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Zelda C. Zablan

Josefina V. Cabigon

Luzviminda Muego

Marilou P. Costello
Population Council

Chona R. Echavez

IMPROVING THE QUALITY OF CARE IN FP/RH SERVICES OF SELECTED COMMUNITIES OF PANGASINAN PROVINCE: AN INTERVENTION STUDY

PHILIPPINES

Zelda C. Zablan
Josefina V. Cabigon
Luzviminda Muego
Marilou P. Costello
Chona R. Echavez

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FAMILY PLANNING OPERATIONS RESEARCH AND TRAINING (FPORT) PROGRAM

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Zelda C. Zablan, Ph.D.
Principal Investigator

Josefina V. Cabigon, Ph.D.
Co-Investigator

ACRONYMS

AIDS	-	Acquired Immune Deficiency Syndrome
AVSC	-	Association of Voluntary Safe Contraception
BHS	-	Barangay Health Station
BHW	-	Barangay Health Worker
BSPO	-	Barangay Service Point Officer
CBMIS	-	Community-Based Management Information System
CMW	-	Current Married Women
CS	-	Community Survey
DMPA	-	Depot Medroxy-Progesterone Acetate
DOH	-	Department of Health
DSWD	-	Department of Social Work and Development
FP	-	Family Planning
FP/RH	-	Family Planning/Reproductive Health
GATHER	-	Greet, Ask, Tell, Help, Explain and Return
HIV	-	Human Immunodeficiency Virus
HR	-	High Risk
IEC	-	Information Education Communication
IEC/M	-	Information Education Communication/Motivation
IUD	-	Intra-uterine Device
LAM	-	Lactational Amenorrhea Method
LGUs	-	Local Government Units
MCH	-	Maternal and Child Health
MCRA	-	Married Couples of Reproductive Age
MWRA	-	Married Women of Reproductive Age
MPO	-	Municipal Population Officer
NFP	-	Natural Family Planning
OPHS	-	Office of Public Health Service
OWs	-	Outreach Workers
PDHS	-	Pangasinan Demographic Health Survey
PHO	-	Provincial Health Officer
POPCOM	-	Population Commission
PPO	-	Population Program Officer
RA	-	Random Assignment
RH	-	Reproductive Health
RH-FP	-	Reproductive Health - Family Planning
RHM	-	Rural Health Midwife
RHU	-	Rural Health Unit
RTI	-	Reproductive Tract Infection
SA	-	Situation Analysis
SDP	-	Service Delivery Point
SP	-	Service Provider
STD	-	Sexually Transmitted Diseases
TCL	-	Target Client Lists
UNA	-	Unmet Need Algorithm
USAID/OPHN	-	United States Agency for International Development/ Office of Population Health and Nutrition

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EXECUTIVE SUMMARY

The intervention study was designed to improve the quality of family planning services within the context of the Integrated Family Planning and Maternal Health Program of the Pangasinan Population and Family Planning Program. It addresses the issue of high unmet need in Pangasinan province and studies the feasibility of enhancing quality of services by (1) training service providers in fixed clinics and (2) orienting the outreach workers on the method of identifying women who have unmet need for FP and switching method.

The study used a Pretest-Posttest Control Group Design in which four municipalities were purposively chosen from the 47 municipalities comprising the province of Pangasinan and randomly assigned to the experimental and control groups. Four indicators were used to match the chosen municipalities, namely: 1) population size; 2) ratio of married women to population; 3) ratio of FP service providers to population; and 4) ratio of outreach workers to population.

The intervention consisted of (1) training the health service providers (physicians, nurses and midwives) on counseling to enhance their information giving capabilities, (2) introducing the outreach workers to the unmet need algorithm (UNA) to identify women with unmet need for FP services and switching, and (3) training supervisors (physicians and nurses) in supportive supervision.

The UNA is a system for identifying women with unmet and switching needs by the use of a series of screening questions. Women who indicate that they wish to delay or limit their childbearing but are not using family planning are targeted as high priority for follow-up. Another high priority group are those who are using FP but are dissatisfied with their method and therefore are vulnerable for FP discontinuation.

The training on counseling was conducted by AVSC International using the GATHER approach. Service providers were trained on what information should be given to clients during the information exchange, namely: 1) method options without promoting a particular method; 2) contraindications and common side effects of the selected method; 3) follow-up requirements and duration of effective use of the selected method; 4) the possibility of switching if the method is not suitable; and 5) the possibility of switching the source of supply. The outreach workers were oriented for one day on selected elements of counseling

to improve their ability to communicate key messages to women. In Pangasinan, the high risk approach was implemented by the FP program as a way of determining women's needs for FP status. "High risk" status is defined by the DOH as women who belong to any or some of the following characteristics:

1. married women 19 years of age or below;
2. married women over 35 years of age;
3. married women of reproductive age with four or more previous pregnancies;
4. women with medical conditions such as TB, hypertension, anemia, etc.

This intervention study continues to implement the high risk approach in masterlisting women but uses the UNA to prioritize women for services.

Supportive supervision was introduced to ensure that counseling is firmly established within the health center. Supervisors and midwives at all levels of the FP/RH delivery system were trained for three days in facilitative supervision in order to improve the management of the outreach activities of midwives and volunteers.

The research component of this project will assess the intermediate impact of these intervention activities to change service providers' knowledge and behavior in information giving and prioritizing women for follow-up. The situation analysis methodology will be used for the impact evaluation. Four instruments were used in the situation analysis, namely: 1) Inventory of facilities available and services for FP provided at the SDP, 2) Interview schedule for SPs, 3) Observation Guide for the client-provider interaction, and 4) Exit Interview Schedule for FP clients attending the SDP. A supplementary knowledge test was also used for the pretest and posttest of providers' knowledge on contraceptive technology and counseling principles, before and immediately after the counseling training.

Data collection activities for the situation analysis were conducted in two experimental municipalities (Bugallon and Pozorrubio) and in two control municipalities (Asingan and Rosales). Data were collected by teams of two members, one with clinical training and the other with a social science background, who were both trained on Situational Analysis under the guidance of a Population Council consultant.

In SA1, there were 44 SDPs observed, 55 interviews of service providers, 78

observations of client-provider interaction and 71 exit interviews. Of the 44 SDPs observed, 23 were experimental SDPs while 21 were control SDPs. In SA2 there were 39 SDPs covered, 50 interviews of service providers, 66 observations of client provider-interaction and 63 client exit interviews. Of the 39 SDPs, 21 were experimental SDPs and 18 were control SDPs. The main reasons for a decrease in SDPs observed in SA1 and SA2 from 44 to 39 are two-fold. In SA2, the midwife did not open the BHS when the research team went for the SA in two BHSs in Rosales, because of other official business. In two BHSs of Pozorrubio, the research team did not indicate the reason for being unable to do the SA. One BHS in Asingan which was operational in SA1 but was no longer operational in SA2.

A baseline community survey (CS1) and post-baseline community survey (CS2) were undertaken in each of the experimental and control areas. There were 2,000 (1,003 for the experimental group and 997 for the control group) married women of reproductive age (MWRAs) interviewed in CS1. In CS2, 851 (out of the 1003 in CS1) in the experimental area and 876 (out of the 997) in the control area were interviewed. In all, 273 respondents (152 from the experimental and 121 from the control) were not interviewed in CS2. The main reasons were that the respondents were not available from the first to fourth call. Many transferred to another place outside the municipality in CS2.

The questionnaire used in both CS1 and CS2 in the experimental and control areas generated socio-economic and demographic information, family planning knowledge, attitude and practice variables, past experiences of reproductive morbidities, use of health facilities and quality of care variables.

The findings revealed the following:

A. Training

1. *There was a significant change in the knowledge of trained service providers on FP counseling in the experimental group.*

   Service providers in the experimental group showed significantly higher average scores on contraceptive technology and on quality of care in the posttest than in their average pretest scores during the training intervention.

2. *There was a significant change in the knowledge of supervisors and midwives in the experimental group on supportive and facilitative supervision.*

Average posttest score of service providers who underwent the facilitative supervision were significantly higher that their own average pretest score or that of the control group. Z test was conducted to test the differences of average scores.

B. Quality of Care Provision

1. Readiness to provide services of clinic service providers

a. *SA results showed improvement of SDPs in the experimental area in providing clients with auditory and visual privacy, IEC (FP health talks), and administrative supervision while SDPs in the control area showed a deterioration in these conditions. SDPs in the experimental area also showed significant improvement on recording and reporting over SDPs in the control area.*

The experimental and control SDPs were comparable in their readiness to provide services at baseline. However, at postbaseline, the awareness created by the FP counseling and supervision training have probably moved experimental SDPs to positions of advantage although not significant, compared to the control SDPs particularly on auditory and visual privacy, IEC (FP health talks), and administrative supervision. A deterioration in these aspects was observed in the control areas. Similarly, at baseline, experimental SDPs were better off than control SDPs on the maintenance of complete and well-ordered client records and logbooks as well as transmission of reports to higher levels while deterioration was observed in the control areas. Significant improvement in these aspects was shown by experimental over control SDPs at postbaseline.

b. Service providers in the experimental SDPs showed a reduction in the proportions promoting one method over another at postbaseline while the practice remains the same in the control areas. They were also more cautious and prudent in providing DMPA to clients than those in the control area.

More service providers in the experimental than in the control SDPs

tended to promote one method over another at SA1. This practice was greatly reduced in the experimental SDPs at SA2 but the difference between experimental and control SDPs was not statistically significant. On the other hand, significantly more service providers in the experimental SDPs screen out younger (<20 years), unmarried women, and those with only one child, and without husband's consent than service providers in the control area.

2. Readiness to provide services of BSPOs

a. *Higher participation of BSPOs in the experimental area than in the control area were seen in the area of masterlisting and in utilizing the data from the masterlist in planning their client visits.*

At baseline BSPOs in the experimental and control groups were comparable on the training they received, possession of a FP Program Communication Kit, supervision received, and the duties and responsibilities performed.

At postbaseline, significantly more BSPOs in the experimental group participated in the clinic workplan, prepared the masterlist of MWRAs (Form 1 Part A) and the Monthly Service Delivery Ledger (Form 1 Part C), and used the masterlist to plan their visits for the next month than in the control group.

3. The Unmet Need Algorithm

a. *Development, introduction and institutionalization of UNA has started in the experimental areas.*

As of April 1998, 88.8 per cent of masterlisted MWRAs in Bugallon and 84.5 per cent in Pozorrubio were in high health risk. In contrast, 25.3 per cent of MWRAs in Bugallon and 29.2 per cent in Pozorrubio have unmet need for family planning. Prioritizing women for family planning services using UNA is more advantageous because it identifies fewer MWRAs who may be more predisposed to use family planning and therefore promotes the efficient use of program resources.

4. Intervention Impacts on FP Use and Drop-out

a. Both experimental and control areas showed increases in contraceptive prevalence in CS2. However, the experimental area increased by only 2.2 per cent while the control area increased. by 7.9 per cent.

The intervention appears to have shown some impact on FP use in the experimental area, but greater increase in control area was likewise observed. Non-equivalence in FP program performance/output of the experimental and control areas was shown by the baseline community survey in terms of the following: 1) higher reproductive performance of MWRAs in the experimental than in the control areas; 2) higher contraceptive prevalence in the control than in the experimental areas; 3) presence of sterilization center (of AVSC) in the control area; and 5) free FP services and supplies in the control while "donations" are solicited in the experimental area.

b. Experimental area posted a slight reduction in its drop-out rate at postbaseline compared to its baseline rate while the drop-out rate in control area was more or less constant.

At baseline, the dropout-rate in the experimental area was 34.5 per cent while this was only 23.4 per cent in the control area. At postbaseline, the drop-out rate in the experimental area reduced to 31.8 per cent while this remained constant at 23.7 per cent in the control area. The study interventions may have effected this slight reduction in the drop-out rate observed in the experimental area.

Conclusions:

Quality of care improved, specifically on information giving, by training service providers on FP counseling.

The FP counseling training was effective in upgrading the knowledge of service providers on contraceptive technology, advantages and disadvantages of methods, their side effects and on quality of care.

Facilitative/supportive supervision was effective in increasing trainees knowledge in counseling and supervision but did not significantly change knowledge on contraceptive technology. There is a need for supervisors to be updated on recent developments in contraceptive technology.

After the intervention, more SDPs in the experimental than in the control area provided visual and auditory privacy for their clients. This is significant because the main intervention was centered on FP counseling to improve information-exchange between providers and clients. Visual and auditory privacy are important aspects in the counseling process.

Evidence of UNA institutionalization is evident. At postbaseline, more BSPOs in the experimental are participated in clinic workplans and accomplished the masterlisting than the BSPOs in the control area. They have also started using the data in their masterlist as guide in planning their visits to the barangays.

Results of the study revealed that UNA is an effective tool for prioritizing women for FP services because it identifies far fewer MWRAs who may be more predisposed to use FP than the High Risk approach.

Using prevalence and the difference between ever use and current use rates as proxy measures, the community survey showed that the training interventions were responsible for some improvement in prevalence in the experimental area. There was also some evidence of a reduction in the drop-out rates in the experimental area which was absent in the control area at postbaseline.

Finally, the study timeframe is too short to allow all interventions to show the expected impacts. Selection of experimental and control areas need to be based on better indicators of program strength. Changes in key program personnel within the life of a study should be avoided as much as possible. Background characteristics of program managers should be an added criterion in the selection of study sites as well as the nature and types of service facilities (e.g. presence of district hospitals providing VSC, facilities implementing cost recovery schemes, etc.).

Improving the Quality of Care in FP/RH Services of Selected Communities of Pangasinan Province: An Intervention Study

INTRODUCTION

Background

The Province of Pangasinan is among the 46 LGUs being supported under the Local Government Performance Program (LPP). It is also one of the two LGUs pilot sites in the country where the Barangay Monitoring System is currently being implemented. This system consists of a master listing of married women of reproductive ages (MWRAs) by a network of health and population outreach workers who are volunteers of the community. This activity is meant to facilitate follow-up efforts by outreach volunteer workers (including program personnel), by means of pinpointing the MWRAs and the barangays most in need of assistance.

The demographic and family planning situation of Pangasinan province shows a mixed picture. The 1995 Pangasinan Demographic and Health Survey (PDHS) has shown that contraceptive knowledge in Pangasinan was fairly high. However, only 53 percent ever-tried using a method and 43 percent of them ever-tried program methods. Still fewer women (36.5%) were found currently using a method with only 26 percent using program methods. Of the fecund, non-sterilized non-pregnant and currently married women (CMW) 15-49, 64 percent did not want to become pregnant in the future, of which only one third were found using a method of contraception. Thus, the family planning (FP) program needs to satisfy the 43 percent of non-pregnant fecund women who have an UNMET NEED for stopping or spacing births, i.e. 36 percent of all CMW 15-49.

Two major challenges face the Pangasinan FP Program: one, the persistently large proportion of drop-outs from use, and two, the high level of UNMET NEED for contraceptive information and services.

Several studies have shown that increased attention on the part of FP program

managers to the provision of quality of services to clients can go far to address these problems (e.g. Jain & Bruce, 1994). Quality of care implies that "the provision of services focuses on the individual acceptor" along with the need for continuous upgrading of programmatic services so as to help individuals reach their reproductive goals (Jain, 1996). As such, quality care may be expected to increase the probability that individuals with an unmet need will subsequently adopt FP and, having once decided to do this, that they will continue to use some form of contraception for a reasonably long period of time. In view of these considerations and through this Project, the Pangasinan FP program aims not only to increase its **coverage** but also to improve the **effectiveness** of its service delivery.

Objectives

The Project aims to improve the quality of family planning services within the context of the Integrated Family Planning and Maternal Program of the Pangasinan Population and Family Planning Program. It addresses the UNMET NEED and enhances the quality of services being offered by FP program personnel and outreach volunteer workers.

The research component of the Project aims to evaluate the impact of three interventions on unmet need and quality of services provided by FP program personnel in fixed clinics and by outreach volunteer workers. It measures the effectiveness of an algorithm to identify women with unmet need for FP services on increased use of contraceptives; and the effectiveness of training on FP counseling, information exchange and supportive supervision on the quality of FP services which is expected to increase client satisfaction, and the demand for, and continued use of, contraception.

