes	10	25.0
No	30	75.0
Professional Experience		
Yes	27	67.5
No	13	32.5
Supervision Experience		
< 5 years	17	42.5
5-8	19	47.5
9 +	4	10.0
CBD Supervision Experience (in months)		
< 24 months	8	22.9
24 – 47	14	40.0
48 +	13	37.1
Number of respondents	40	100.0

Table A.2: Socio-Economic Characteristics of CBD Agents by Type of Measurement

Characteristics	Percent Distribution	
	Baseline Sample	Post-intervention sample
Control/Experimental		
Control	48.8	51.3
Experimental	51.2	48.7
Region		
Gt.Accra	19.5	20.5
Western	19.5	17.9
Eastern	9.8	12.8
Ashanti	24.4	32.1
Brong Ahafo	17.1	15.4
Northern	9.8	10.3
Age		
<35 years	22.0	30.8
35-49	65.9	59.0
50 +	12.1	10.2
Sex		
Male	48.8	61.5
Female	51.2	38.5
Education		
Primary or less	4.8	0.0
Middle school	61.0	61.5
Secondary school	22.0	35.9
Post-secondary	12.2	2.6
Professional Experience		
Yes	51.2	56.4
No	48.8	43.6
CBD Service		
1 – 2 years	17.1	5.1
3 – 4	31.7	43.6
5 +	51.2	51.3
Number of respondents	41	39

A. Data Collection Tools and Methods

Both quantitative and qualitative data were collected during the study. For the qualitative data, a series of focus group discussions were conducted among CBD agents.

Five data collection instruments were used in collecting the quantitative data. Three of the questionnaires were administered on supervisors and two on CBD agents. These instruments were developed by PRIME and revised by the assessment team during the training of data collectors for the baseline survey. The following is a description of the various instruments used for the study.

B. Supervisors' Instruments:

a. Instrument on Personal Characteristics and Working Conditions

This was a structured questionnaire used in collecting information on some personal characteristics (sex, age, educational and professional background) of the CBD supervisors. It also contained questions on the working conditions of the supervisors. The working conditions assessed included salaries/incentives, transport facilities, supplies and field logistics. This questionnaire was administered using the interview method.

b. Instrument on Supervisors Skills and Performances

This instrument had three components. One component contained questions eliciting information on how supervisors planned and implemented supervisory activities. The other was a checklist assessing the content of supervisors work plans and reports. The third was also a checklist evaluating supervisors skills and performances on selected technical tasks in real or simulated situations. The methods of data collection employed were document analysis, interview and observation.

The same instrument was used in assessing supervisors skills and performances at the baseline and follow-up stages. It also served as a pretest/posttest measurement tool during the technical supervision training.

For the pretest/post test however, the first section of this instrument which required data collection from supervisors work plans and reports was not administered as the interview was not conducted in the field.

c. Instrument on Supervisors Knowledge

This was a self-administered questionnaire with 21 questions. The questions covered a wide range of issues that CBD supervisors are expected to know in order to perform their

tasks. The instrument contained questions on reproductive health issues such as STD/AIDS and contraceptive methods. It also covered specific topics such as supervision styles and techniques; communication skills and feedback, malaria treatment, and provision of oral rehydration therapy.

This instrument was used for the baseline and follow-up as well as for the pretest-posttest studies. A few minor modifications were effected in the knowledge questionnaire during the training of interviewers for the follow-up study. The modifications made were not significant enough to contribute to any change in the meaning of the affected questions and hence to the responses given between data collected at the baseline and follow-up surveys.

C. CBD Agents' Instruments:

a. Instrument on CBDs' Personal Characteristics and Perception about the Supervision Received Questions on some personal characteristics of the CBD agents such as age, sex, educational/professional background and supervisor's status in terms of part-time or full-time were included in this questionnaire. The second part of the questionnaire focused on the CBD agents' perception about the nature and quality of supervision received.

This instrument was administered without any changes at the baseline and follow-up stages to CBD agents of some sampled part-time and full time supervisors within the experimental and control groups of the study. The questionnaire was administered using the interview method.

b. Instrument on CBD Performances

The CBD's performance instrument was a checklist for assessing the agent on some specific tasks (also performed by their supervisors) such as handling a pill resupply visit, demonstrating the use of condoms and spermicide and preparing and administering oral rehydration salt.

The instrument used for the baseline and the follow-up measurements were almost identical. Two additional sections were however included in the instrument used for the follow-up study. One section assessed the CBD agents on how they handled initial visits whilst the other section looked at the number of specific activities like rallies, film shows, home visits and new family planning acceptors recruited three months before and after the training intervention from the agents notebook. This section was designed to provide the information necessary to evaluate the impact of the intervention on use of services.

D. Focus Group Discussion (FGD)

As mentioned in the earlier part of this section focus group discussions were carried out to collect qualitative data on CBD agents' perceptions about the supervision received. Most critically, this study was to establish whether or not there were perceived differences in the nature and the quality of supervision received between the CBD agents of supervisors who participated in the technical supervision training (experimental group) and the CBD agents of supervisors who received no training (control group). Finally, another purpose was to identify whether or not there were differences in perceptions about quality of supervision among supervisees of part-time and full-time supervisors. The FGDs were conducted using a guide which was developed by PRIME and the team of FGD specialists who carried out the exercise.

A total of eight (8) FGDs were conducted. For the baseline study four FGDs were conducted broken down according to the above mentioned criteria.

-One (1) FGD among CBD agents of full-time supervisors in an experimental area (Ashanti)

-One (1) FGD among CBD agents of part-time supervisors in an experimental area (Ashanti)

-One (1) FGD among CBD agents of full-time supervisors in a control area (Eastern)

-One (1) FGD among CBD agents of part-time supervisors in an control area (Eastern)

The other four (4) were conducted at the time of the follow-up study using the same procedure but this time however, Brong Ahafo region was selected as the experimental area and Eastern region as the control area.

The same guide was used at the baseline and the follow-up study but with a slight modification during the latter study to capture changes in CBD agents' perceptions about their supervisors performance after the training.

CBD agents who had participated in the quantitative study at either the baseline or follow-up assessment were excluded from the FGDs.

The findings from the FGDs will be used as necessary in the present report to complement the quantitative data.

Baseline Survey on PPAG CBD Supervisors **Appendix C**

Baseline Survey on PPAG CBD Supervisors **Appendix C**

CORE GROUP:	1. Control Group	2.Experimental Group
REGION:	1. Greater Accra 2. Western 3. Eastern	4. Ashanti 5. Brong Ahafo 6. Northern
STATUS:	1. Staff (full-time)	2. Volunteer (part-time)
CATEGORY:	1. Supervisor	2. CBD Agent
SURVEY:	1. Pre-measure	Post-measure
IDENTIFICATION:		

1. Name of the interviewee : _____
2. Position :_____
3. District :_____
4. Age in completed years:_____
5. Sex : ☐
   1. Male 2. Female
6. Educational status : ☐
   1. Not attended school
   2. Primary school
   3. Secondary school
   4. Middle school
   5. Post-secondary and above
7. What is your background education, if applicable? ☐
   1. Health
   2. Education
   3. Social
   4. Other, precise_____
   9. Not applicable

8. Have you performed CBD-agent's tasks before becoming supervisor? ☐
   1. Yes 2. No

9. **IF FULL-TIME** :What was your main occupation before you started as supervisor?_____
(only fill in for staff supervisors; for volunteers fill 99)

Question 10,11,12 and 13 only for volunteer-supervisors!!
For staff-supervisors fill 99 or 9

10. **IF PART-TIME** :What is your actual main occupation?
_____

11. How many days a 6-days week do you spend with your supervision activities next to your main occupation? ☐

12. Is it easy to combine these 2 jobs? ☐
   1. Yes 2. No

13. Give 2 reasons :_____
_____
_____

14. Duration at current position as supervisor? (in years) ☐

15. Have you recently attended any training in supervision? ☐
   1.Yes 2. No

16. If yes, who organized the training? ☐
   1. PPAG
   2 .
   3.

17. How many days lasted the theoretical part of the training? ☐☐

18. How many days lasted the practical part of the training? ☐☐

19. How useful was this training for you? ☐
    1. Very useful
    2. Rather useful
    3. A little bit useful
    4. Not useful at all

20. Can you justify your choice ?
    _____

21. How long ago was this training? ☐
    0. Less than one year ago
    1. One year ago
    2. Two years ago
    3. More than two years ago
    9. Never trained as supervisor

22. What are the other training sessions you attended to during the last three years including those organized by PPAG and other partners? ☐
    1. Counseling/IEC/communication
    2. Family Planning/contraceptives
    4. First aid
    16. Managements (services, supplies,finances)
    32. Other, specify_____

23. How usefull was this training for you? ☐
    1. Very useful
    2. Rather useful
    3. A little bit useful
    4. Not useful at all

24. What kind of training would you prefer in the future, based on your current job and tasks? ☐
    1. supervision
    2. counseling
    3. family planning
    4. first aid
    5. management
    6. other, specify_____

25. Can you justify your answer?_____
    _____

26. What was your motivation to become supervisor ? ☐

1. job
2. felt needed by the community
3. member of association
4. other, specify_____

27. How many CBD agents do you supervise? ☐☐

28. At what distance lives the CBD agent who is the farthest away? ☐☐

29. How frequent do you visit each agent? ☐

1. Every month 3. Every 6 months
2. Every 3 months 4. Once a year
5. Other

WORKING CONDITIONS

30. What supervisory activities do you perform? ☐

1. Supervisory visits at agents home/worksite
2. Supervisory meetings
4. Meeting CBD agents at supervisor's home
16. CBD clients interviews
32. Other, specify_____

31. Currently, what motivates you as supervisor? ☐

1.
2.
3 .

32. Currently, what demotivates you as supervisor?

1.
2.
3.

33. What would you like as motivating factors to better perform your supervision tasks?

1. Better salary	4.
2. Transport facilities	5.
3. Training	6.

34. Do you have transport facilities?

1. Yes 2. No

35. What type?

1.Car	4.Taxi/car fees
2.Bicycle	5.Other
3.Motorbike	

36. Who is in charge of these transport facilities ?

1. PPAG	3. Others
2. Supervisor	

37. Is this means always available when you plan to go for a supervisory activity?

1. Yes 2. No

38. Do you think your current transport facilities are satisfactory ?

1. Yes 2. No

39. If not, how could these be improved ?

1.
2.
3.
4.