Specific Research Objectives:

1. To assess the extent to which the **Algorithm to identify women with unmet need for FP services** has influenced the prioritization of outreach volunteer activities and increased the **demand for** and **use of** family planning services.

2. To measure the effects of the FP counseling training on:

    2a. knowledge of service providers on FP counseling and on the quality of FP information exchange with clients in fixed clinics.

3. To evaluate the effects of the supportive supervision training of doctors, nurses and midwives on quality of care provided (using Bruce framework 6 elements) in fixed clinics, as well as of municipal and district population officers on the quality of outreach activities of volunteers.

4. To assess the effects of the 3 study interventions, that is, training on FP counseling and supportive supervision, and the identification of women with unmet need, on the quality of FP services provided, client satisfaction, FP acceptance and continued use of contraception, and reproductive health status of women.

Pre-Project Program Context

The Pangasinan Population and Family Planning Program is being carried out within the context of the Integrated FP and Maternal Health Program of the Local Government Unit (LGU) of Pangasinan. This program stresses two key objectives:

(1) to "expand the availability of reproductive health services to women in high risk groups",

(2) to "foster continued provision of selected child health interventions with a view to improving infant and child survivorship" (DOH, OPHS, 1995, p.1).

As a means of attaining these goals, the Population and FP Program of Pangasinan in 1996 began implementing an innovative approach to community outreach under its Community-Based Monitoring Scheme. First implemented in three pilot communities (Mangaldan, Bugallon and Sison), the Community-Based Monitoring Scheme better known as the Community-Based Management Information System (CBMIS) has been expanded and covered almost all municipalities of Pangasinan before this Project began.

The main activity undertaken under the monitoring scheme is the compilation of an annual masterlist of all married women of reproductive ages (MWRAs) living in a particular barangay. This task is carried out by volunteer outreach workers (BSPOs) under the supervision of clinic personnel. Among the questions included on the monitoring form are items which check if the respondent falls within one of the five major categories for a **high**

risk pregnancy, that is: (1) women who are older than 35 years of age ("too old"), aged below 20 ("too young"), with four or more previous pregnancies ("too many"), with a child below 15 months ("too soon"), or with a medical condition (women treated for diseases such as tuberculosis, malaria, anemia, heart or kidney diseases, hypertension, liver or blood diseases, or peptic ulcer). The **Masterlist** serves two major purposes:

(1) it provides clinic staff and outreach volunteers a reference for current and prospective FP clients living in their assigned areas. Women could thus be identified according to their needs, as follows:

(a) those in need of regular supply (RESUPPLY)
(b) those who failed to return for a scheduled appointment (FOLLOW-UP), and
(c) those who are not using but fall in one or more of the high risk categories, and who need to be counseled on the risks to which they may be subjecting themselves and their children (COUNSELING).

(2) it provides information needed in the reallocation of material and human resources. At the supervisory level a simple comparison of monitoring forms from all barangays in the municipality can identify those areas where the ratio of eligible couples to outreach workers is high, or the proportion of high risk women is excessive. These data serve as a basis for assigning additional workers or volunteers, and resources to barangays in need of additional assistance.

This Project provided a package of quality of care interventions that complemented and built on the existing strategies and approaches used by the Population and Family Planning Program of Pangasinan. Utilizing the CBMIS, the Project expanded the CBMIS to include an Algorithm that identifies women with UNMET NEED for family planning which it prioritizes for additional follow-up. Other quality of care inputs included FP counseling, counteracting rumors and misconceptions about FP, and supportive supervision. These interventions are discussed in more detail in the section which follows.

Project Interventions

1. **Algorithm to identify women with Unmet Need for FP services**. The Unmet Need Algorithm (UNA) is an instrument for prioritizing women with unmet need for family planning into three types: (1) those who have expressed a desire to limit childbearing but who are not using FP; (2) those who wish to delay their next birth but who are not using FP; and (3) those who are using FP but who are dissatisfied with their method and therefore are vulnerable to contraceptive discontinuation.

   The training of volunteer outreach workers in contacting current and potential clients (i.e., all MWRAs) to ascertain both their reproductive goals and their contraceptive behavior was conducted on November 28 and December 5, 1997 in San Fabian, Pangasinan. The algorithm was used in January to March 1998 during the regular masterlisting of every MWRA in each barangay by volunteer outreach workers. Women with unmet need are considered a priority for **information-giving, referral and follow-up activities** of outreach volunteers. These women are advised about FP services available at the nearest health clinic, and if they are agreeable, the outreach worker makes a tentative appointment for them to visit the clinic. Progress in contacting women with unmet need and in providing them with FP services is discussed during the monthly meetings held among clinic service providers, volunteer outreach workers and supervisors for health and population activities. Only two such meetings took place. A reporting system was installed in January 1998 for assessing progress. For further details about the CBMIS and the Unmet Need Algorithm.

2. **Training in FP Counseling**. On September 29 to October 10, 1997 in San Fabian, Pangasinan, service providers in fixed clinics and volunteer outreach workers were trained for one week in counseling to improve **information exchange** with their clients. The information provided to clients consisted of: (1) method options without promoting a particular method; (2) contraindications and common side effects of the selected method; (3) follow-up requirements and duration of effective use of the selected method; (4) the possibility of switching if the method is not suitable; and (5) the possibility of switching the source of supply. Through the provincial trainors trained by AVSC and their resource persons, clinic service providers were trained for one week in FP counseling using the GATHER approach. The outreach volunteers were trained for one day on selected elements of counseling (i.e., GATR) to improve

their information exchange with women in the community. Both clinic service providers and outreach volunteers were trained to follow-up women identified as having an unmet need. Specifically, the training addressed the following concerns:

(a) Ensure that clients have visual and physical privacy for information sharing, personal interviews and physical examinations;

(b) Ensure that service providers treat clients with dignity and respect;

(c) Ensure that service providers assist the client's choice process by soliciting information from clients about their background (age, number of children), reproductive goals (timing of next desired child), attitudes and preferences for contraceptive methods, and prior experience with contraceptive methods;

(d) Ensure that service providers are technically competent in counseling clients (using the GATHER approach), screening clients for contraindications, supplying clinical methods, and applying aseptic techniques; and

(e) Ensure that service providers adhere to clinical standards in all aspects of service delivery.

3. **Training in Supportive Supervision**. Supervisors and midwives at all levels of the FP/RH service delivery system were trained for **three days** in facilitative supervision to improve the management of the outreach activities of volunteers, as well as to ensure the continued implementation of improved counseling in clinics.

Conceptual Framework and Hypotheses

As seen in the conceptual framework presented in **Figure 1**, the three program interventions are expected to improve the quality of care of RH/FP services resulting in an increased demand for family planning and use of contraception. These latter two factors are ultimately expected to contribute to a reduction in unintended pregnancies and reproductive morbidity.

For figure 1

An assessment of the impact that the interventions have upon the quality of care is the objective of the first phase of this study. This objective is attained through an experimental research design discussed in the following section on Methodology. The hypotheses tested were formulated around comparisons between the experimental and control areas utilized in this design and include the following:

1a. **Knowledge about health risks, unmet need and appropriate counseling messages** will be higher among outreach workers (OWs) and service providers (SPs) after the intervention in the experimental areas than in the control areas.

1b. There will be an increase in the above knowledge levels among SPs from the experimental areas **after they have been trained and supervised** in these subjects.

2a. **Client-provider interactions** in the experimental areas will show greater evidence of good quality service provision after the intervention (e.g. provision of privacy for counseling and examination, attitude toward clients exhibited by the SPs, utilization of proper procedures for soliciting and sharing FP-related information, use of proper screening procedures and of aseptic examination technique) than will be the case in the control areas.

2b. There will be a positive improvement in the above-noted practices among SPs from the experimental communities **after they have been trained and supervised** in these matters.

3. FP clients from the experimental areas will report a significantly higher level of **satisfaction** with the services they have received from the program than will clients from the control areas.

Two community-level surveys were carried out during Phase I and a series of community surveys will be carried out during Phase II of this study. This will make it possible to collect information on several other hypotheses related to our medium-range and long-term objectives:

4. There will be a **higher proportion** of **new users** of RH/FP services among women in the experimental than in the control areas.

5. The proportion of FP acceptors who become **dropouts** will be **lower** in the experimental than in the control areas.

6. The level of **unintended pregnancies** in the experimental areas will be **lower** than in the control areas.

7. The level of **reproductive morbidity** will be **lower** among women in the experimental areas than in the control areas.

Time constraints do not allow a definitive test of these hypotheses during Phase I of the present study. However, it is expected that, by the completion of Phase II, these hypotheses will have been tested.

METHODOLOGY

Research Design

As stated in Chapter I, the research component of the Project aimed to evaluate the "impact" of three project interventions: (1) an algorithm to identify women with unmet need for FP services; (2) training in FP counseling; and (3) training in supportive supervision. To meet this objective, the study design used is a Pretest-Posttest Control Group Design in which four municipalities were randomly assigned (RA) from the 47 municipalities constituting the whole province of Pangasinan to the experimental group and the control group. The municipalities randomly assigned to the experimental group are Bugallon and Pozorrubio. Those randomly assigned to the control group are Asingan and Rosales. Both the experimental and the control group received an initial measurement observation of two types, situation analysis and community survey (the pretests or baselines O_1 and O_3). The experimental group then received the three project interventions (X) stated earlier, but the control group did not receive such interventions. Approximately four months after the last intervention, the same measurement observation of two types, situation analysis and community survey (the posttests or post-baselines O_2 and O_4) were undertaken. The experimental design is shown in the following diagram :

		Time ---------->		
RA	Experimental group	O_1	x	O_2
	Control group	O_3		O_4

It is expected that O_2 would be greater than O_4 because of the project interventions in the experimental group. Given the random assignment of these municipalities, O_1 should be more or less equal to O_3.

Selection of the Study Municipalities

Four municipalities were purposively chosen from 47 municipalities comprising the province of Pangasinan and were randomly assigned to the experimental and control groups. To match these four purposively chosen municipalities before randomly assigning each pair to the experimental and control groups four indicators were used: (1) population size; (2) ratio of married women to population; (3) ratio of family planning (FP) service providers to population; and (4) ratio of outreach workers to population. The remaining two study municipalities were randomly drawn from those municipalities having values on these four indicators close to the corresponding values for the first two randomly drawn municipalities. **Table 2.1** presents the resulting study municipalities based on the above stages and criteria.

Table 2.1: Resulting Study Municipalities According to Selected Indicators

Study Municipality	Indicator			
	Population size	Married Women Population Ratio	Family Planning Service Providers Population Ratio	Outreach Workers Population Ratio
First Matched Pair				
Asingan	46,647	3,887	3,110	1,555
Bugallon	50,478	4,207	3,155	2,524
Second Matched Pair				
Pozorrubio	53,374	4,761	4,029	1,540
Rosales	47,616	4,762	3,968	1,287

The final matching criterion was the number of rural health units (RHUs) with Asingan and Bugallon having two RHUs; hence, one of them would be experimental and the other control. Pozorrubio and Rosales had each one RHU; therefore, one of them would be the experimental and the other control. The Provincial Population Officer identified Bugallon and Pozorrubio as the experimental municipalities and Asingan and Rosales as the control municipalities.

Data Collection

Situation Analysis. The baseline situation analysis (SA1) in the experimental group and control group took place in June-July 1997 in all service delivery points (SDPs) which are the rural health units (RHUs), and barangay health stations (BHSs). The post-baseline (SA2) in both experimental and control groups was conducted in March 1998. The same set of four questionnaires were used in both baseline and post-baseline SAs: (1) Inventory of the facilities and services at the SDP; (2) Service Provider's interview; (3) Observation of Client-Service Provider interaction; and (4) Client Exit interview of clients. These questionnaires had to be administered within "one day in the life of the SDP". Therefore, trained interviewers (with social science background) and process observers (with medical background, mostly nurses) had to go to a particular SDP during market day and arrive before the SDP opened in the morning to make observations of client-service provider interactions, and to conduct client exit interviews. Priority activities performed in the morning were the administration of the third and fourth instruments, because clients generally seek health or family planning services during the morning to coincide with their marketing activity. Inventory of the facilities and services at the SDP and interview of service providers generally took place in the afternoon when very few clients or even no clients were present. As part of the SA, the interviewers noted the time the SDP opened in the morning and closed in the afternoon.

There were 44 SDPs covered, 55 interviews of service providers, 78 observations of client-provider interaction and 71 client exit interviews in SA1 **(Table 2.2).** In SA2 there were 39 SDPs covered, 50 interviews of service providers, 66 observations of client-provider interaction and 63 client exit interviews. The main reasons for a decrease of SDPs covered from SA1 to SA2 from 44 to 39 are two-fold. In SA2, the midwife did not open the BHS when the research team went for the SA in two BHSs in Rosales, because she was either on delivery call or had to travel to Manila. In two BHSs of Pozorrubio, the research team did not indicate the reason for being unable to do the SA. One BHS in Asingan which was operational in SA1 was no longer operational in SA2. It must be noted at this point that there are six RHUs (two each for Bugallon and Asingan and one each for Pozorrubio and Rosales) and the remainder are all BHSs.

Table 2.2: Coverage of Baseline and Post-Baseline Situation Analyses (in absolute number)

Group/Municipality	SDP		Service Provider interview		Client-Provider Interaction		Client Exit Interview	
	SA1	SA2	SA1	SA2	SA1	SA2	SA1	SA2
Experimental	**23**	**21**	**29**	**28**	**39**	**37**	**36**	**36**
Bugallon	12	12	16	16	30	26	29	25
Pozorrubio	11	9	13	12	9	11	7	11
Control	**21**	**18**	**26**	**22**	**39**	**29**	**35**	**27**
Asingan	10	9	13	12	15	12	13	12
Rosales	11	9	13	10	24	17	22	15
TOTAL	**44**	**39**	**55**	**50**	**78**	**66**	**71**	**63**

Note that six of the 44 SDPs in SA1 and 39 in SA2 are RHUs. The rest are BHSs.

Modified Situation Analysis. The baseline modified SA1 was conducted in the experimental and control areas among all barangay service point officers (BSPOs) in the week before the conduct of SA1 in June 1997 before the project interventions. The modified SA2 also took place in the experimental and control areas one week before SA2 in March 1998 . Only one questionnaire was used. It consisted of two parts. Part I refers to the length of service of BSPOs as volunteers, their work hours, trainings received, duties and responsibilities, supervision they received, coordination and community participation activities. Part II relates to their implementation of the Barangay Monitoring Scheme, the status of masterlisting, and its use in planning and in monitoring progress of outreach workers. Part II of the questionnaire in Modified SA2 was expanded to include information on the implementation of the Unmet Need Algorithm (UNA) one of the project interventions referred to in Chapter I.

Table 2.3: Coverage of Baseline and Post-Baseline Modified Situation Analysis (in absolute number)

Group/Municipality	Modified SA1	Modified SA2
Experimental	**42**	**56**
Bugallon	16	22
Pozorrubio	26	34
Control	**72**	**72**
Asingan	39	36
Rosales	33	36
TOTAL	**114**	**128**

In all, 114 BSPOs were interviewed in Modified SA1 and 128 BSPOs in Modified SA2. The increase in BSPO respondents in the modified SA2 was due entirely to the increase in recruitment of BSPOs in the study areas to replace inactive ones.

Community Survey. The baseline community survey (CS1) and post-baseline community survey (CS2) were undertaken in each of the experimental and control areas in August-September 1997 and March-April 1998, respectively. A total sample size of 2,000 married women of reproductive age (MWRA) aged 15-44 years in the experimental and control municipalities was determined according to the following rationale. The impact study is interested to test if increasing the quality of services provided would lead to an increase in the contraceptive continuation rate and decrease in the unintended pregnancy rate. The unintended pregnancy rate in the control area was 20 percent of all pregnancies occurring during a period of 18 months of observation. It is the interest of the study to find out if the intervention can reduce this risk to at least 15 percent. Using a one-tailed test criteria of testing statistical significance, the sample size required for the study is 711 each for users and non-users in the experimental and control areas. (Adapted from a table prepared by Elizabeth Westley, Population Council Memo, dated 11 October 1996). To allow for the attrition of cases normally experienced in a panel study of this type, the number of cases was increased to 1,000 MWRAs, in each group.