INSTRUMENTS

40. Do you prepare a monthly supervision calender?

1. Yes 2. No

41. In which way do you keep to it?

1. Always	4. Almost never
2. Almost always	5. Never
3. Sometimes	

42. What are some reasons that make you miss your supervisory visits or planned activities ? ☐
    1. Transport means not available
    2. Instruments not available
    4. Season/climate
    16. CBD-agent not available
    32. Lack of planning
    64. Others

43. How many days a week do you perform supervisory visits? ☐
    1. Every day 4. Once in a while
    2. Some days a week 5.
    3. Once a week 6 .

44. Do you always inform the CBD agent in advance about your visit? ☐
    1. Yes 2. No (if no, skip to 52)

45. How many days in advance? ☐☐

46. By which means? ☐
    1. The agents have a copy of the monthly program
    2. They are informed by letter
    4. I try to inform them, which is not always possible
    5. I am usually not able to inform them

47. Do you do surprise supervision visits? ☐
    1. Yes, always 3. No, never
    2. Yes, sometimes 4 .

48. Do you feel that your work is appreciated by the community? ☐
    1. Yes 2. No

49. Can you justify your choice?_____

50. Mention some of the difficulties you encounter in the execution of your job as supervisor. ☐☐
    1. Feel not needed by the community
    2. Poor working relationship
    4. Poor working conditions (transport, salary,...)

16. Poor supervision
32. Poor training
64. Other,specify_____

51. According to you, how should these difficulties been solved? ☐☐
1. More training
2. Training in communication
4. Improving transport facilities
16. Improving reimbursement volunteers
32. Let volunteers become staff supervisors
64. Other, specify_____

INSTRUMENTS

52. Do you have supervisory instruments/checklists? 1. Yes 2. No

53. List them._____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

54. Are they always available when you plan to go for supervisory activities? ☐
1.Yes 2.No

55. What are the other materials available to help you to perform your supervisory activities? In which quantity?

MATERIALS	YES	NO	QUANTITY
1. Contraceptives samples			
2. Contraceptives stock			
3. First aid drugs and materials			
4. ORS			
5. Monthly report forms			
6. Register			
7. Financial report forms			
8. Statistical forms			
9. Office supplies			
10. Sales bookkeeping			
11. Supervisory protocols/documenst/guides			
12. Reference manuals or notes			
13. Visual aids			

Date of interview:_____

Name of the interviewer : _____

Baseline Survey on PPAG CBD Agents **Appendix D**

CORE GROUP:	1. Control Group	2.Experimental Group
REGION:	1. Greater Accra 2. Western 3. Eastern	4. Ashanti 5. Brong Ahafo 6. Northern
STATUS:	1. Staff (full-time)	2. Volunteer (part-time)
CATEGORY:	1. Supervisor	2. CBD Agent
SURVEY:	1. Pre-measure	Post-measure
IDENTIFICATION:		

1. Name of the interviewee : _____

2. District :_____

3. Age in completed years:_____

4. Sex : 1. Male 2.Female

5. Educational status:
   1. Not attended school
   2. Primary school
   3. Secondary school
   4. Middle school
   5. Post-secondary and above

6. What is your background education, if applicable?
   1. Health
   2. Education
   3. Social
   4. Other, precise_____
   9. Not applicable

7. Duration at current position as CBD-agent ?

8. Where do you live? ☐
   1. In the community
   2. Outside the community

9. At what distance do you live from the supervisor? (in km.) ☐☐

10. Which tasks do you perform as CBD-agent? ☐
    1.
    2.
    3.

11. Are you supervised? ☐
    1. Yes 2. No

12. If yes, where does the supervisor meet you? ☐
    1. At my home
    2. At my worksite
    3. At his home
    4. At meeting's ..
    5. Others, precise_____

13. When was the most recent supervision you received? (month/year) ☐

14. How did he supervise? ☐
    1. He visited me at home
    2. He visited me while performing task
    3. He invited me to his home
    4. He invited me to a meeting
    5. Others, specify_____

15. Were you informed about the supervision? ☐
    1.Yes 2. No

16. If yes, how did he inform you? ☐
    1. He sent me a letter/ a note
    2. I have his supervisory plan
    3. He sent verbal message
    4. He came to inform me
    5. Other, specify_____

17. Apart from the date of the supervision activity, what is the other information he provided to you? ☐
    1. What will be done during the supervisory activity
    2. How it will be done
    3. What is needed during the supervision
    4. Where the supervisory activity will be executed
    5. Other, specify_____

18. How much time per trimester do you meet your supervisor for the formal supervision activities? ☐
    1. None
    2. Once per trimestre
    3. Twice per trimestre
    4. Once per month
    5. More than once a month
    6. Other, specify

19. At which circumstances do you formally meet your supervisor for "supervision matters" ☐
    1. When he pays supervisory visits
    2. When he organizes supervisory meetings
    3. Others, specify_____

20. Are you involved in the elaboration of the "supervisory monthly plan" ☐
    1. Yes 2. No

21. If yes, how?_____
    _____

22. Does the supervisor always inform you before he conducted supervisory activities? ☐
    1. Yes 2. No

23. Do you feel at ease while communicating with your supervisor? ☐
    1. Yes 2. No

24 Explain your answer. _____
_____
_____

25. Do you think you receive any support from your supervisor that helps you to improve your performances? ☐
1. Yes 2. No

If yes, in which domains? ☐
1. Family planning concepts
2. Family planning methods
3. First aid
4. Management of supplies, finances and users
5. Demonstration of condom use
6. Demonstration of spermicide use
7. Demonstration of ORS reparation/distribution
8. Counseling steps
9. How to fill in forms
10. Others, specify_____

26. Does the supervisor pay your visits? ☐
1. Yes 2. No

27. If yes, how much time does he spend with you (hours) ☐

28 What does he do, step by step?
1._____
2._____
3._____
4._____

29. Do you have a notebook or anywhere the supervisor writes down his observations and comments after visit? 1. Yes 2. No ☐

30. If yes, **interviewer** check and note what is written for the last visit.
_____
_____
_____
_____

31. During the the supervisory visits, does the supervisor share with you what he observed? ☐
    1. Yes 2. No

32. If yes, how? ☐
    1. We discuss
    2. He writes down in my notebook
    3. He gives me verbal instructions
    4. Other, specify_____

33. What do you think the supervisor should do to help you more perform your tasks? Please check spontaneous answers!
    1. Give me advice ☐
    2. Supervise me more frequently ☐
    3. Be more considerate ☐
    4. Inform me a few days before he'll supervise me ☐
    5. Give me constructive feed-back ☐
    6. Give me some training ☐
    7. Give more training ☐
    8. Spend more time with me during the visit ☐
    9. Other, specify_____ ☐

Instrument for Evaluating CBD Supervisor's Knowledge **Appendix E**

Name of the interviewee:_____
Region:_____

1. Among the following, check those which are not concerned by technical supervision.
   1. Giving feed-back to the supervisee
   2. Collecting sales money
   3. Developing helping process while supervising
   4. Finding fault during supervision
   5. Checking on the progress of activities

2. Please, fill in the appropriate supervision technique in front of the proposed CBD agent's tasks.

	TASK	TECHNIQUE
1. Condom use demonstration		
2. Filling in financial forms		
3. Counseling		
4. Pill re-supply		
5. Supplies management		

3. In supervision, democratic style implies:
   1. Giving instructions to be respected by supervisee
   2. Conducting discussion and sharing points of view between supervisor and supervisee
   3. Involving supervisee in making decision on improvement of services quality.
   4. "Letting supervisee do as he likes"
   5. Pointing out mistakes
   6. Conducting political discussions on CBD programs

4. You are requested to develop a superisory monthly plan.
   What are the components you should include in your plan?

_____
_____
_____
_____

5. What are the two (2) major supervisory activities you should execute?

_____
_____
_____

6. Please list at least three critical activities that should be executed while preparing a supervisory meeting.

_____
_____
_____

7. Among the following, choose sentences that express supervisor's reasons for writing a monthly report.

1. It has been instructed to do so. ☐
2. It helps me to think about solutions to CBD agents problems. ☐
3. It helps to evaluate implementation of supervisory activities. ☐
4. To describe activities carried out and those not carried out. ☐
5. It gives me information to plan for the next period (month). ☐

8. "Feed-back on changing behavior is compulsory during supervision". ☐

1. True
2. False

Explain your choice: _____
_____
_____
_____

9. List the six (6) steps of a counseling session.

1._____
2._____
3._____
4._____
5._____
6._____

10. List three (3) ways in which AIDS doesn't spread.

1._____
2._____
3._____

11. State two (2) ways to prevent AIDS/STD.

1._____
2._____

12. State two (2) important storage conditions for contraceptives.

1._____
2._____

13. How do you check the expiration date of the condom?

_____

_____

14. How many tablets per day do you give an adult person suffering of malaria and during how many days.

_____

_____

15. Questions on PILL and DIARRHEA

16. Give the purpose/definition of feed-back in supervision.

_____

_____

17. Give three (3) criteria for giving usefull and effective feedback.

1._____
2._____
3._____

18. Give three (3) positive non-verbal communication cues.

1._____
2._____
3._____

19. Give three (3) negative non-verbal communication cues.

1._____
2._____
3._____

20. What are the six (6) verbal communication skills.

1._____
2._____
3._____
4._____
5._____
6._____

Instrument for Evaluating CBD Supervisor's Skills and Performances **Appendix F**

Instructions:
- **Objectives**
- **Conditions/simulation**
- **Technique**

Background information:

-Name of Supervisor:
-Region:
-District:
-Date:
-Name of Interviewer:

I.SUPERVISION TASKS

A. Interview and Document Analysis			
	YES	**NO**	**OBSERVATION**
1. Do you have a written monthly plan?			
If yes, go to 2 and check: ***2. The monthly plan shows*** ***3.*** 2a. CBD Agent's names (to be supervised)			
2b. CBD Agent's location			
2c. Dates of visit (or supervisory meeting)			
2d. Task to be supervised per agent			
2e. Resources required for each supervisory activity			
2f. A place for "observations/comments" or recording carried out and not carried out activities.			
3. What do yo do before and during ***4. implementation of your planned supervision activities!! (record spontaneous answers)*** 3.1. Mobilize resources			
3.2. Inform concerned target (e.g. agents…)			
3.1. 3.3. Carry out activities			
	YES	**NO**	**OBSERVATION**
3.4. Record activities carried out/not			
3.5. Others (Please be precise……)			
4. What are the next tasks that follow the implementation phase?			