The MWRA masterlist annually compiled by the Provincial Population Office in Pangasinan under its CBMIS as explained in Chapter I provided the sampling frame for drawing the sample of 2,000 MWRAs. As of August 1997 there were 11,654 and 11,371 MWRAs listed in the experimental and control areas, respectively. Systematic sampling following a random start yielded the total sample size of 2,000 MWRAs (1,003 for the experimental group and 997 for the control group). The main reason for the slightly unequal sample size is the drawing of 2,000 from the combined MWRAs (23,025) in the experimental and control areas instead of separately drawing 1,000 from each group. Using a sampling interval of 11.5 (23,025/2000) rounded to 12 resulted in a sample size for the experimental area larger by three owing to its slightly larger MWRA size than that of the control area (11,654 vs. 11,371). The MWRAs in the experimental area were numbered from 1 to 11,654 and those in the control area numbered from 11,655 to 23,025 and the random start was 11. These 2,000 MWRAs were all interviewed in CS1. However, 273 (about 13.7 percent) of them were not interviewed in CS2. The main reasons were that the respondents were not available from the first to the fourth call, or transferred to another place outside the municipality in CS2. **(Table 2.4)**.

The questionnaire used in both CS1 and CS2 in the experimental and control areas generated basic socio-economic and demographic information, family planning knowledge, attitude and practice variables, past experiences of reproductive morbidities, use of health facilities and quality of care variables. A summary of the data collection activities conducted in Phase I of the project is presented in **Figure 2.**

Table 2.4: Distribution of Sample MWRAs (Eligible and Actually Interviewed) by Experimental and Control Groups

Group	Sample MWRA			
	Community Survey 1		**Community Survey 2**	
	Eligible	Interviewed	Eligible	Interviewed
Experimental	**1003**	**1003**	**1003**	**851**
Bugallon	503	503	503	412
Pozorrubio	500	500	500	439
Control	**997**	**997**	**997**	**876**
Asingan	499	499	499	443
Rosales	498	498	498	433
TOTAL	**2000**	**2000**	**2000**	**1727**

Methods of Analysis

Training: Training is the the primary intervention in the study. It consists of three parts: (1) one week live-in training of service providers (public health nurses and midwives) on FP counseling; (2) one-week live-in training of supervisors (Provincial/District FP Coordinators, Municipal Health Officers, public health nurses, District/Municipal Population Officers) on supportive and facilitative supervision in the context of quality improvement; and (3) training of Barangay Service Point Officers (BSPOs) on the use of Jain's UNA which uses reproductive intentions (want more /want no more children) of women not using FP, and satisfaction or dissatisfaction with current method as a basis for identifying women needing priority attention.

These training programs have built-in designs for evaluating their immediate effects. There are two designs built into the FP counseling and supportive and facilitative supervision training programs for the service providers. One is the pretest-posttest non-experimental design as schematically shown below.

Time

Experimental Group ---------->

O_1 X O_2

An initial measurement observation (O_1) or pretest was made to those training participants (experimental group) just before their actual training (X). Then just after their actual training before they left for home, the trainees were administered the second set of measurement observation (O_2) or posttest. However, it is very difficult to infer that X "caused" the O_1 - O_2 difference because there are several confounding extraneous variables that are possible threats to validity. These are: (1) history (changes producing events, e.g. laughter, distracting events such as season or institutional-event schedule); (2) maturation (biological or psychological processes such as hunger, tiredness or boredom); (3) testing (pretest effect).

The other design built into the counseling and supervision training programs is the posttest - only control group design which is an experimental design in which municipalities were randomly chosen. The diagram below illustrates this design.

Time

---------->

Experimental Group X O_2

RA

Control Group O_3

Although a pretest was conducted on the experimental group, no pretest was taken with the control group, hence the effect of X could only be measured by comparing O_2 and O_3. This design is not subject to the threats to validity as stated earlier with the first design. The *t* test is used to assess whether an O_2 - O_3 difference is statistically significant.

Since the first design is subject to several threats to validity (history, maturation, testing and instrumentation) while the second design is not, the conclusions arrived at in the succeeding chapter are based on the second design.

All of the public health nurses and midwives in both experimental municipalities (Bugallon and Pozorrubio) were trained on FP counseling. All public health nurses and midwives in both control municipalities (Asingan and Rosales) participated in the measurement observation.

The 10 participants in the supportive and facilitative supervision training include one Provincial FP Coordinator, one District FP Coordinator, two Municipal Health Officers, one District Population Officer, two Municipal Population Officers and three public health nurses. The control group is fewer by one because in Asingan, the RHU Poblacion Midwife is the Municipal Population Officer. Being mainly a service provider, she belongs to the FP counseling training control group and therefore answered the FP counseling measurement instrument. She would have responded to two measurement instruments but to avoid response fatigue, one measurement instrument is sufficient for the study purpose.

SA data: Linking data between and among the four SA questionnaires allows for a much richer and more informative analysis. The report basically follows most of the suggestions by Miller, et. al (1997: 157-187) as the plan of analyzing SA data and derivation of relevant indicators. It adopts the typical outline for SA primary report as follows:

A. Description of samples
B. Readiness to provide services
    1. Services provided
    2. Infrastructure, facilities, and equipment
    3. Staff experience and training
    4. IEC materials and activities
    5. Supplies and logistics
    6. Recordkeeping, reporting and supervision
C. Quality of services
    1. Interpersonal relations
    2. Choice of methods
    3. Information exchange
    4. Appropriateness and acceptability of services

Comparing SA1 and SA2 on these variables is the focus of the analysis.

Modified SA data. The mode of analysis of the modified SA data is mostly univariate and bivariate, also directed towards comparing modified SA1 and SA2. Analysis of completed UNA forms is also undertaken.

Community Survey data. The comparison of CS1 and CS2 data uses univariate and bivariate analyses. It is guided by the following outline:

1. Profile of MWRAs
2. Reproductive Performance, Behavior and Intentions
3. Contraceptive History, Problems, Behavior and Intentions
4. Health Status (Overall and Reproductive) and Behavior
5. Utilization of FP and Health Services
6. Quality of Care

Hypothesis testing. In the analysis of all three types of data, hypotheses were tested using conventional tests for the significance of differences between experimental and control groups on the variables of interest. Other tests for relationships were also used where appropriate.

CHAPTER III
IMMEDIATE EFFECTS OF THE TRAINING INTERVENTIONS

Introduction

Measuring the immediate effects of the training intervention on FP counseling, supportive and facilitative supervision and use of UNA is the main concern of this chapter. The trainings on FP counseling and supportive and facilitative supervision were done with AVSC International Philippines as the source of trainers. The principal investigator and the provincial population officer of Pangasinan handled the practicum training of the BSPOs using the actual UNA forms.

Immediate Effects of FP Counseling Training

Table 3.1 presents the correct pretest and posttest scores of the 24 participants in the one-week live-in training on FP counseling. Comparing the pretest (O_1) and posttest (O_2) scores on each of the three topics (contraceptive technology and FP counseling skill, quality of care and monitoring and supervision), the posttest scores are consistently higher than the pretest scores. However, as stated in the preceding section the observed difference might be due to the training itself (X), history, testing, maturation and instrumentation. Hence, the effect of the training course should be examined by comparing the posttest scores of the experimental group and the posttest scores of the control group (**Table 3.2**). Relevant indicators for analyzing the observed difference in O_2 and O_3 are shown in **Table 3.3**. Overall, those who underwent the training on FP counseling (experimental group) reveal statistically and significantly higher average scores than those who were not trained (control group). The areas in which training plays an important role are on contraceptive technology, their advantages and disadvantages (particularly side effects) and FP counseling skill and quality of care. The training did not have a significant effect on the monitoring and supervision topic which focused on the nature and use of the CBMIS and the UNA.

Table 3.1: Training on FP Counseling: Correct Pretest and Posttest Scores of Trainees (Experimental)

ID Number	Pretest (Experimental)				Posttest (Experimental)			
	A	B	C	**TOTAL**	A	B	C	**TOTAL**
1	7	8	3	**18**	13	8	8	**29**
2	9	9	4	**22**	12	8	8	**28**
3	7	10	4	**21**	16	13	6	**35**
4	7	8	6	**21**	17	11	8	**36**
5	12	11	6	**29**	12	9	8	**29**
6	12	10	7	**29**	18	15	6	**39**
7	14	10	6	**30**	16	14	7	**37**
8	10	8	4	**22**	17	14	4	**35**
9	10	9	4	**23**	15	14	4	**33**
10	7	7	5	**19**	20	12	4	**36**
11	11	9	7	**27**	14	9	6	**29**
12	10	9	5	**24**	12	10	5	**27**
13	6	7	7	**20**	10	10	6	**26**
14	8	8	6	**23**	14	11	6	**31**
15	4	9	5	**17**	9	10	7	**26**
16	5	8	6	**20**	17	10	6	**33**
17	5	2	6	**19**	13	6	6	**25**
18	4	7	6	**12**	15	6	8	**29**
19	5	7	7	**19**	12	10	6	**28**
20	5	7	6	**18**	10	10	6	**26**
21	6	6	7	**19**	8	10	7	**25**
22	8	8	7	**23**	13	10	5	**28**
23	10	9	3	**22**	12	10	6	**28**
24	6	8	6	**20**	9	10	6	**25**
Mean	7.8	8.2	5.5	21.5	13.5	10.4	6.2	**30.1**
Standard Dev.	2.7	1.7	1.3	4.1	3.1	2.3	1.2	**4.3**

A = On Contraceptive Technology and FP Counseling Skill

B = On Quality of Care

C = On Monitoring and Supervision

Table 3.2: Correct Posttest Scores of Control Group: Training on FP Counseling

Posttest (Control)				
ID Number	**A**	**B**	**C**	**TOTAL**
1	12	8	7	**27**
2	12	8	7	**27**
3	11	9	6	**26**
4	12	9	7	**28**
5	10	9	7	**26**
6	11	8	7	**26**
7	12	9	7	**28**
8	8	8	5	**21**
9	12	9	6	**27**
10	6	5	7	**18**
11	6	6	6	**18**
12	8	6	7	**21**
13	8	9	7	**24**
14	8	8	7	**23**
15	6	10	5	**21**
16	8	7	7	**22**
17	11	8	7	**26**
18	9	2	7	**18**
19	9	8	7	**24**
20	10	2	7	**19**
Mean	9.5	7.4	6.7	23.5
Standard Deviation	2.1	2.2	0.7	3.5

A = On FP Methods Knowledge an FP Counseling Skill

B = On Quality of Care

C = On Monitoring and Supervision

Table 3.3: Significance of the Difference in the Average Scores of the Experimental Group (O_2) and Control Group (O_3): Training on FP Counseling

	Number of Cases	Mean	Standard Error	*t* Value	Significance level
1. On Contraceptive Technology and FP Counseling Skill					
Experimental	24	13.5	.64	**4.92**	**.00**
Control	20	9.5	.48		
2. On Quality of Care					
Experimental	24	10.4	.48	**4.37**	**.00**
Control	20	7.4	.49		
3. On Monitoring and Supervision					
Experimental	24	6.2	.26	-1.49	.14
Control	20	6.7	.15		
4. Overall Average Scores					
	24	30.1	.88	**5.53**	**.00**
Experimental	20	23.5	.79		
Control					

Immediate Effects of Training on Supportive and Facilitative Supervision

Table 3.4 compares the correct pretest and posttest scores of the 10 trainees (experimental group) on supportive and facilitative supervision and the corresponding scores of the control group. As observed with FP counseling, the average posttest scores of the experimental group are higher than the average pretest and control group scores. **Table 3.5** portrays more clearly the effect of the training intervention. The average overall correct scores of the experimental group are significantly higher than that of the control group. The training increased knowledge and skill in counseling and supervision, but did not make a significant change on knowledge of contraceptive technology.

Table 3.4: Training on Supervision: Correct Scores of Experimental and Control Group

Supervisor Workshop (Control)					Supervisor Workshop (Experimental)								
Post Course Assessment					Pre-Course Assessment					Post Course Assessment			
ID No.	A	B	C	TOTAL	ID No.	A	B	C	TOTAL	A	B	C	TOTAL
1	7	8	3	**18**	4	7	10	4	**21**	12	12	5	**29**
2	7	8	3	**18**	5	6	3	4	**13**	10	10	5	**25**
3	8	10	2	**20**	6	7	7	3	**17**	10	11	5	**26**
4	9	9	0	**18**	7	11	14	2	**27**	13	11	4	**28**
5	6	10	3	**19**	8	11	10	2	**23**	12	11	4	**27**
6	5	6	3	**14**	9	7	8	4	**19**	10	10	5	**25**
7	6	8	3	**17**	10	8	6	2	**16**	9	8	2	**19**
8	5	9	3	**17**	11	9	9	2	**20**	11	10	5	**26**
9	5	8	4	**17**	13	8	7	2	**17**	10	8	4	**22**
					14	5	5	2	**12**	6	6	3	**15**
Mean	**6.4**	**8.4**	**2.7**	**17.6**		**7.9**	**7.9**	**2.7**	**18.5**	**10.3**	**9.7**	**4.2**	**24.2**
Standard Dev.	**1.4**	**1.2**	**1.1**	**1.7**		**1.9**	**2.9**	**0.9**	**4.3**	**1.9**	**1.8**	**1.0**	**4.3**

A = On Counseling

B = On Contraceptive Technology

C = On Supervision

Table 3.5: Significance of the Difference in the Average Scores of the Experimental Group (O_2) and Control Group (O_3): Training on Supportive Supervision

	Number of Cases	Mean	Standard Error	*t* Value	Significance level
1. On Counseling					
Experimental	10	10.3	.62	**4.88**	**.00**
Control*	9	6.4	.48		
2. On Contraceptive Technology					
Experimental	10	9.7	.58	1.7	.10
Control	9	8.4	.41		
3. On Supervision					
Experimental	10	4.2	.33	**3.1**	**.01**
Control	9	2.7	.37		
4. Overall Scores					
Experimental	10	24.2	1.37	**4.49**	**.00**
Control	9	17.6	.56		

* In one control municipality (Asingan), the RHU Poblacion midwife is the municipal Population Officer but being mainly a service provider, she belongs to the FP counseling training control group and therefore answered the FP counseling measurement instrument.

Summary and Conclusions

Training on FP counseling and supportive and facilitative supervision made a significant improvement on relevant knowledge and skills of participants, and illustrate the central role training plays in upgrading FP service providers and supervisors. The areas in which the project training intervention did not have a significant effect are nature and use of CBMIS, and UNA and contraceptive technology. It appears that those trained and not trained under the project intervention are highly knowledgeable when it comes to contraceptive technology because of their previous training and experiences.

CHAPTER IV
INTERVENTION IMPACTS ON READINESS TO PROVIDE SERVICES AND QUALITY OF CARE: SITUATIONAL ANALYSIS RESULTS

Introduction

The presentation of the results of the situational analysis in SA1 and SA2 is directed towards the attainment of two of the essential objectives of an SA. These are: (1) to describe and compare the current readiness of service delivery staff and facilities to provide quality services to clients, and (2) to describe the actual quality of care received by clients. However, with the implementation of three project interventions with a built-in pretest-posttest control group research design, the SA1 and SA2 data allow the measurement of some effects, though short-term, of the interventions. Hence, apart from fulfilling the above two objectives, the analytical strategy extends the comparison of the experimental (O_1) and control (O_3) groups before the intervention to a comparison of the same experimental (O_2) and control (O_4) groups after the intervention.

With the random assignment of the study areas, it is expected that O_1 would be more or less equal to O_3 on some if not most of the background variables considered in the study design. Examples of these basic non-program variables are type and locality of the SDPs and socio-demographic characteristics of the service providers and FP clients. The following section focuses on a description of the samples to assess if this expectation is valid. If this expectation is fulfilled, then inferences regarding the immediate effects of the project interventions on some program variables can be made.

Description of the Samples

SDPs by Type and Locality. Recall that the number of SDPs observed in SA1 and SA2 decreased from 23 to 21 in the experimental area, and from 21 to 18 in the control area. This was due to the absence of the midwife because of delivery or important travel, and the closure of one SDP at SA2. Moreover, it is worth noting that all study SDPs belong to the government sector. They are mostly BHSs (ranging from 83 to 87%) and are located in rural lowland areas (**Table 4.1**). It appears that there is a very slight difference in type and locality between the experimental and control SDPs.