Instrument for Evaluating CBD Supervisor's Skills and Performances **Appendix F**

4.1. Check the accomplishment of activities			
4.2. Identify problems/constraints			
4.3. Seek solutions to problems			
4.4. Write monthly report			
5. Please ask and check the latest reports (March; 6. Does it show the following?) 5a. Activities carried out			
5b. Activites not carried out and reasons			
5c. Action to be taken			
5d. Describe what kind of achievements are reported: 1. technical (contraceptives distribution, 2. counseling, ORS, ……..)			
2. administrative (money, report, 3. distribution of contraceptives, collect report, …)			
Instruction: Now let us discuss one of major activities you mentioned earlier e.g. supervisory visits.			
6. What do you do before you go to visit a CBD agent (for supervision) (please check answers spontaneously mentioned) ***7.*** 6.1. Identify what to supervise			
6.2. Identify appropriate instrument			
6.3. Assemble required resources			
6.4. Inform CBD agent on the: ***6.5.*** 6.4.1. Identify what to supervise			
6.4.2. time			
6.4.3. task to be supervised			
6.4.4. material required			

Instrument for Evaluating CBD Supervisor's Skills and Performances **Appendix F**

B. Observation of the Supervisor performing the visit			
	YES	**NO**	**OBSERVATION**
7. Check yes or no if the supervisor perform the 8. following in real or simulated situation (please, circle which situation			
7.1. Create a positive environment			
7.2. Assure/Tell the CBD Agent that he comes 7.3. to assist and not to find fault			
7.3. Review with the CBD Agent the purpose of 7.4. the visit			
7.5. 7.4. Discuss how it will be organized			
7.5. Use appropriate technique			
7.6. Has appropriate instruments			
7.7. Utilize democratic participative style			
7.8. Record all important info on instruments			
7.9. Provide immediate feedback at different 7.10. times and at the end			
7.10. Tell supervisee implications related to 7.11. observed strengths and weaknesses			
7.11. Allow/Ask CBD Agent to discuss any 7.12. other issues			
7.12. If applicable, identify with supervisee 7.13. reasons of any missed step or information while performing the task (e.g. agent did not give side effects of any FP method, agent skipped one step while demonstrating condom use,…).			
8. What are the next steps following the visit (Please note spontaneous answers)?			
8.1. Conclusion on CBD's performance			
8.2. Write brief report			
8.3. Use conclusions/recommendations in planning the next visit			
8.4. Share report contents with supervisee			

II.TECHNICAL TASKS

Methodology: Observation in real or simulated situation; the observer will make sure that the agent has all required material.

Instrument for Evaluating CBD Supervisor's Skills and Performances

Appendix F

A. Supervisor explains and demonstrates on dummy penis how to use the condom

	YES	NO	OBSERVATION
1. Gets the dummy penis			
2. Identify direction in which condom is rolled after removing it from the package			
3. Pinches wipple of condom			
4. Rolls condom on to fit erected dummy penis			
5. Explains that penis must be removed from vagina before it relaxes			
6. Holding condom at the base of the dummy penis to prevent sperm from spilling into the vagina, he demonstrates how to remove the penis			
7. Draws condom from penis			
8. Explain that the condom must be burnt or put in the toilet			
9. Stress use of a new condom every time of intercourse			
10. Explains that the condom helps to prevent STD/AIDS/RTIs			
11. Observe the client repeating correctly the demonstration			

B. Supervisor explains and shows how to use foaming tablet

ror! Bookmark not defined.	**YES**	**NO**	**OBSERVATION**
1. Opens the foaming tablets			
2. Holds one tablet in between the fore finger and middle finger of left hand			
3. Puts her right foot on a stand or liesflat on the bed and raises her feet on the bed			
4. Explain how to insert the foaming tablet deep into the vagina			
5. Explain that couple waits for 5-10 minutes for tablet to dissolve before sex			
6. Explain to wait at least 6 hours after intercourse before washing the vagina			
7. Explain that it is recommended to use condom to increase effectiveness			
8. For each sexual act, a new tablet must be used			
9. The client correctly repeats the process.			

C. Supervisor prepares and gives ORS solution

	YES	**NO**	**OBSERVATION**
1. Washes hands			
2. Measures one beer bottle or two Fanta bottles of clear water			
3. Pours the clean water measured into a clean container			
4. Open one sachet of ORS			
5. Pours all the content into the measured water			
6. Stirs to dissolve			

Instrument for Evaluating CBD Supervisor's Skills and Performances **Appendix F**

	YES	NO	OBSERVATION
7. States how much fluid to give a child with diarrhea Give one glass or small cup full each time the child passes watery stools			
b) Give drink in small amount			
c) Give frequently throughout the day			
d) If the child vomits, wait 5 minutes and give fluid again			
8. Throw away unused ORS after 24 hours			
9. Tell client to continue with other home available fluids for replacement of lost fluids (in addition to ORS)			

Instrument for Evaluating CBD Supervisor's Skills and Performances

Appendix F

Focus Group Discussion Guide CBD Perception of their Supervisors **Appendix G**

I. Tasks performed by CBD

1. Let's start our today's discussion by enumerating what CBD agents of the PPAG are supposed to do in the community.
2. Can you explain why CBD's were asked to do that?
3. Probe whether in the course of their work they organize demonstrations for groups or individuals i.e. potential clients, home visits, film shows, talks etc.
4. How do you source your materials for your work?
5. Who assists you in your work?
6. Probe why those people are helping in their work.