Table 4.1: Percentage Distribution of SDPs by Various Characteristics, SA1 and SA2

Characteristics	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**23**	**21**	**21**	**18**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Type				
RHU	13.0	14.3	14.3	16.7
BHS	87.0	85.7	85.7	83.3
2. Locality				
Urban	13.0	9.5	14.3	11.1
Rural lowland	74.0	81.0	76.2	77.8
Rural upland	13.0	9.5	9.5	11.1

FP Clients. In both SA1 and SA2, the number of exit interviews of FP clients was less than the number of those observed during the client-provider interaction (**Table 4.2**). Those observed but not interviewed could not remain for the interview for personal reasons.

Table 4.2: Percentage Distribution of FP Clients by Main Purpose of Visit to the SDP

Main purpose of visit	SA1		SA2	
	Experimental	Control	Experimental	Control
1. Interviewed while exiting				
N	**36**	**35**	**36**	**27**
%	**100.0**	**100.0**	**100.0**	**100.0**
New FP client	13.9	17.1	41.7	25.9
Revisit of Follow-up	77.8	77.2	38.9	59.3
Coming for follow-up because of a problem	8.3	5.7	19.4	14.8
2. Observed during client-provider interaction have or have not been interviewed while exiting				
N	**39**	**39**	**37**	**29**
%	**100.0**	**100.0**	**100.0**	**100.0**
New acceptor	12.8	15.4	40.5	24.1
Resupply or regular follow-up	71.8	66.7	40.5	58.6
Problem with method or wanted to change method or wanted to discontinue method	15.4	17.9	19.0	17.3

Most of the FP clients in the experimental and control groups during SA1 visited the SDP for contraceptive resupply. What is interesting is that in SA1, there is no substantial difference in the distribution of these clients by main purpose of visit to the SDP between the experimental and control groups. In SA2 however, the differences in the distribution of the new and revisit clients between the experimental and control group are relatively large with a percentage-point difference of 15 or greater although they are not significantly different. The significant increase of new FP clients from SA1 to SA2 in the experimental areas could be partly attributed to the initial effects of the intervention programs but the role of other factors cannot be ignored, because the difference between the experimental and control groups in SA2 is not statistically significant.

Examining how the study cases differ by socio-demographic characteristics (**Table 4.3**) reveals the same pattern of more marked differences observed between the two groups in SA2 than in SA1. The experimental and control cases do not differ greatly by age and education in SA1, but differ significantly for the high school and college educated in SA2. Some significant differences are however present with religion and literacy in SA1 only.

Table 4.3: Percentage Distribution of FP Clients Interviewed While Exiting the SDP by Socio-Demographic Characteristics

Socio-demographic Characteristics	SA1		SA2	
	Experimental	Control	Experimental	Control
N[a]	**36**	**35**	**36**	**27**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Age				
15-24	19.4	14.3	19.4	22.2
25-29	36.2	34.3	19.5	33.3
30-34	22.4	40.0	36.1	29.6
35+	22.0	11.4	25.0	14.9
Median	**27.8**	**28.2**	**31.3**	**26.8**
2. Highest level of School Completed				
Elementary	33.3	28.6	27.8	14.8
High School	38.9	51.4	36.1	70.4*
College	27.8	20.0	36.1	14.8*
3. Read and Understand a letter or a newspaper easily				
N	**12**	**10**	**10**	**4**
%	**100.0**	**100.0**	**100.0**	**100.0**
Not at all	-	30.0	-	-
With difficulty	58.3	60.0	80.0	50.0
Easily	41.7	10.0*	20.0	50.0
4. Religion				
Catholic	94.4	60.0*	94.4	81.5
Non-Catholic	5.6	40.0*	5.6	18.5

[a]Base for all the variables except when N is specified for a given category.

* Significantly different from experimental group with Z value >2.0 or <-2.0.

A closer look at these exit-interview FP clients with respect to their reproductive status reveals that in SA1 the experimental and control groups do not differ greatly in average number of living children (except for the category 3), average age of youngest child (in years), unwanted fertility, full breastfeeding status and abortion attempt (**Table 4.4**). In SA2, the magnitude of percentage-point differences was larger although not statistically significant except for number of living children and having an unwanted pregnancy. More clients in experimental SDPs wanted no more children than in the control SDPs, and there were more immediate postpartum cases in the control than experimental SDPs as reflected by breastfeeding practice. The control SDP clientele consist of women in their immediate postpartum period who want more children, while clients in experimental SDPs consist of women who want to stop childbearing.

Table 4.4: Percentage Distribution of FP Clients Interviewed While Exiting the SDP by Reproductive Status

Reproductive Status	SA1		SA2	
	Experimental	Control	Experimental	Control
N[a]	**36**	**35**	**36**	**27**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Number of living children				
1	8.3	17.1	13.9	25.9
2	38.9	22.9	8.3	29.6*
3	13.9	37.1*	27.8	22.2
4 or more or none	38.9	22.9	50.0	22.3*
Median	**2.2**	**2.3**	**2.9**	**1.8**
2. Age of youngest child (in years)				
Less than 1	11.1	14.3	38.9	33.3
1	16.7	11.4	25.0	14.8
2	25.0	20.0	11.1	25.9
3	22.2	25.7	8.3	18.5
4 or more	25.0	28.6	16.7	7.5
Median	**1.9**	**2.2**	**0.4**	**0.9**
3. Wanted to have more children	41.7	37.1	27.8	48.1
4. When to have more children				
N	**15**	**13**	**10**	**13**
%	**100.0**	**100.0**	**100.0**	**100.0**
Immediately or up to two years	20.0	7.7	10.0	15.4
More than 2 years	66.7	69.2	60.0	76.9
Others	13.3	23.1	30.0	7.7
5. Currently breastfeeding	47.3	28.6	27.8	37.0
6. Currently full breastfeeding	19.4	11.4	5.6	14.8
7. Had unwanted pregnancy	30.6	45.7	16.7	51.9*
8. Had attempted to abort				
N	**11**	**16**	**6**	**14**
%	**100.0**	**100.0**	**100.0**	**100.0**
Yes	18.2	12.5	-	-
No	81.8	87.5	100.0	100.0

[a]Base for all the variables except those with specified N.

*Significantly different from experimental group with Z value > 2.0 or < -2.0.

The experimental and control groups do not differ greatly in their husbands' knowledge of the clients' contraceptive practice in both SA1 and SA2 (**Table 4.5**). There is likewise a universal discussion about FP between husbands and wives in both groups and periods of study. In SA1, there were more FP clients in the sample who were very new acceptors of a method than their control counterparts although the difference is not statistically significant. The reverse holds true in SA2. About 67 percent of the experimental group and about 86 percent of the control group are very new acceptors. This indicates that a larger (although not statistically significant) proportion of revisit clients are in the experimental than in control SDPs. This could be a result of more follow-up or referral efforts by experimental outreach workers. While the cases going to the SDP for a problem are too small, the pattern that is emerging is similar to the new FP clients.

Table 4.5: Percentage Distribution of FP Clients Interviewed While Exiting the SDP by Contraceptive Background

Contraceptive Background	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**36**	**35**	**36**	**27**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Ever discussed FP with husband/partner	97.2	97.1	97.2	100.0
2. Husband knew that R uses or is planning to use FP	97.2	97.1	100.0	100.0
3. Among new FP clients,				
N	**5**	**6**	**15**	**7**
%	**100.0**	**100.0**	**100.0**	**100.0**
Never used FP	100.0	75.0	66.7	85.7
4. Among those coming for follow-up; reason for wanting to stop or switch				
N	**3**	**2**	**7**	**4**
%	**100.0**	**100.0**	**100.0**	**100.0**
Medical side effects	66.7	50.0	28.6	50.0
Didn't like the method	33.3	-	14.3	25.0
Wanted pregnancy	-	-	14.3	-
Others	-	50.0	42.8	25.0

Service Providers. The service providers in both experimental and control areas in both SA1 and SA2 do not differ significantly on socio-demographic characteristics(See **Table 4.6)**. There are however, slightly fewer experimental service providers reporting to be Catholics compared to the control counterparts in both SAs. Service providers in the experimental SDPs have slightly fewer living children and are older than service providers in the control areas. The level of overall current use of FP among service providers is also the same in both groups and SAs (**Table 4.7**). It is in the use of specific methods that some slight variations occur. Those in the experimental group are more likely to be pill and IUD users, while those in the control group tend to be DMPA users.

In general however, the study groups are more or less similar before the intervention. We turn now to the main variables of interest and examine whether the project interventions have already had some effects in the experimental areas.

Table 4.6: Percentage Distribution of Service Providers by Socio-demographic Characteristics

Socio-demographic Characteristic	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**29**	**26**	**28**	**22**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Age				
below 35	27.6	26.9	17.9	31.8
35-44	37.8	57.9	46.4	54.7
45 +	34.6	15.2	35.7	13.5
Median	**38.5**	**37.2**	**40.0**	**38.0**
2. Marital Status				
Single	17.2	7.7	14.3	13.6
Married	82.8	84.6	78.6	86.4
Widowed/Sep.	-	7.6	7.1	-
3. Number of living own children				
0	20.6	11.5	21.4	13.6
1	20.7	11.5	14.3	18.2
2	13.8	11.5	17.9	13.6
3+	44.9	65.5	46.4	54.6
Median	**1.9**	**2.5**	**1.8**	**2.1**
4. Religion				
Catholic	79.3	92.3	75.0	90.9
Non-catholic	20.7	7.7	25.0	9.1

Table 4.7: Current Use of FP by Service Providers

FP Use	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**29**	**26**	**28**	**22**
%	**100.0**	**100.0**	**100.0**	**100.0**
Not currently using	55.3	50.1	53.5	54.7
Currently using	44.7	49.9	46.5	45.3
Pill	10.3	3.8	7.1	4.5
IUD	13.8	3.8	14.3	4.5
Injectable	-	15.4	-	13.6
Condom	-	-	3.6	-
Spermicide	3.4	-	-	-
Ligation	10.3	7.7	14.3	13.6
Vasectomy	-	-	3.6	-
NFP	6.9	19.2	3.6	9.1

Readiness to Provide Services

Services Provided. In general, all SDPs in both experimental and control areas usually provide FP (**Table 4.8**). In SA1 the expected similarities between the experimental and control area before the project intervention in the type of health services provided are met. Almost all SDPs in the experimental and control areas are providing FP, antenatal care, maternity care and delivery, postnatal care, child immunization, child growth monitoring, oral rehydration therapy, nutrition counseling and curative services for adults and children before the intervention. Very few SDPs in both study groups offered HIV/AIDS counseling and IEC, infertility consultation and treatment of incomplete abortion before the intervention. The same level and pattern of services provided by SDPs in the experimental and control areas are maintained after the intervention (SA2). There are, however, significantly more experimental SDPs providing IUD (81 percent) than their control counterparts (33 percent) in SA2. The opposite pattern is observed with NFP and LAM. Moreover, there are more (although not statistically significant) experimental SDPs providing reproductive health services than the control SDPs. The average number of new DMPA clients in a year in the control area is 4 times that in the experimental area. The much larger average number of DMPA, pills and LAM revisit clients in the control than in experimental areas is due to different policies adopted in their distribution. DMPA is provided free of charge in the control SDPs while the

experimental SDPs are charging DMPA users for the commodity in line with their cost recovery efforts. Only a larger average number of IUD revisit clients is observed in the experimental areas in SA2. Differences in the policies adopted in the provision of specific methods between the two study groups have clearly affected their performance.

Table 4.8: Selected Indicators Related to Services Provided

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**23**	**21**	**21**	**18**
A. Percent of SDPs that usually provides				
1. Family Planning in general	100.0	100.0	100.0	100.0
2. Specific FP Methods				
Pill	100.0	100.0	100.0	100.0
Condom	100.0	100.0	100.0	94.4
IUD	47.8	38.1	81.0	33.3*
Injectable	95.7	100.0	95.2	88.9
Ligation	-	-	-	5.6
Vasectomy	4.3	-	-	-
NFP	60.9	61.9	38.1	77.8*
LAM	78.3	66.7	42.9	83.3*
3. Antenatal Care	95.7	90.5	100.0	100.0
4. Maternity Care/ Delivery	95.7	90.5	100.0	77.8
5. Postnatal Care	95.7	90.5	100.0	72.2
6. HIV/AIDS Counseling/IEC	8.7	9.5	28.6	16.7
7. Child Immunization	100.0	76.2	100.0	100.0
8. Child Growth Monitoring	100.0	66.7*	95.2	94.4
9. Infertility Consultation	8.7	14.3	28.6	38.9
10. Oral Rehydration Therapy	95.7	85.7	100.0	94.4
11. Treatment of Incomplete Abortion	4.3	14.3	4.8	11.1
12. Nutrition Counseling	78.3	81.0	85.7	83.3
13. Curative Services - Client	95.7	81.0	100.0	88.9
14. Curative Services - Child	95.7	90.5	100.0	83.3

(Table 4.8 continuation)

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
B. Median Number of New Clients in a year per specific FP method				
Pill	16.8	16.5	16.0	27.0
Condom	3.8	4.0	3.7	2.3
IUD	4.0	6.0	1.0	1.0
Injectable	12.5	4.5	9.0	36.5
NFP	1.0	2.0	1.0	-
LAM	1.0	6.0	1.0	12.5
C. Median Number of Revisit clients in a year per specific FP method				
N	**23**	**21**	**21**	**18**
Pill	59.5	48.9	52.0	100.0
Condom	14.3	17.0	6.5	6.5
IUD	4.0	7.5	4.1	2.0
Injectable	23.5	11.0	12.0	77.5
NFP	1.0	2.0	1.0	-
LAM	1.0	6.0	1.0	59.0

*Significantly different from experimental group with Z value > 2.0 or < -2.0.

Infrastructure, Facilities and Equipment. The SDPs in both study groups are more or less similar with respect to infrastructure in both SAs **(Table 4.9)** . The experimental SDPs are slightly more disadvantaged than the control SDPs in the existence of piped running water and electricity. In terms of facilities and environmental cleanliness, it is in the presence of appropriate examination areas that some although insignificant variations exist between the study groups. The experimental SDPs have smaller proportions with auditory and visual privacy compared to the control SDPs, and more fully clean experimental SDPs than control SDPs in SA1. After the intervention, the substantial variations observed before the intervention are reduced, and the experimental improved more than the control areas.

Before the project intervention, the experimental SDPs do not differ greatly from the control SDPs on FP equipment or medical supplies except thermometer, ovum forceps, cotton and slides. In SA2, the experimental SDPs are at a greater advantage than the control SDPs regarding the availability of equipment and supplies, especially scissors, thermometer, cotton and gauze.

Table 4.9: Selected Indicators Related to Infrastructure, Facilities, and Equipment

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**23**	**21**	**21**	**18**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Percent of SDPs with working necessary infrastructure such as				
Piped running water	-	4.8	4.8	22.2
Adequate supply of water	69.6	76.2	66.7	50.0
Electricity	43.5	61.9	47.6	55.6
Waiting room/area for clients	95.7	95.2	100.0	88.9
Sufficient seating for clients	95.7	95.2	95.2	88.9
Working toilets/latrines available for clients	73.9	76.2	76.2	66.7
B. Percent of SDPs with appropriate examination areas				
With separate room or area	91.3	95.2	85.7	83.3
With Auditory privacy	52.2	76.2	71.4	61.1
With visual privacy	73.9	90.5	81.0	77.8
With adequate light	65.2	71.4	61.9	77.8
With adequate water	56.5	61.9	57.1	61.1
Fully clean	43.5	28.6	47.6	38.9
Partially clean	43.5	61.9	38.1	50.0
C. Percent of SDPs missing selected FP equipments or medical supplies				
Sterilizer	82.6	61.9	71.4	72.2
Blood pressure apparatus	4.3	4.8	-	5.6
Weighing scale for adults	4.3	19.0	9.5	22.2
Flashlight and/or goose necked lamp	69.6	61.9	61.9	77.8
Uterine sounds	69.6	57.1	28.6	44.4
Specula	65.2	47.6	28.6	44.4
Tenacula	65.2	52.4	42.9	44.4
Scissors	21.7	19.0	4.8	44.4*
Stethoscope	8.7	4.8	4.8	11.1
Examination table	8.7	4.8	-	22.2
Thermometer	4.3	42.9*	-	55.6*
Ovum forceps	65.2	28.6*	38.1	55.6
Needles and syringes	26.1	19.0	19.0	44.4
Gloves, disposable	34.8	42.9	42.9	38.9
Gloves, non-disposable	69.6	81.0	66.7	72.2
Cotton	36.1	9.5*	9.5	44.4*
D. Percent of SDPs missing other medical equipments or supplies				
Weighing scale for children	56.5	57.1	38.1	66.7
Microscope	95.7	90.5	85.7	94.4
Antiseptic solutions	34.8	52.4	38.1	55.6
Refrigerator for EPI	73.9	52.4	81.0	83.3
Slides	21.7	57.1*	33.3	55.6
Stains/reagents	100.0	95.2	81.0	100.0
Gauze	39.1	33.3	9.5	50.0*
Generator set	87.0	85.7	100.0	100.0

*Significantly different form experimental group with Z value > 2.0 or < -2.0.