II. CBD and Supervisor relations

1. How far does your supervisor live from here?
2. How often do you see him/her?
3. Probe to find out whether any of the following affect their relationship with the supervisor (sex, age, occupation, social status).

III. Working Relations with Supervisor

1. How will you describe your working relations with your supervisor?
2. When you encounter problems/challenges in your CBD activities, who do you report/discuss such problems with? Explain why.
3. Does your supervisor share her/his problems in the performance of his/her duties with you?

IV. Performance of supervisor in the last 4 months (only post-intervention)

1. Since July, how many visits have you had from your supervisor? What were the items discussed? Has anything new been introduced since July? Probe for any new subjects like update, new system of reporting, etc.
2. Probe specifically whether between July and now, the supervisor has offered any new ideas on issues like adolescent sexuality, post-abortion care, update on contraceptives, reporting system, counseling, etc.
3. Have there been any changes in terms of the supply of contraceptives since July? Explain? What about IEC materials?
4. How would you rate the quality of technical services offered by your supervisor in recent times as compared to previous ones? Please explain your answer.

Focus Group Discussion Guide CBD Perception of their Supervisors **Appendix G**

V. Technical Support by supervisors

1. Let us move to technical support CBD's have received from the supervisor. Can we share your experiences.
2. Let us discuss the benefits of these visits especially to you as CBD agents. Probe, to find out whether they have learned anything "new" from the supervisors, e.g. ORS preparation, steps in counseling, provision of first aid, contraceptives, etc.
3. What did your supervisor leave behind for you the last time you met?
4. Is there anything you will want him/her come along with during the next visit?
5. Is there any area of technical support which you will want your supervisor
6. to provide for you?
7. What do you expect from your supervisor with regard to your work?
8. What do you think a good CBD supervisor should do? Explain your answer.

VI. CBD perception of supervisor

1. If you were asked to choose a supervisor, who will you select and why?
2. How will the transfer of a supervisor affect your work?
3. How fast does your supervisor respond to your needs?
4. How would you judge your supervisor's knowledge, competence, kindness and cooperation in his/her role as supervisor?

6. In which area of your work as a CBD would you want to see an improvement?

Tabulation of CBD Supervisors' Performance of Selected Tasks

Appendix H

Table H.1: Supervisors' Performance of Specific Tasks during Supervisory Visit at Baseline and Follow-Up - Experimental Group

Task	Percent performing….	
	Baseline	Post-intervention
Assure/tell the agent that he comes to assist and not to find fault	42.1	84.2
Review the purpose of the visit with the agent◆	73.7	94.7
Discuss how it will be organized	10.5	94.7
Use appropriate technique◆	89.5	100.0
Has appropriate instruments◆	0.0	100.0
Utilize democratic/participatory style◆	78.9	100.0
Record all important information on instrument◆	0.0	84.2
Provide immediate feedback at different times and at the end◆	73.7	84.2
Tell supervisee implications related to observed strengths and weaknesses◆	47.4	94.7
Allow/ask agent to discuss any other issues◆	68.4	57.9
Task-Specific Performance Index (% of standard)	**48.4**	**90.0**

◆Critical tasks

Table H.2: Supervisors' Performance of Selected Tasks While Handling Initial Visit at Baseline and Follow-Up - Experimental Group

Task	Percent Performing	
	Baseline	Post-intervention
Find out what client knows about FP◆	52.6	63.2
Find out if client knows where to get services	31.6	36.8
Tell client about all available methods◆	57.9	94.7
Ask client to make a choice◆	63.2	89.5
Check if client qualifies for the method chosen◆	21.1	94.7
Give specific information on chosen◆ method	78.9	94.7
Task-specific Performance Index	**64.7**	**86.3**

◆Critical tasks

Table H.3: Supervisors' Performance of Selected Tasks Connected With the Demonstration of Condom Use at Baseline and Follow-Up - Experimental Group

Task	Percent Performing	
	Baseline	Post-Intervention
Explain when to remove penis from vagina◆	68.4	89.5
Correctly demonstrates how to remove the penis from condom◆	63.2	94.7
Stresses use of a new condom every time◆	63.2	68.4
Explains that the condom helps to prevent STD/AIDS	15.8	78.9
Observe the client repeating the demonstration correctly◆	5.3	84.2
Task-specific Performance Index	**68.4**	**90.0**

◆Critical tasks

Table H.4: Supervisors' Performance of Selected Tasks Related to the Demonstration of the Use of Foaming Tablet at Baseline and Follow-Up - Experimental Status