Staffing, Staff Experience and Training. Both experimental and control SDPs do not vary greatly from each other on staffing except on the status of the BSPO and BHW (**Table 4.10**). In SA1, larger (though insignificant) proportions of experimental SDPs have full-time BSPOs and BHWs than control SDPs, and they are on duty at time of observation. The advantage of experimental over control SDPs became more pronounced at SA2. The pattern that seems apparent is that these staff became comparable in the experimental and control areas after the project intervention. Those in the experimental areas show a consistent pattern of improvement between the pre and post intervention period.

Table 4.10: Selected Indicators Related to Staffing

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**23**	**21**	**21**	**18**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Percent of SDPs with the following assigned to work full time at the MCH/FP section of a given SDP				
Medical doctor	13.0	14.3	14.3	11.1
Nurses	13.0	14.3	14.3	16.7
Midwife	100.0	100.0	100.0	88.9
BSPO	13.0	4.8	52.4	38.9
BHW	26.0	9.6	66.7	55.6
B. Percent of SDPs with the following on duty at time of observation				
Medical doctor	13.0	14.3	14.3	11.1
Nurses	13.0	14.3	14.3	16.7
Midwife	91.3	95.3	95.2	88.9
BSPO	21.7	4.8	52.4	33.1
BHW	56.5	38.1	61.9	61.1
C. Percent of SDPs with the following or present to provide FP at time of observation				
Medical doctor	-	-	4.8	5.6
Nurses	-	-	9.5	11.1
Midwife	69.6	100.0*	85.7	66.7
BSPO	4.3	-	-	27.8
BHW	4.3	-	9.5	27.8

*Statistically significantly different from the experimental group with Z value < -2.0.

Before the project intervention, both experimental and control groups are more or less equal in terms of staff experience and training in several areas, except in practical and theoretical training on NFP and LAM in which the experimental group is disadvantaged(**Table 4.11**). Note however that after the intervention the control service providers are significantly more exposed to MIS orientation training than their experimental counterparts. Before and after the intervention, a more or less similar proportion of the staff in the experimental and control areas thought that the trainings they attended were adequate to allow them to perform their duties, address side effects of FP, and identify and manage RTI/STD cases. The average duration since training in basic comprehensive, DMPA and Interpersonal Communication Skills is also similar for both groups and SAs.

Table 4.11: Selected Indicators Related to Staff Experience and Training

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**29**	**26**	**28**	**22**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Percent of staff where basic training included:				
1. Basic FP	27.6	23.1	78.6	77.3
2.Basic Comprehensive	72.4	84.6	85.7	77.3
3.DMPA	79.3	76.9	96.4	86.4
4.Counselling	6.9	15.4	57.1	31.8
5.Mid-level management/planning	3.4	-	-	13.6
6.Supervision/Evaluation	6.9	15.4	10.7	27.3
7.IEC orientation on Organizing IEC items	3.4	23.1	14.3	31.8
8.MIS Orientation	24.1	19.2	7.1	54.5*
9.RTI/STD Core Management	13.8	15.4	14.3	22.7
10.Interpersonal communication skills	86.2	73.1	78.6	66.7
11. HIV/AIDS	13.8	23.1	3.6	22.7
12. Pre-marriage counseling given by health center	10.3	-	14.3	13.6
13. Pre-marriage counseling given by church	3.4	-	-	-
14. Practical and Theoretical Training on:				
Pill	93.1	96.2	75.0	90.9
Condom	93.1	88.5	71.4	86.4
IUD	82.8	80.8	82.1	72.7
Injectable	93.1	80.8	64.3	81.8
Sterilization	-	3.8	-	4.5
NFP	20.7	53.8*	21.4	31.8
LAM	17.2	65.4*	17.9	27.3
B. Percent of staff who think that the trainings they attended are adequate to allow them to:				
1. Perform their duties	82.8	84.6	85.7	81.8
2. Address side effects of FP	96.6	96.2	96.4	81.8
3. Identify and manage RTI/ STD cases	62.1	53.8	42.9	50.0
C. Percent of staff who think they need to undergo a refresher course	13.8	15.4	14.3	9.1
D. Median years since training in:				
1. Basic Comprehensive	4.0	4.2	4.2	3.8
2. DMPA	4.0	3.2	3.3	3.5
3. Interpersonal Communication Skills	5.1	2.9	4.2	4.0
E. Percent of staff providing the following methods/services in the last 3 months				
Pill	86.2	100.0	92.9	90.9
Condom	72.4	96.2*	82.1	81.8
IUD	48.3	30.8	57.1	18.2*
Injectable	75.9	100.0*	96.4	90.9
NFP	20.7	61.5*	21.4	36.4
LAM	20.7	73.1*	39.3	54.5
BTL referral	24.1	46.2	50.0	45.5

*Significantly different from experimental group with Z value > 2.0 or < - 2.0.

Before the intervention, the experimental and control areas differed markedly in the percent of staff providing condom, injectable, NFP and LAM in the last three months. The experimental staff are at a much lower position compared with the control staff. After the intervention, the proportions providing services generally follow an increasing pattern in both the experimental and control areas with the experimental staff showing significantly higher improvement in IUD provision than the control staff.

IEC Materials and Activities. The availability of IEC and support materials in the experimental and control groups are quite similar in both SAs (Table 4.12).However, the experimental group shows an increase in the proportion with a sign announcing FP services eliminating its significant difference from the control group before the intervention, and an increase in the proportion that ever offered health talks including FP. The reverse of these pattern for these two factors is found for the control group. Moreover the experimental SDPs have significantly higher proportions than control SDPs with IEC/support materials on antenatal/postnatal care, child welfare, nutrition, FP information sheet and sample of contraceptives.

Supplies and Logistics. Before and after the project intervention, both the experimental and control SDPs demonstrate low levels of stockouts of contraceptive supplies in the past six months with the experimental SDPs showing a distinct advantage over the control SDPs (Table 4.13). Almost all have a written inventory for FP contraceptives, an up-to-date, legible and complete inventory, and storage facilities that protect the contraceptive supplies from rain, sun, adverse temperatures, rats and pests. All experimental SDPs showed a legible and complete FP inventory, and protected FP storage facilities compared to only 78 and 83 percent respectively of SDPs in control areas. In fact, after the intervention, the experimental SDPs show significantly better inventory and safekeeping of other FP medical supplies.

Table 4.12: Selected Indicators Related to IEC Materials and Activities

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**23**	**21**	**21**	**18**
%	100.0	100.0	100.0	100.0
A. Percent of SDPs with a sign announcing FP services	52.2	81.0*	85.7	66.7
B. Percent of SDPs with the following IEC/Support Materials available at SDP				
1. Family Planning	100.0	100.0	100.0	88.9
2. Antenatal/postnatal care	82.6	95.2	85.7	50.0*
3. Maternity care/delivery services	52.2	52.4	47.6	22.2
4. HIV/AIDS	4.3	-	9.5	5.6
5. Other STDs	-	-	4.8	-
6. Child Welfare	82.6	71.4	71.4	33.3*
7. Nutrition	73.9	85.7	76.2	44.4*
8. FP information sheet	78.3	47.6*	95.2	66.7*
9. Sample of contraceptives	82.6	95.2	100.0	66.7*
10. FP promotional materials	91.3	76.2	52.4	61.1
11. Anatomical Models	-	-	-	-
C. Percent of SDPs that ever offered health talks, which include FP	65.7	61.9	95.2	83.3
D. Percent of SDPs that offered health talk at time of observation	17.4	33.3	-	55.6
E. Percent of health talks that include:				
1. Family Planning	17.4	28.6	-	55.6
2. Antenatal Care	-	14.3	-	27.8
3. Maternal care/delivery services	4.3	14.3	-	22.2
4. Postnatal care	-	9.5	-	11.1
5. Child immunization	-	9.5	-	44.4
6. Child growth monitoring	-	14.3	-	33.3
7. Oral rehydration therapy	-	4.8	-	33.3
8. Nutrition counseling	-	23.8	-	33.3
9. Curative Services-child	-	14.3	-	33.3
10. Breastfeeding	-	9.5	-	16.7
11. HIV/AIDS	-	-	-	5.6

*Significantly different from experimental group with Z value > 2.0 or < -2.0.

Table 4.13: Selected Indicators Related to Supplies and Logistics Management

Selected Indicator	SA1		SA2	
	Experimental	**Control**	**Experimental**	**Control**
N	**23**	**21**	**21**	**18**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Percent of SDPs experiencing stockouts of contraceptive supplies in the previous six months				
1. Pill	-	14.3	-	11.1
2. Condom	8.7	19.0	-	11.1
3. IUD	8.7	14.3	4.8	5.6
4. Injectable	8.7	14.3	-	16.7
B. Percent of SDPs with a written inventory for:				
1. FP contraceptives	91.3	100.0	100.0	94.4
2. Other FP medical supplies	47.8	4.8*	57.1	11.1*
C. Percent of SDPs with and up-to-date legible or complete inventory for:				
1. FP contraceptives	73.9	76.2	100.0	77.8
2. Other FP medical supplies	26.1	-	57.1	11.1*
D. Percent of SDPs that store the following by expiration date				
1. FP contraceptives	91.3	90.5	100.0	94.4
2. Other FP medical supplies	34.8	-	57.1	-
E. Percent of SDPs that have stronger facilities that protect the following from rain, sun, adverse temperature, rats and pests				
1. FP contraceptives	100.0	100.0	100.0	83.3
2. Other FP medical supplies	**39.1**	**-**	**57.1**	**-**

* Significantly different from experimental group with Z value >2.0.

Recordkeeping, Reporting and Supervision. At SA1, the experimental and control SDPs did not fare well in recordkeeping particularly in completing and filing record cards. The accomplishment of the logbook/TCL/ledger and transmittal of reports to higher units were however, high in both groups (Table 4.14). The experimental SDPs showed significant improvement over the control SDPs after the intervention at SA2 especially in the preparation of their client records. SDPs in both areas also received at least the same level (about one) of supervisory visits in the past six months. Strikingly, the type of supervision is more of a routine administrative type, mostly checking records and supplies. Supportive supervision appears to be almost non-existent in both study groups. There are, however, two service providers in the experimental areas after the intervention who were reported to have demonstrated proper examination procedures and clinical services.

Table 4.14: Selected Indicators Related to Recordkeeping, Reporting and Supervision

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**23**	**21**	**21**	**18**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Percent of SDPs with:				
1. Client Record Card Systems	73.9	47.6	95.2	44.4*
2. Well Ordered Record Card System	26.1	14.3	71.4	22.2*
3. Record Cards completely/ Currently filled in	47.8	14.3*	90.5	44.4*
4. A daily FP actually register/ logbook/TCL/ledger	100.0	95.2	100.0	100.0
B. Percent of SDPs that send statistical reports to higher units	100.0	95.2	100.0	88.9
C. Percent of SDPs that have at least one supervisory visit in the previous six months	82.6	85.7	71.4	72.2
D. Median number of supervisory visits	1.1	1.0	1.5	1.5
E. Percent of SDPs with supervisors performing				
1. Routine Administrative supervision				
a. Check records	73.9	52.4	57.1	50.0
b. Check supplies	56.5	42.9	57.1	38.9
c. Identify problems but did offer solutions	-	9.5	9.5	22.2
d. Evaluate performance	13.0	23.8	19.0	5.6
e. Observe provider providing counseling	-	4.8	23.8	-
f. Observe provider providing clinical	4.3	14.3	23.8	5.6
2. Supportive supervision				
a. Demonstrate proper exams	-	-	4.8	-
b. Demonstrate proper counseling	-	4.8	-	-
c. Make service suggestions for improvement	-	4.8	-	-
d. Demonstrate proper clinical services	-	-	4.8	-

*Significantly different from experimental group with Z value > 2.0.

Quality of Services

Interpersonal Relations. Nearly all of the observed provider-client interactions portray a very friendly atmosphere in both experimental and control areas in both SAs (Table 4.15). However, a generally deteriorating pattern was observed in both study groups in most of the indicators of interpersonal relations.

Table 4.15: Selected Indicators Related to Interpersonal Relations

Selected Indicator	SA1		SA2	
	Experimental	Control	Experimental	Control
N	**39**	**39**	**37**	**29**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Percent of FP clients who received a friendly greeting (Obs)	100.0	82.0	97.3	96.6
2. Percent of FP clients who N	36	35	36	27
feel that the provider %	100.0	100.0	100.0	100.0
listened to her concerns (Exit)	55.6	40.0	47.2	37.0
3. Percent of FP clients N	36	35	36	27
who (exit): %	100.0	100.0	100.0	100.0
a. had questions	52.8	48.6	36.1	22.2
b. provider let ask the question	50.0	48.6	36.1	22.2
c. were satisfied with answer	50.0	48.6	36.1	22.2
d. felt that the provider was easy to understand	100.0	100.0	97.2	96.3
e. felt that the provider listened to her carefully	86.1	100.0	63.9	96.3*
f. felt that the provider gave enough time to describe her situation	86.1	94.3	58.3	96.3*
g. were conducted any health examination or procedures	63.9	54.3	63.9	48.1
h. were explained the examinations or procedures before they performed	58.3	42.9	52.8	44.4
i. were explained the results of the health examinations or procedures	61.1	51.4	61.1	40.7
j. thought that they were given enough privacy during the consultation	36.1	60.0*	58.3	48.1
k. were given any IEC material to bring home	16.7	2.9	13.9	3.7
l. were told when to come back for another visit	77.8	77.1	83.3	70.4
N	**39**	**39**	**37**	**29**
4. Percent of SPs consistently: **%**	**100.0**	**100.0**	**100.0**	**100.0**
a. giving the client full attention and eye contact	61.5	53.8	35.1	44.8
b. showing respect to the client	84.6	66.7	48.6	51.7
c. listening to the client and encouraging her to speak up	76.9	33.3*	27.0	44.8
d. using simple, easy-to-understand language	84.6	74.4	78.4	86.2

*Significantly different from experimental group with Z value >2.0.

There are factors outside of the intervention that appears to be adversely affecting both groups. The devolution negatively affected service providers in their capacity to provide quality services such as limited IEC materials, low medical supplies, low salaries on account of their transfer from the national to the LGU plantilla, and demoralization due to uncertainties of their career advancement.

Choice of Methods. Of the very small number of new FP clients observed or interviewed upon exiting, almost all clients in the experimental SDPs were told about various methods of contraception such as the pill, condom, IUD, injectable and NFP in both SAs (Table 4.16). Far fewer new FP clients in the control area were told about various methods in both SAs although the differences were not statistically significant. More service providers in experimental than control SDPs tended to promote one method over another at SA1, but this practice was greatly reduced in the experimental SDPs and remained the same in the control SDPs at SA2. The differences were, however, not statistically significant.

At SA1, more service providers in experimental than control SDPs screened out clients for pill use who had less than 3 children or who were still breastfeeding. At SA2, more service providers in the experimental than in the control areas became more prudent and cautious by screening out breastfeeding, older (>35 yrs) and younger (<20 yrs) women, unmarried women and those with no husband's consent from using the pill. All of these differences were, however, not statistically significant. Service providers in experimental SDPs at SA2 had significantly higher proportions than SPs in control SDPs who dispensed pills to women with no or less than 3 children

Screening practices of clients for DMPA use was very similar among service providers in experimental and control SDPs in SA1. The only exception was a greater tendency of service providers in experimental SDPs to screen out younger (<20 yrs) and nulliparous women for DMPA use while those in control SDPs screened out breastfeeding women and those without their husbands consent. These differences were however, not statistically significant. In SA2, significantly more service providers in experimental than control SDPs screened out younger (<20 yrs) and unmarried women from DMPA use, and larger (but not significant) proportions screened out older and breastfeeding women as well as those without their husbands consent from DMPA use. There was a significant reduction in service providers in experimental SDPs who screened out women with one child from DMPA use. Very small proportions of service providers in the study groups reported they would never recommend NFP for delaying or limiting pregnancy in SA1 and none reported the same in SA2.