Task	Percent Performing	
	Baseline	Post-intervention
Holds the tablet between the fore finger and the middle finger◆	47.4	84.2
Puts right foot on a stand.....◆	42.1	100.0
Tell how to insert the foaming tablet deep into the vagina◆	94.7	100.0
Tell that couple waits for 5-10 minutes for tablet to dissolve before sex◆	89.5	94.7
Ask to wait at least six hours after intercourse before washing vagina◆	36.8	68.4
Explain that it is recommended to use a condom to increase effectiveness	10.5	36.8
Ask the client/CBD agent to demonstrate the procedure◆	0.0	89.5
Task-specific Performance Index	**57.4**	**86.8**

◆ Critical tasks

Table H.5: Supervisors' Performance of Selected Tasks Related to the Demonstration of the Preparation and Use of ORS at Baseline and Follow-Up - Experimental Group

Task	Percent Performing	
	Baseline	Post-intervention
Washes hands◆	35.3	94.7
Measures one beer bottle or two Fanta bottles of clear water◆	84.2	100.0
States that unused ORS should be thrown away after 24 hours◆	63.2	89.5
Asks client to continue with other fluids available at home in addition to ORS◆	26.3	57.9
Task-Specific Performance Index	**76.3**	**94.2**

◆Critical tasks

Table I.1: Proportion of CBD Agents Performing Selected Tasks Connected with Condom Use Demonstration - Baseline and Follow-Up

	Baseline (%)	Post-Intervention (%)	
		Control	Experimental
1. Gets the dummy penis.	95.1	97.4	100.0
2. Identify direction in which condom is rolled after removing it from the package.	85.4	71.8	89.5
3. Pinches wipple of condom.	80.5	69.2	68.4
4. Rolls condom on to fit erected dummy penis.	95.1	87.2	100.0
3. Tell that penis must be removed from vagina before it relaxes.	63.4	71.8	94.7
4. Holding condom at the base of the dummy penis to prevent sperm from spilling into the vagina, he demonstrates how to remove the penis.	56.1	51.3	57.9
7. Draws condom from penis.	87.8	76.9	89.5
5. Explain that the condom must be burnt or put in the toilet.	95.1	94.9	94.7
6. Stress the use of a new condom every time of intercourse.	46.3	35.9	57.9
7. Explains that the condom helps to prevent STD/AIDS/RTIs.	22.0	28.2	42.1
8. Observe the client/CBD agent repeating correctly the demonstration.	2.4	17.9	36.8

Table I.2 : Proportion of CBD Agents Performing Selected Tasks Connected with ORS Preparation and Use - Baseline and Follow-Up

	Baseline (%)	Post-Intervention (%)	
		Total	Experimental
1. Opens the foaming tablet.	95.1	100.0	100.0
2. Holds one tablet in between the fore finger and middle finger of the hand.	34.1	33.3	42.1
3. Put her opposite right foot on a stand or lies flat on the bed and raises her feet on the bed.	24.4	38.5	63.2
4. Show (position) how to insert the foaming tablet deep into the vagina.	87.8	76.9	100.0
5. Tell that couple waits for 5 to 10 minutes for tablet to dissolve before sex.	87.8	74.4	94.7
6. Tell to wait at least 6 hours after intercourse before washing the vagina.	12.2	17.9	26.3
7. Tell that it is recommended to use condom to increase effectiveness.	2.4	7.7	5.3
8. For each sexual act, a new tablet must be used.	75.6	71.8	94.7
9. Tell the client correctly repeat the process.	2.4	10.3	15.8

Table I.3: Proportion of CBD Agents Performing Selected Tasks Connected with ORS Preparation and Use - Baseline and Follow-Up

	Baseline (%)	Post-Intervention (%)	
		Total	Experimental
1. Washes hands.	12.2	30.8	36.8
2. Measures one beer bottle or two Fanta bottles of clear water.	75.6	84.6	89.5
3. Pours the clean water measured into a clean container.	68.3	79.5	84.2
4. Open one sachet of ORS.	97.6	92.3	94.7
5. Pour all the content into the measured water.	90.2	87.2	94.7
6. Stirs to dissolve.	92.7	74.4	84.2
4. States how much fluid to give a child with diarhea. a. Give drink in small amount	65.9	79.5	94.7
b. Give frequently throughout the day.	63.4	74.4	94.7
8. Throw away unused ORS after 24 hours.	43.9	56.4	68.4
9. Tell client to continue with other home available fluids for replacement of lost fluids (in addition to ORS).	4.9	23.1	42.1

Table I.4: Proportion of CBD Agents Performing Selected Tasks Connected with Pill Resupply - Baseline and Follow-Up

	Baseline (%)	Post-Intervention (%)	
		Total	Experimental
1. Greet respectfully and with kindness.	73.2	12.8	100.0
2. Respect privacy and confidentiality.	68.3	59.0	84.2
3. Ask about the purpose of the visit.	78.0	89.7	100.0
4. Question client about how she takes the pill packet.	56.1	64.1	78.9
5. Ask client what she does when she misses one pill.	28.3	33.3	36.8
6. Use check list to verify if the client does not have any problem.	9.8	53.8	94.7
7. Refer if there are any problems.	51.2	56.4	78.9
8. If there are no problems, resupply.	67.5	71.8	94.7
9. Encourage women to continue oral pills regularly.	45.0	64.1	68.4
10. Insist on return for resupply.	55.0	53.8	73.7
11. Record the client.	39.0	15.4	15.8