Table 4.16: Selected Indicators Related to Choice of Methods

Selected Indicator		SA1		SA2	
		Experimental	Control	Experimental	Control
1. Percent of new FP clients who were told about various methods: (observation)	**N**	**5**	**6**	**15**	**7**
	%	**100.0**	**100.0**	**100.0**	**100.0**
a. Pill		100.0	66.7	86.7	71.4
b. Condom		100.0	33.3	66.7	28.6
c. IUD		80.0	33.3	66.7	28.6
d. Injectable		100.0	66.7	66.7	71.4
e. Female Sterilization		40.0	33.3	13.3	28.6
f. Vasectomy		40.0	16.7	6.7	-
g. NFP		100.0	16.7	6.7	-
2. Percent of new FP clients who were told about any other method in addition to the method they received during the consultation (exit interview)	**N**	**5**	**6**	**15**	**7**
	%	**100.0**	**100.0**	**100.0**	**100.0**
		100.0	42.9	60.0	42.9
3a. Percent of providers who encourage one method over others during the consultation (observation)	**N**	**5**	**6**	**15**	**7**
	%	**100.0**	**100.0**	**100.0**	**100.0**
		60.0	16.7	6.7	14.3
3b. Percent of new FP clients reporting that the provider promoted one method (Exit)	**N**	**5**	**3**	**9**	**3**
		100.0	**100.0**	**100.0**	**100.0**
%		40.0	33.3	22.2	33.3
4. Percent of providers not providing pill if the client is/has	**N**	**29**	**26**	**28**	**22**
	%	**100.0**	**100.0**	**100.0**	**100.0**
a. 35 years old		69.0	84.6	75.0	68.2
b. 20 years old or younger		75.9	73.1	96.4	90.9
c. still having no. or 1-2 children		75.9	57.7	32.1	90.9*
d. still breastfeeding		75.9	57.7	89.3	72.7
e. unmarried		65.5	73.1	67.9	59.1
f. no husband's consent		44.8	61.5	53.6	31.8
5. Percent of providers not providing DMPA if the client is/has	**N**	**29**	**26**	**28**	**22**
		100.0	**100.0**	**100.0**	**100.0**
%					
a. 35 years old and over		37.9	38.5	75.0	59.1
b. 20 years old or younger		51.7	30.8	82.1	54.5*
c. only one child		48.3	34.6	17.9	68.2*
d. still breastfeeding		17.2	30.8	57.1	40.9
e. unmarried		55.2	57.7	78.6	50.0*
f. no husband's consent		34.5	53.8	64.3	31.8*
6. Percent of providers who report that they would never recommend NFP for delaying or limiting pregnancy		6.9	15.4	-	-

*Significantly different from the experimental group with Z value > 2.0 or <-2.0.

Information Exchange. Before the interventions, less than 10 percent of the providers asked their clients about spacing or limiting plans, the nature of the client's sexual relations, breastfeeding status whether they discussed FP with their husbands (**Table 4.17**). Close to 20 percent asked FP clients about their problems or concerns about a method. Only about 10 percent of the FP clients were reported to have received more information about the method accepted in both experimental and control groups in SA1. How to use the method, advantages and disadvantages, side effects, what to do if a problem occurs, possibility of changing method, and possible sources of supply other than the SDP in question, appear not to have been shared by the provider with her clients. Strikingly, after the interventions, a pattern of improvement towards more comprehensive information about a particular method being accepted is evident. A significant improvement is observed regarding information on side effects. Since the control area behaves in the same way in SA2 as in SA1, it may be inferred that the training intervention has generated some improvement in information exchange in the experimental areas.

Table 4.17: Selected Indicators Related to Information Exchange

Selected Indicator	SA1		SA2	
	Experimental	**Control**	**Experimental**	**Control**
N	**33**	**33**	**29**	**23**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Percent of FP clients (new and returning) asked by the service provider about:				
1. Spacing or limiting plans	5.1	5.1	27.0	10.3
2. Nature of client's sexual relation	5.1	2.6	10.8	-
3. Breastfeeding status	7.7	-	27.0	10.3
4. Problem/concern about a method	25.6	17.9	13.5	10.3
5. FP discussion with husband	5.1	2.6	13.5	6.9
B. Percent of FP clients (new and returning) who received the following information on the method accepted from the service provider:				
1. How to use the method	12.8	10.3	43.2	20.7
2. Advantages	12.8	10.3	24.3	10.3
3. Disadvantages	10.3	10.3	27.0	10.3
4. Side Effects	12.8	12.8	43.2	13.8*
5. What to do if problems occurs	10.3	10.3	21.6	10.3
6. Possibility of changing method	7.7	10.3	24.3	10.3
7. Possible sources of supply other than this SDP	7.7	7.7	5.4	-

*Significantly different from the experimental group with Z value > 2.0.

Appropriateness and Acceptability of Services. There is a high level of client satisfaction of services received in the study areas in both SAs. Almost all FP clients are generally satisfied with their visit to the SDP. They feel that they received the information they wanted. Almost everyone found the clinic opening hours convenient; has never been turned away from the clinic during official hours; feel their waiting time to be reasonable and feel that the service provider was friendly and approachable.

Summary

The study areas turned out to be more or less similar in terms of type and locality of SDPs, age, education, reproductive status and contraceptive background of FP clients, age, marital status, fertility and contraceptive behavior of service providers. Of the many indicators examined as proxy variables of readiness to provide services and quality of care, eight variables emerged to demonstrate some effects of the project interventions. These are: (1) readiness to provide IUD; (2) better IEC through more materials in antenatal, postnatal care, child welfare, nutrition, FP information sheet and sample of contraceptives; (3) better inventory and safekeeping of other FP medical supplies; (4) improved recordkeeping with client record card system, well ordered record card and complete filling-up of record cards; (5) listening carefully to the clients; (6) giving client enough time to describe her situation; (7) discussion of other methods instead of just one method; (8) screening out unsafe choices of DMPA clients; and 9) information on side effects on the method accepted. Recall that the training intervention focuses on improving ways of providing the most comprehensive form of information to FP clients in a given setting in the locality. The last four variables are in fact indicators of such a comprehensive form of information exchange between the service providers and FP clients. While one of the interventions is to improve supportive supervision among the municipal health officers, municipal population officers and nurses, the SA data do not provide insights as to how such training has generated an improvement. One possible explanation is the lack of travel allowance preventing those with supervisory responsibilities to go to their respective areas of supervisory jurisdiction on a regular basis. Reimbursement of travel expenses is no longer the norm owing to the competing priorities the LGUs have to contend with.

CHAPTER V

Modified Situation Analysis for BSPOs and Implementation of the Unmet Need Algorithm

Quality of Care of Family Planning Outreach

The Project implemented two interventions for outreach workers, aimed at identifying and generating the demand for family planning and in promoting its continued use: (1) the training of barangay supply point officers (BSPOs) to improve their information-giving, referral, resupply and follow-up activities, and (2) the expansion of the Community-based Management Information System (CBMIS) to an A**lgorithm** for the identification of women in the community with **Unmet Need** (UNA) for family planning services and to ascertain their contraceptive behavior. These interventions are expected, in the immediate term, to improve the family planning information provided by BSPOs to the eligible couples and to improve their ability to track contraceptive use and family planning-related behaviors of the eligible couples in their communities. In the intermediate term, the outreach interventions are expected to increase the demand for family planning services, promote the continued use of contraception, and decrease the drop-out rates resulting from improved tracking, information giving, referral, resupply and follow-up activities (**see Figure 1**).

Research Instruments for FP Outreach

The Modified Situation Analysis for BSPOs is the main research instrument which measures the effects of the outreach interventions. Part I is an interview schedule aimed at gathering information about the BSPOs, the training they underwent and their duties and responsibilities. Part II is an observation guide used to gather data through observation on the implementation of the CBMIS in the control area, and the UNA in the experimental area, particularly that of the masterlisting, its use in planning and in monitoring the progress of outreach activities.

All women of reproductive age are masterlisted by the BSPO during the first quarter of every year to ascertain: (1) their pregnancy status, (2) whether or not they want a pregnancy, (3) when they want a pregnancy, (4) whether or not they are using a contraceptive method, and if so, (5) whether or not they are satisfied with the current method they are using. Based on their answers to these questions, they are classified into those with or without unmet need. Non-pregnant women who want

to postpone or stop childbearing, but are not currently using a contraceptive method, as well as those who are currently using one but are not satisfied with the method are determined to have **Unmet Need,** and considered **priority** for information about methods and services, referral and counseling about switching. Pregnant women are given information about ante-natal care and management of pregnancy; those who want to have a child soon are given information about family planning services in case she changes her mind; those found to be in high health risk but want to become pregnant are counseled on the possible complications of high-risk pregnancy; and those who are currently using a method and are satisfied with it are resupplied or reminded of the next scheduled visit.

The UNA masterlist consists of three parts: Part A classifies women according to their reproductive health risk status, Part B classifies them according to their unmet need status, and Part C is the monthly service ledger which records the services rendered during a given month. The masterlist is a record that is kept by the BSPO in which she enters the services she renders to clients during each month in the monthly service ledger. At the end of each month, the BSPO reviews her accomplishment prior to attending the monthly meeting with other BSPOs and the health service providers. At that meeting, she updates her service ledger on services rendered by others to women in her masterlist. She then plans the next month's activities to inform, refer, resupply and follow-up the masterlisted women in her community.

The Municipal Population Officer (MPO) copies the entries in the service ledgers of each BSPO in her area and tabulates this to reflect the monthly accomplishment of the outreach in her municipality. This compilation is a monthly tracking of contraceptive prevalence and unmet need (**see Appendix A** for the UNA Masterlist).

Description of the Survey Samples

All BSPOs in the experimental and control municipalities participated in the study. In June 1997, there were 42 BSPOs in the experimental and 72 BSPOs in the control groups. All were interviewed in the baseline Modified Situation Analysis. Eight months after the baseline survey and six months after the training intervention, 56 BSPOs in the experimental and 72 BSPOs in the control groups were interviewed using the postbaseline Modified Situation Analysis (**see Figure 2**).

Data gathered by the Baseline Survey showed that BSPOs in the experimental area had a mean age of 44 years, 90 percent were married, had an average of 5.4 living children, 93 percent were Catholics, and 36 percent were using a contraceptive method, mainly the pill or the injectable. On average, she has been working as a BSPO for 6.4 years and for 4.0 years as a BSPO in the barangay. Over 70 percent reported that they worked as a BSPO for 4 hours or less. Over three-fifths reported

that they worked for 1 or 2 days in the week. Ninety percent reported having received training as a BSPO.

The Baseline Survey data showed that BSPOs in the control area had a mean age of 47 years, 81 percent were married, had an average of 4 living children, only 69 percent were Catholics and 25 percent were using a contraceptive method, mainly ligation or spermicide. On average, she was working as a BSPO for 5.1 years and for the same number of years as a BSPO in the Barangay. Over three-fourths worked as a BSPO for 4 hours or less per day, and almost two thirds worked for 1 or 2 days in the week. Ninety-four percent reported having received training as a BSPO.

At the outset, the BSPOs in the experimental area were slightly younger than those in the control area. However, a higher proportion of BSPOs in the experimental area were married and had one child more than those in the control area. BSPOs in the experimental area were mostly Catholics compared to only 60 to 70 percent in the control area.. Although all BSPOs were working part-time, those in the experimental area appeared to be working slightly more hours per day and more days per week as family planning volunteers than those in the control areas.

Readiness to Provide Services

BSPO duties for which training was found adequate

Although the training received by BSPOs in the experimental and control areas did not differ at baseline, significantly more BSPOs in the experimental than in the control areas said they were adequately trained to allow them to perform their duties (**Table 5.1**).
At postbaseline, significantly more BSPOs in the experimental than in the control areas were trained, and more in the experimental than in the control area said they were adequately trained to allow them to perform their duties/responsibilities.

Of the subjects they received training on at baseline, significantly more BSPOs in the experimental than in the control area said they were trained to motivate clients to use FP. No difference existed between the two groups in the other aspects of their training. At postbaseline, significantly higher proportions of BSPOs in the experimental area considered their training in masterlisting to be adequate than BSPOs in the control area.

The intervention appeared to adequately prepare BSPOs in the experimental area for masterlisting.

Table 5.1 : Training Received and Duties for which Training was found adequate

Indicator	Baseline			Postbaseline		
	Experi-mental	Control	Z or T value	Experi-mental	Control	Z or T value
Q3. Ever attended a training course(s) as a BSPO	42 90.5	72 94.4	-0.74 NS	56 96.4	72 86.1	2.16 S
Q4. Do you think the training you received in FP is/are adequate to allow you to perform your duties?	37 86.5	68 39.7	5.73 S	54 79.6	62 48.4	3.72 S
Q4d. In what duties? **N**	**42**	**72**		**56**	**72**	
a. Motivate clients to use FP	52.4	25.0	2.96 S	30.4	26.4	.500 NS
b. Advise for couples who have more than 4 children	4.8	2.8	0.52 NS	0.0	1.4	-1.01 NS
c. Approach couple to use FP or refer them to clinic	11.9	4.2	1.39 NS	3.6	1.4	0.77 NS
d. Resupply	0.0	1.4	-1.01 NS	12.5	6.9	1.05 NS
e. Masterlisting	0.0	0.0		26.8	4.2	3.55 S

Duties and Responsibilities of BSPO

At baseline, the BSPOs in the experimental and control groups were comparable in the duties and responsibilities they reported as FP volunteer workers. However, significantly more BSPOs in the control than in the experimental areas said they accompanied sterilization clients to the clinic. It should be mentioned that Asingan is a pilot area of AVSC and sterilization services are available in the town **(see Table 5.2)**. Significantly more BSPOs in the experimental area said they conducted masterlisting of couples in the barangay than in the control area at baseline.

At postbaseline, BSPOs in the experimental and control areas reported comparable duties and responsibilities. However, accompaniment of sterilization clients was significantly higher in the control than in the experimental areas, and participation in the preparation of a clinic workplan was significantly higher among BSPOs in the experimental than in the control areas.

The one area in which the intervention may have had a positive effect was in the BSPOs participation in the clinic workplan preparation.

Table 5.2: Percent of BSPOs who said they performed specified duties and responsibilities at Baseline and Postbaseline Surveys in Experimental and control areas

Indicator	Baseline			Postbaseline		
	Experi-mental	Control	Z or T value	Experi-mental	Control	Z or T value
Duties and responsibilities as a BSPO Q5a-h						
N cases	**42**	**72**		**56**	**72**	
IEC/M: Inform & motivate MCRAs for FP	92.9	97.2	-0.97 NS	91.1	98.6	-1.85 NS
Refers FP clients to clinic	90.5	93.1	-0.48 NS	89.3	94.4	-1.03 NS
Accompanies sterilization clients to clinic	21.4	61.1	-4.64 S	17.9	52.8	-4.47 S
Resupply pills and condom	78.6	75.0	0.44 NS	80.4	76.4	0.55 NS
Conducts follow-up of FP/MCH clients	57.1	54.2	0.30 NS	89.3	90.3	-0.18 NS
Conducts masterlisting of couples in Barangay	92.9	69.4	3.50 S	98.2	97.2	0.38 NS
Prepares monthly reports using CBMIS	57.1	52.8	0.45 NS	87.5	90.3	-0.50 NS
Participates in preparation of clinic workplan	38.1	43.1	-0.53 NS	25.0	5.0	3.03 S

BSPO Coordination and Community Participation Activities

BSPOs in the experimental and the control areas were comparable in their coordination with the Rural Health Midwife (RHM) or the RHU health center staff at baseline and postbaseline surveys. Almost all reported that they coordinated with the health staff (**see Table 5.3**).

In the specific areas of coordination, the two groups were comparable at baseline, but significantly higher percentages of BSPOs in the control than in the experimental areas reported coordination in their referral of clients, family planning and assistance rendered to the RHM. Note that family planning is but one activity for which coordination was mentioned. The data also show that coordination in referral and family planning activities of BSPOs in the experimental group declined over time but increased in the control group.

Almost all BSPOs reported having participated in community activities and the levels in the experimental group were comparable with those in the control group. Significantly more BSPOs conducted mother's classes in the control than in the experimental groups in both the baseline and postbaseline surveys, but did not differ significantly in other community participation activities.

Table 5.3 : Percent of BSPOs who reported coordination and community participation activities in Baseline and Postbaseline Surveys for Experimental and Control areas

Indicator	Baseline			Postbaseline		
	Experi-mental	Control	Z or T value	Experi-mental	Control	Z or T value
1. COORDINATION (Q24a & b) N	**42**	**72**		**56**	**72**	
Coordinate with health staff of barangay/municipality	100.0	95.8	1.78 NS	98.2	94.4	1.17 NS
Areas of coordination						
a. Referral of clients	38.1	38.4	-0.03 NS	7.1	37.5	-4.57 S
b. Family Planning	14.3	13.9	0.06 NS	5.4	16.7	-2.12 S
c. Barangay activities	4.8	1.4	0.95 NS	3.6	0.0	1.45 NS
d. Assist midwife	4.8	9.7	-1.02 NS	17.9	34.7	-2.21 S
2. COMMUNITY PARTICIPATION (Q25)						
Participated in community activities	95.2	94.4	0.19 NS	91.9	98.6	-1.72 NS
Areas of Participation a. Conduct mothers class	31.0	62.5	-3.45 S	41.1	90.3	-6.61 S
b. Participate in income generating projects	28.6	23.6	0.58 NS	28.6	22.2	0.82 NS
c. Clean and green activities	42.9	54.2	-1.17 NS	46.4	56.9	-1.19 NS
d. Bgy./Mun. activities	81.0	52.8	3.34 S	53.6	44.4	1.04 NS

Observation and Reporting of BSPO Activities

An inventory of recorded and reported activities of BSPOs was conducted through inspection of the records, reports and workplan maintained under her personal care. This was done after she was interviewed using Part I of the questionnaire. Note that the house of the BSPO is considered as her office. The following are the results of the inspection.

Masterlist and Its Use in Planning

At baseline survey, significantly more BSPOs in the experimental than in the control areas had a masterlist that was filled out (**see Table 5.4 Panel A**). The accomplishment of the masterlist and the service ledger in the baseline survey was comparable in both areas as well as its use for planning BSPO visits in the following month.

However, at postbaseline survey, significantly more BSPOs in the experimental than in the control area properly accomplished the Masterlist of MWRA, and their High Risk classification, as well as the monthly service ledger. Significantly more BSPOs in the experimental area used the masterlist to plan their activities in the succeeding month. The proportions of BSPOs in the experimental area responding positively ranged from 91 to 100 percent while those in the control area ranged from 61 to 86 percent.

Mean Number of MWRAs Scheduled for Visits

The mean number of MWRAs observed from BSPO records for referral, counseling, informing non-high risk users, informing MWRAs about FP services, informing pregnant mothers about pre-natal care and pregnancy management, referring couples with infertility problems and follow-up of contraceptive complications did not differ between the experimental and control groups at baseline survey. Only the mean number of dissatisfied current users referred for counseling was significantly higher in the experimental than in the control areas (**see Table 5.4 Panel B**). This indicates that the monthly workload planned by BSPOs at baseline was comparable in both groups. At postbaseline, BSPOs in the experimental area scheduled significantly more women who had wanted to space/limit childbearing (i.e., women with unmet need) for FP information and referral than in the control area.

Use of CBMIS/UNA

At baseline, significantly more BSPOs in the control than in the experimental area used the CBMIS data in constructing their monitoring indicators such as coverage, high risk, FP prevalence and graphing of high risk users (**see Table 5.4 Panel C**). At postbaseline, the BSPOs in the experimental area were comparable with those in the control area for this activity. The proportions of BSPOs reporting these activities in the experimental area increased greatly between the baseline and postbaseline surveys. Use of these indicators in graphing their performance was abandoned by both groups of respondents at postbaseline survey.

Significantly more BSPOs in the experimental than in the control area had a clinic workplan at baseline and postbaseline surveys. However, the proportions reporting this activity in both groups declined in the latter period.

Similarly, significantly more BSPOs in the experimental than in the control area had their workload included in the clinic workplan in both baseline and postbaseline surveys. It is worth noting that **all** BSPOs were able to show a clinic workplan which included their workload.

Table 5.4: Results of observations on the Community-based Monitoring System and the Unmet Need Algorithm

Indicator	Baseline			Postbaseline		
	Experi-mental	Control	Z or T value	Experi-mental	Control	Z or T value
A. Percent of BSPOs possessing the specified indicator (BQ1-BQ2)						
Is there a masterlist for eligible couples in Bgy.	42 85.7	72 63.9	2.79 S	56 91.1	72 87.5	0.66 NS
Masterlist of eligible MWRAs filled out	42 83.3	72 61.1	2.73 S	56 91.1	72 86.1	0.9 NS
Form Part A (Masterlist of MWRA & High Risk identi- fication) properly accomplished	36 50.0	46 58.7	-0.79 NS	51 98.0	64 78.1	3.6 S
Form 1 B (Unmet Need category identification) properly completed	36 72.2	nd	-	51 100.0	nd	-
Form 1 Part C (Monthly service delivery ledger) properly accomplished	36 61.1	46 80.4	-1.93 NS	51 94.1	64 78.1	2.61 S
(Table 5.4 Continuation)						
Indicator	Baseline			Postbaseline		
	Experi-mental	Control	Z or T value	Experi-mental	Control	Z or T value
Masterlist used to plan BSPO visits for next month	36 86.1	46 80.4	0.69 NS	51 98.0	64 61.0	5.79 S
B. Mean No. of MWRAs scheduled for next month for: (BQ2a1-9)						
a. Resupply	34 12.67	46 7.87	.052 NS	51 5.88	63 8.68	0.08 NS
b. Counseling of HR non-users on possible complications	36 6.86	45 5.44	.523 NS	51 0.61	62 3.61	-0.001 S
c. Informing NHR non-users who want a child soon about FP	36 5.22	46 2.09	.651 NS	51 0.94	63 1.11	- 0.701NS
d. Referring current users who are dissatisfied with the method to a FP clinic for counseling	35 6.09	46 2.54	0.041 S	51 0.33	63 1.38	- 0.701NS
e. Informing women who want to space/stop childbearing about FP services and referring them to a FP clinic	36 86.1	45 5.07	0.637NS	51 4.9	60 1.08	.001 S
f. Informing a currently pregnant woman about pre-natal care and management of pregnancy	36 4.92	45 4.29	. 753 NS	51 1.73	63 1.92	-.67 NS
g. Referring couples with infertility problems to a health facility	35 0.74	46 1.15	.41 NS	50 0.16	63 0.38	0.07 NS
h. Follow-up of contraceptive complications	36 1.0	45 1.06	0.91 NS	51 0.02	63 0.73	0.00 S
i. Remotivation of drop-outs	-	-	-	51 0.49	63 0.66	0.46 NS

Indicator	Baseline			Postbaseline		
	Experi-mental	Control	Z or T value	Experi-mental	Control	Z or T value
Ever been trained in the use of CBMIS/Unmet Need Algorithm	- -	-	-	51 100.0	64 0.96	1.43 NS
BQ2c. Community-based Monitoring System been used to estimate/show:						
a. Overall FP coverage?	36 28.0	46 63.0	-7.89 S	51 62.7	61 67.2	-0.50 NS
b. High risk women?	36 30.6	46 73.9	-4.31 S	51 96.1	62 93.5	0.63 NS
c. Current users of FP?	36 30.6	46 76.1	-4.58 S	51 84.3	62 87.1	-0.42 NS
d. Tracking (graph) of HR users vs. all users?	36 0.0	46 8.7	-2.09 S	51 0.0	62 0.0	-
BQ3. Have a clinic workplan?	42 64.3	72 26.4	4.19 S	56 46.4	72 5.6	5.67 S
BQ4. Is workload of BSPO/ BHW included in clinic workplan	27 77.8	19 36.8	3.00 S	56 100.0	72 51.3	6.08 S

The Unmet Need Algorithm

In late November 1997, the Unmet Need Algorithm (UNA) was used in the experimental municipalities of Bugallon and Pozorrubio. The BSPOs were trained to masterlist **all** married women of reproductive age (MWRA 15-49 years) in their community using UNA Form 1. The BSPOs did some exercises in filling up the UNA Form 1 Parts A, B, and C. The Municipal Population Officers (MPOs) were taught how to supervise the BSPOs in filling up the UNA Form 1 and were trained on how to consolidate the data generated from the completed Form 1 using Report Forms 1 and 2. In December 1997, the actual masterlisting began.

There were difficulties encountered by BSPOs in the filling up of UNA Form 1B and C during the masterlisting. One-on-one coaching was done by the Provincial Population Officer (PPO) and the PPO staff until all BSPOs have mastered the use of the UNA Form 1. The completion of the masterlisting was slow. Some of the reasons for this slow progress is the presence of other activities which the LGU expects the BSPOs to perform, and the absence of incentives or reimbursement of local travel expenses since some of these barangays have widely dispersed settlements.

Monthly meetings were held among MPOs and BSPOs in December 1997 and January 1998 to ensure proper filling of the UNA Form 1. By February 1998, the monthly meetings included the RHU personnel for the purpose of action planning. With technical assistance from the Project Principal Investigator and the PPO, the interface between, and close coordination among population

workers were spelled out, and their roles and functions were clarified. A referral form was developed by the PPO staff and copies were distributed to BSPOs and service providers for use starting in March 1998. Monthly Status Report Forms 2A, B, and C and Form 3 were also discussed with the MPOs and the District Population Officer (DPO) for their use.

Table 5.7 shows that as of 1 April 1998, 42.7 percent of the masterlisting was completed in Bugallon and 58.9 percent in Pozorrubio. The percentage completion was based on the number of masterlisted MWRAs in August 1997 using the CBMIS which showed 5,664 MWRAs for Bugallon and 5,888 MWRAs for Pozorrubio.

Limiting the comparison among non-users, the percent of **high risk non-users** was 35.8 percent and 37.3 percent for Bugallon and Pozorrubio, respectively. Thus, high risk non-users were 27.3 percent higher than women with an unmet need in Bugallon. The corresponding percentage for Pozorrubio was 21.7 percent. The data further show that the greatest bulk of MWRAs with unmet need are also at high health risk that is, 89.3 percent in Bugallon and 79.4 percent in Pozorrubio.

The Unmet Need Algorithm has greater appeal for prioritizing women for family planning services, because it identifies far fewer MWRAs who may be more predisposed to decide to use family planning and therefore promotes the efficient use of program resources. Moreover, satisfying the unmet need of MWRAs will also attend to the health risk concerns of around two-thirds of them.

The monthly or quarterly tabulations of data from UNA permits the tracking of contraceptive use among women with unmet need, those in high health risk and those in both health risk and unmet need. The combined contraceptive prevalence of Bugallon and Pozorrubio as of 1 April 1998 from the UNA was 43.4 percent. This was validated by the Community Survey 2 results which shows a prevalence of 46.7 percent (see Table 6.3a in Chapter VI). This shows that the recently installed UNA is capable of reliably tracking contraceptive prevalence.

Data in Table 5.7 shows that women with an **unmet need** was 25.3 percent and 29.2 percent of total MWRAs for Bugallon and Pozorrubio, respectively. In contrast, women in **high health risk** constituted 88.8 percent and 81.5 percent of MWRAs in Bugallon and Pozorrubio, respectively.

Table 5.7: Number and Percentage Distribution of MWRAs by Unmet Need, High Risk, Current Contraceptive Use and Pregnancy Status, Bugallon and Pozorrubio, April 1998

Fertility Preferences/ FP/Pregnancy Status	High Risk		Non High Risk		TOTAL	
	N	%	N	%	N	%
A. BUGALLON*						
Want no more children (UN)	**556**	**22.6**	**66**	**2.7**	**622**	**25.3**
Want more children	325	13.2	150	6.1	475	19.3
Currently using FP	1083	44.0	4	0.2	1087	44.2
Currently Pregnant	220	8.9	56	2.3	276	11.2
TOTAL	**2184**	**88.8**	**276**	**11.2**	**2460**	**100.0**
(Table 5.7 continuation)						
Fertility Preferences/ FP/Pregnancy Status	High Risk		Non High Risk		TOTAL	
	N	%	N	%	N	%
Want no more children (UN)	**804**	**23.2**	**210**	**6.0**	**1014**	**29.2**
Want more children	488	14.1	183	5.3	671	19.4
Currently using FP	1409	40.6	79	2.3	1488	42.9
Currently Pregnant	123	3.5	170	4.9	293	8.4
TOTAL	**2824**	**81.5**	**642**	**18.5**	**3466**	**100.0**
C. BUGALLON & POZORRUBIO						
Want no more children (UN)	**1360**	**22.9**	**276**	**4.6**	**1636**	**27.6**
Want more children	813	13.7	333	5.6	1146	19.3
Currently using FP	2492	42.0	83	1.4	2575	43.4
Currently Pregnant	343	5.8	226	3.8	569	9.6
TOTAL	**5008**	**84.5**	**918**	**15.5**	**5926**	**100.0**

(*) Note: The number of masterlisted MWRAs in August 1997 using the CBMIS was 5,664 for Bugallon & 5,888 for Pozorrubio, respectively.

Summary

Modified Situation Analysis

BSPOs in the experimental areas were better trained and felt their training was adequate to allow them to perform their duties and responsibilities than those in the control areas.

BSPOs in the experimental and control groups were comparable in most duties and responsibilities they perform except for the significantly higher participation of BSPOs in the experimental area in clinic workplan preparation.

Significantly more BSPOs in the experimental area than in the control area were in possession of a masterlist that was properly filled up at baseline and postbaseline surveys; used the masterlist to plan their next month activities; and referred dissatisfied users for counseling. At postbaseline, BSPOs in the experimental area scheduled significantly more MWRAs who wanted to space/limit childbearing for FP information and services than in the control area. More BSPOs in the experimental than in the control area had a clinic workplan at baseline and postbaseline survey, however, these proportions declined at postbaseline. Significantly more BSPOs in the experimental than in the control area had their workload included in the clinic workplan in both baseline and postbaseline surveys.

There were inherent structural problems systemwide in the outreach vis-a-vis their work relationship with the clinic staff. These included the lack of monetary incentives to outreach workers; the lack of clarity in the role of definitions of outreach workers in the FP program since the FP program was transferred from POPCOM to DOH in 1989; the weakening of coordination between the clinic and outreach structure because of the devolution of health services; and the conflicting effects of national policies on accessibility and free choice on the one hand and sustainability on the other.

The Unmet Need Algorithm

The Unmet Need Algorithm was shown to be a viable means for prioritizing family planning services. Not only does it identify far fewer MWRAs who may be predisposed to use contraceptive methods but a high degree of overlap exists with women who are at high health risk. In view of this high degree of overlap, Unmet Need as the basis for prioritizing FP services has greater appeal since

it is consistent with the principles of reproductive rights and freedom, and empowers women to exercise their free choice. The UNA has also been shown to reliably track contraceptive prevalence, and therefore is a valuable tool for program planning, monitoring and evaluation at local level.

CHAPTER VI
INTERVENTION IMPACTS ON QUALITY OF CARE: COMMUNITY SURVEY RESULTS

Introduction

The presentation of the results of CS1 and CS2 is directed towards measuring some effects, though short-term, of the three project interventions with a built-in pretest-posttest control group research design. It essentially compares the experimental (O_1) and control (O_3) groups before the interventions and the same experimental (O_2) and control (O_4) groups after the interventions.

With the random assignment of the study areas, it is expected that O_1 would be more or less equal to O_3 on the background variables. Since CS2 covers the same panel of respondents, O_2 and O_4 would generally be equal in these background variables. CS1 and CS2 are data sources to assess whether information exchange in the experimental areas has improved in a span of five months between two data-gathering periods. August-September 1997 and March-April 1998 are the data-gathering periods for CS1 and CS2, respectively.