Table I.5: Indicators of Quality of Service Provided by CBD Agents to Clients - Follow-Up

	Percent Performing…..	
	Control	Experimental
1. Establish rapport.	95.0	100.0
2.a. Give overview of non-prescriptiveFP methods.	95.0	94.7
b. Give overview of prescriptive FP methods	60.0	89.5
3. Allow client to choose method.	70.0	84.2
Check clients' eligibility to chose method.	20.0	89.5
5. Provide correct information on chosen method.	55.0	100.0
6. Give the method.	60.0	78.9
7. Refer if necessary.	55.0	73.7
8. Use appropriate aides.	40.0	89.5
N=	20	19

Table J.1: CBD Agents' Responses to Selected Questions on Nature and Quality of Supervision Received - Baseline and Follow-Up

Indicator	Percent stating			
	Control group		Experimental group	
	Baseline	Post-intervention	Baseline	Post-intervention
Place of Supervision*				
CBD's Home	80.0	80.0	90.0	89.5
CBD's worksite	25.0	15.0	20.0	21.0
Supervisor's Home	15.0	20.0	5.0	0.0
Meetings	20.0	50.0	10.0	0.0
Others	20.0	10.0	5.0	5.3
Supervisor normally informs CBD in advance (q19)	25.0	55.0	40.0	68.4
Supervised during 1 month preceding study	35.0	90.0	15.0	89.5
Last visit took place at CBD's home	89.5	80.0	89.5	89.5
Previsit Information Provided in Addition to date of Visit*				
What will be done	60.0	68.8	50.0	60.0
How it will be done	15.0	0.0	5.0	20.0
What is needed	5.0	0.0	10.0	20.0
Where	55.0	25.0	20.0	0.0
Other	15.0	18.8	30.0	20.0
Frequency of Receiving Supervisory Visit				
Less than once a month	15.8	5.0	10.0	0.0
Once a month	31.6	50.0	15.0	36.8
Twice a month	26.3	30.0	45.0	52.6
More than twice a month	26.3	15.0	30.0	10.5
Feel at ease while communicating with supervisor	95.0	100.0	100.0	100.0

Table J.2: CBD Agents' Responses to Selected Questions on Nature and Quality of Supervision Received by Supervisors' Status - Baseline

	40.0	36.8	35.0	26.3
Areas in which Effective Supervision was received◆	40.0	73.7	30.0	36.8
Family Planning concept	5.0	21.0	5.0	21.0
Family Planning methods	25.0	36.8	35.0	36.8
First Aid	15.0	21.0	10.0	26.3
Management of supplies, finances and users	25.0	21.0	0.0	31.6
Demonstration of condom use	10.0	5.3	0.0	15.8
Demonstration of spermicide use	40.0	21.0	5.0	0.0
Demonstration of ORS	5.0	5.3	15.0	36.8
Counseling steps				
How to fill forms				
Average duration of a supervisory visit (in hours)	2.0	1.9	1.35	1.9
Indicator	Percent stating			
	Control group		Experimental group	
	Baseline	Post-intervention	Baseline	Post-intervention
Has a notebook for supervisor's comments	42.1	20.0	41.2	21.1
Supervisor shares findings with CBD agent	95.0	90.0	85.0	100.0
Supervisor shares Findings through:				
Discussion	73.7	61.1	52.9	73.7
Written Comments	10.5	0.0	5.9	0.0
Verbal Instructions	15.8	38.9	35.3	21.1
Expected Input from Supervisor◆				
Advice	15.0	30.0	15.0	0.0
More frequent supervision	30.0	35.0	35.0	15.8
Be more considerate	15.0	5.0	0.0	0.0
More advanced information about visit	5.0	0.0	0.0	0.0
Provide more constructive feed-back	5.0	5.0	5.0	0.0
Provide training	40.0	15.0	15.0	5.3
Spend more time while visiting	15.0	10.0	5.0	5.3
Logistics (raincoat, boots, bag, ID-card, etc.)	25.0	15.0	10.0	57.9
Means of transportation	20.0	20.0	35.0	26.3
Allowance	15.0	20.0	35.0	31.5
Regular supply	10.0	5.0	10.0	26.3
Visual aid	40.0	15.0	0.0	21.0

◆Multiple-response question, percentages may total more than 100

Table J.3: Supervisory Activities Mentioned by CBD Agents of the Experimental Group - Baseline and Follow-Up

Task	Percent mentioning	
	Baseline	Post-Intervention
1. Collect returns and ask about sales	42.1	36.8
2. Verify the agents' notebook	73.7	31.6
3. Check if the agents is in need of contraceptives	21.1	26.3
4. Check for problems and solve them	57.9	31.6
5. Supply the agent with equipment, materials and contraceptives	10.5	5.3
6. Conduct home visits/counseling with the agent	15.8	63.2
7. Advice the agent on contraceptive methods and the way to demonstrate them to the clients	0.0	21.1
8. Organize rallies with lectures given to the people by the opinion leaders	0.0	21.1
9. Interact with the FP committee in the community/participation in group meetings	0.0	15.8
Inform the agent about new acceptors to be visited	0.0	10.5
Number of respondents	19	19

Appendix