The comparison of O_2 and O_4 focuses on output variables that indicate whether the family planning clients in the experimental communities are provided better information by the trained service providers compared with their counterparts in the control communities. The presentation of results in this chapter is guided by the following outline (cf. Chapter II):

1. Profile of MWRAs
2. Reproductive Performance, Behavior and Intentions
3. Contraceptive History, Problems, Behavior, Intentions and Knowledge
4. Health Status (Overall and Reproductive) and Behavior
5. Accessibility to Service Delivery Points and Utilization of FP and Health Services
6. Quality of Care

As noted in Chapter II, about 14 percent of the 2,000 MWRAs interviewed in CS1 were not interviewed in CS2 because the eligible respondent either was not available from the first to the fourth call or transferred to another place outside the municipality where she usually resided when interviewed in CS1. Therefore, the first topic in the above outline deals with the profile of these MWRAs to provide a proper perspective for the findings in the succeeding sections of this chapter.

Had CS2 covered all the panel respondents in CS1, the proportions in most of the profile variables which are more or less static characteristics per study group, would be identical if the data gathering were of high quality in both surveys. To ensure that the respondents missed in CS2 did not alter the distribution in CS2 relative to CS1 per profile variable, a discussion on this topic is necessary.

Profile

The sample respondents in the experimental municipalities are not greatly different from their counterparts in the control municipalities on current age, average age at marriage, husband's current work status and ownership of TV and electric iron in CS1 and CS2 **(Table 6.1)**. Substantial and significant differences are however evident with religion (more Catholics in the experimental areas than in the control areas), education of respondent and her husband's education (respondent's education and husband's education among control cases is slightly higher than the experimental cases). The other variables where the experimental and control cases differ significantly and substantially are: (1) residence since birth in current barangay; (2) has worked for cash and frequent reading of the newspaper; (3) listening to the radio; (4) watching TV; and (5) ownership of refrigerator, radio, electric fan, gas or electric stove, camera, sewing machine, sofa, sleeprite/bed with mattress. With the exception of the variable, residence since birth in current barangay, wherein the control cases are smaller in proportion, the proportions for the other variables are generally higher in the control areas than in the experimental areas in CS1 and CS2.

Table 6.1: Profile in Percent of or Average Measure for Married Women Aged 15-44 years by Group (Experimental and Control, Community Survey 1 and Community Survey 2), Province of Pangasinan

Characteristic	Community Survey 1		Community Survey 2	
	Experimental	Control	Experimental	Control
N	**1003**	**997**	**851**	**876**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Age				
15-24	10.7	13.8	11.3	13.2
25-29	21.1	22.4	22.3	22.9
30-34	25.2	23.5	24.6	24.1
35+	43.0	40.4	41.8	39.7
Median	33.0	33.0	33.0	32.5
Mean	33.1	32.6	32.8	32.5
2. Average age at marriage (median)				
Respondent	22.0	22.0	21.0	21.0
Husband	25.0	25.0	24.0	24.0
3. Religion				
Catholic	90.4	71.0*	91.0	71.9*
Protestant	0.8	4.1*	0.9	5.5*
Aglipayan/Phil.	0.3	8.6*	0.0	7.3*
Independent Church	2.5	6.0*	2.5	6.2*
Iglesia ni Kristo	5.9	10.2*	5.4	8.9*
Others/No Response	0.1	0.1	0.2	0.2
None				
4. Highest Level of School Attended				
Grade 5 and below	4.4	4.3	4.9	4.5
Grade 6	26.9	17.2*	26.0	17.2*
Some High School	12.1	12.8	14.0	13.6
Fourth Year H.S.	34.7	39.2*	30.3	36.3*
Some College	7.1	10.5*	6.7	8.9
College degree and over	11.2	11.4	9.4	11.9
Vocational	3.6	4.6	8.7	7.6

(Table 6.1 continuation)				
	Community Survey 1		Community Survey 2	
Characteristic	Experimental	Control	Experimental	Control
5. Husband's Highest Level of School Attended				
Grade 5 and below	4.7	6.0	4.2	4.6
Grade 6	20.1	15.6*	20.4	15.4*
Some High School	8.7	9.3	10.4	10.3
Fourth Year H.S.	35.7	38.6	30.0	34.7*
Some College	8.6	10.9	8.4	9.6
College degree and over	12.5	11.8	8.5	11.2
Vocational	9.7	7.8	18.1	14.2*
6. With Husband Currently Working	94.1	94.6	94.2	95.4
7. Has work for cash	21.2	18.9	20.9	29.3*
8. Has lived in current resident barangay since birth	51.6	37.5*	53.3	40.1
9. Has ever read the newspaper one to four times a week	65.4	67.8	62.0	71.8
10. Has ever listened to the radio	80.5	87.9*	80.0	89.3
Median number of hours per week	13.4	13.1	13.6	13.4
11. Has ever watched television	81.0	92.5*	83.1	93.3
Median number of hours per week	14.0	13.5	17.5	13.9
12. Ownership of Consumer durables				
Refrigerator	20.1	27.0*	23.1	29.1*
TV	60.6	61.7	63.7	62.4
Radio	76.5	82.4*	81.7	84.2
Electric fan	46.7	53.1*	50.2	56.2*
Gas or electric stove	49.8	56.1*	54.4	61.5*
Camera	20.2	27.9*	22.1	29.7*
Sewing machine	11.1	16.4*	13.4	17.6*
Electric Iron	42.6	43.6	45.0	45.4
Sofa	54.1	67.8*	54.6	48.6*
Sleeprite/Bed w/ mattress	50.2	66.2*	32.3	44.4*

*Significantly different from the experimental group with Z-value >2.0 or <-2.0.

Reproductive Performance, Behavior and Intentions

The experimental study cases show slightly (not statistically significant) higher reproductive performance than the control study cases in CS1 and CS2 (**Table 6.2**). For example, those in the experimental areas show a slightly greater proportion ever pregnant, and recently pregnant, higher average number of pregnancies, livebirths, and living children than those in the control areas. They also do not differ greatly on the other reproductive indicators (average number of dead children, stillbirth, spontaneous fetal loss and abortions).

Table 6.2: Distribution in Percent of or Average Measure for Married Women Aged 15-44 years According to their Reproductive History and Intention by Group (Experimental and Control, Community Survey 1 and Community Survey 2), Province of Pangasinan

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	Control	Experi-mental	Control
N	**1003**	**997**	**851**	**876**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Reproductive History (whole)				
1. Ever Pregnant	97.9	95.6	98.8	97.5
2. Average no. of pregnancies	4.1	3.5	4.3	3.5
3. Average no. of children ever born	3.7	3.1	3.9	3.2
4. Average no. of children dead	1.2	1.1	1.2	1.2
5. Average no. of living children	3.6	3.0	3.9	3.1
6. Average no. of stillbirths	1.1	1.1	1.1	1.2
7. Average no. of spontaneous fetal loss	1.3	1.3	1.3	1.2
8. Average no. of abortions	1.4	1.4	1.2	1.3
B. Recent Reproductive History				
1. Pregnant in the past year	17.1	15.1	18.1	14.9
C. Reproductive Intention				
1. Wanted to have more children	34.5	33.7	35.0	37.8
2. Number of years before the birth of the wanted child (years)				
Median	2.8	4.5	1.9	2.9
Mean	3.0	3.7	3.4	3.2
3. Desired family size				
Median	3.3	2.8	3.3	2.7
Mean	3.9	3.4	3.9	3.4

The reproductive intention variables may be examined for improved information exchange. Having been given better information, the FP clients might have altered their reproductive intentions in the later survey. However, there has been no substantial gaps in the proportion wanting more children, average number of years before the birth of the wanted child (in years) and average desired family size both in CS1 and CS2.

One possible indication of some effects of the intervention would be the reduction of the proportion of women having experienced abortion in the past year preceding each survey date. However, in both surveys, there were no reported abortions in the recent year prior to each survey date.

Contraceptive History, Problems, Behavior, Intentions and Knowledge

A significantly lower contraceptive prevalence (44.5 percent) is evident with the experimental cases than is shown with the control cases (50.1 percent) before the intervention (**Table 6.3a**). However, after the intervention, those in the experimental areas still portray a significantly lower contraceptive prevalence rate (46.7 percent) than those in the control areas (58.0 percent). The same observation holds true with specific method prevalence rates especially injectable and ligation in both surveys. These observations are however expected as it will take a much longer period of time before an impact on contraceptive prevalence of the interventions can be attained.

Table 6.3a : Past and Current Use of Contraception among MWRA, Community Survey 1 and Community Survey 2, Province of Pangasinan

Indicator	Community Survey 1		Community Survey 2	
	Experimental	Control	Experimental	Control
D5. FP Status of MWRA	**1003**	**997**	**851**	**876**
Ever tried	79.0	73.5*	78.5	81.7
Never tried	20.6	26.5*	21.4	18.3
Never heard	0.4	-	0.1	-
D19. Method currently using	**1003**	**997**	**851**	**876**
Condom	0.9	1.1	1.4	1.3
IUD	3.7	1.7	3.8	1.6
Pill	10.6	12.5	12.8	15.0
Injectable	3.2	9.3*	4.7	8.9*
Ligation	5.7	12.1*	6.6	12.4*
Vasectomy	0.1	-	0.1	-
Traditional NFP	4.1	4.2	3.4	2.9
Modern NFP	0.1	-	-	-
LAM	5.6	0.6*	1.4	0.2
Withdrawal	10.5	8.6	12.5	15.6
Self Control	0.1	-	-	-
Herbal	-	-	-	0.1
Total Users	**44.5**	**50.1***	**46.7**	**58.0***
Never/Non-users (pregnant, non-pregnant)	55.5	49.9*	53.3	42.0*

*Significantly different from experimental group with Z-value > 2.0 or < -12.0.

Contraceptive prevalence at the outset was significantly higher in the control (50.1%) than in the experimental area (44.5%). This indicates the lack of equivalence between the two groups before the interventions were applied. At postbaseline, there was a 2.2 percentage points increase in the experimental groups while the control group likewise showed an increase of 7.9 percentage points in the postbaseline.

Using prevalence and the difference between ever-use and current use rates as proxy measures, the community survey **showed that the training interventions** were responsible for some improvement in prevalence in the experimental area. There was also some evidence of a reduction in the drop-out rates in the experimental area which was absent in the control area at postbaseline.

The same superiority of the control over the experimental areas on contraceptive use is apparent when other indicators are examined (**Table 6.3b**). After the intervention, there were significantly larger proportions of users of injectable in the past year up to survey date in the control group. There are no substantial differences in the length of use (in months) of a method in the past year up to survey date between the experimental and control clients. However, while before the intervention the experimental group showed a significantly higher proportion having no plan to use family planning than in the control group, the proportion decreased after the intervention and the experimental group became comparable with the control group. The percentages in the experimental and control group reporting specific reasons for not currently using FP also remained at the same level in both surveys. If information exchange had been improved, there would have been a much lower proportion stating side effects as the main reason for not currently using among the experimental cases compared to the control cases. However, data show that the difference in proportions between experimental and control in CS1 and CS2 remained the same. The significant differences between experimental and control groups regarding the methods to be tried by those who were not currently using but planned to use FP in the near future at CS1 were maintained at CS2. There are no remarkable indications of some improved information exchange in the experimental areas as to their knowledge about the particular method chosen.

Table 6.3b: Distribution in Percent of or Average Measure for Married Women Aged 15-44 years According to their Recent Contraceptive History, Intention and Knowledge by Group (Experimental and Control, Community Survey 1 and Community Survey 2), Province of Pangasinan

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	Control	Experi-mental	Control
N	**1003**	**997**	**851**	**876**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. **Method Used in past year up to survey date**				
All	**35.3**	**34.9**	**35.0**	**39.7***
Condom	1.7	1.3	2.1	2.0
IUD	3.9	1.8	4.5	2.0
Pill	12.5	15.0	16.3	18.1
Injectable	4.7	11.7	5.9	13.9*
Traditional NFP	3.8	4.5	4.1	3.3
Modern NFP	0.4	-	-	0.1
LAM	8.3	0.6	2.1	0.3
B. Length of Use (in months), used in past year up to survey date				
	8.5	9.8	8.5	12.1
Condom	9.6	12.3	12.3	11.3
IUD	12.3	11.5	12.2	12.2
Pill	12.2	12.0	9.0	12.1
Injectable	10.3	11.0	12.3	12.3
Traditional NFP	5.6	-	-	-
Modern NFP	8.2	6.0`	5.0	7.7
LAM				

(Table 6.3b continuation)				
Variable	Community Survey 1		Community Survey 2	
	Experi-mental	Control	Experi-mental	Control
C. Non-current Use (non-users & never users)	**557**	**497**	**454**	**368**
N				
1. Plan about using family planning	59.7	50.3*	53.5	51.4
None	40.3	43.7	46.5	48.6
Will try another method				
2. Main reasons for not currently using at survey date				
Wants children	16.9	20.2	17.7	27.5*
Lack of knowledge	2.6	6.5*	2.5	1.1
Opposed to FP	4.5	9.7*	5.8	10.1*
Costs too much	0.3	-	0.4	-
Side Effects	27.6	15.4*	28.0	17.5*
Health Concerns	8.8	11.3	9.5	7.9
Hard to get method	-	-	-	-
Religion	0.6	0.8	-	1.6
Fatalistic	-	-	-	-
Old/difficult to get pregnant	29.5	30.0	31.7	26.5
Menopause/Had	1.0	2.4	1.2	3.2
hysterectomy	0.6	0.8	0.4	1.1
Inconvenient	-	-	-	0.5
Not married	4.5	1.6*	2.1	3.2
Husband is disabled	0.6	-	0.8	-
Husband opposed	1.0	0.4	-	-
Afraid to use	1.3	0.8	-	-
Don't know				
3. Method to try	**225**	**218**	**211**	**179**
N	6.2	1.8*	5.2	1.1*
Condom	11.2	4.5*	7.1	2.8*
IUD	39.6	40.2	43.6	40.8
Pill	20.0	29.9*	22.7	32.4*
Injectable	10.2	10.3	9.0	12.3
Female Sterilization	-	0.4	-	-
Male Sterilization	2.2	6.3*	2.8	2.2
Traditional NFP	-	-	-	0.6
Modern NFP	0.9	-	-	0.6
LAM	-	-	8.5	6.1
Withdrawal	-	-	1.0	1.1
Others	9.8	6.7	-	-
Don't know				

(Table 6.3b Continuation)

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	Control	Experi-mental	Control
D. Among those who received pill at time of last clinic visit N	**129**	**131**	**136**	**160**
1. Knew that she would start using the pill from the 1st to 5th day of menstruation	93.8	77.1*	93.4	81.9*
2. Knew that pill should be taken everyday	98.4	98.5	98.5	94.4
3. Knew that when forget to take the pill for one day, take the forgotten one immediately and then continue	89.9	80.2*	76.5	48.1*
4. Stated that there are any other problems that can occur to women using the pill	4.7	8.4	1.5	2.5
5.Told by service provider that pills will not protect her against sexually transmitted diseases	10.1	13.7	6.6	13.8*

E. Among those having an IUD inserted during the clinic visit N	**43**	**20**	**37**	**16**
1. Knew that checking if her IUD is in place by touching the thread regularly	76.7	75.0	48.6	93.8*
2. Stated that there are any other problems that can occur to women who use the IUD	5.0	25.0*	7.1	14.3
4. Told by service provider that IUD will not protect her against sexually transmitted diseases	14.0	10.0	8.1	0.0
5. Told when to return for a check-up	93.0	80.0	97.3	93.8

(Table 6.3b Continuation)

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	Control	Experi-mental	Control
F. Among those who were Injectable users N	**56**	**110**	**56**	**98**
1. Received the injection at that visit	100.0	100.0	98.2	96.9
2. Knew that she should get an injection once every three months	100.0	98.2	100.0	96.9
3. Stated that there are any other problems that can occur to women who use injectables (DMPA)	7.1	18.2*	5.4	5.1
4. Told by service provider that DMPA will not protect her against sexually transmitted diseases	14.3	14.5	7.1	7.1
5. Told when to return for another visit	89.3	94.5	100.0	96.9
6. Given a reminder card	90.0	75.0*	83.9	72.9
G. Among those who were condom users N	**20**	**15**	**24**	**13**
1. Got a supply of condoms at that visit	75.0	66.7	79.2	61.5
2. Would get her supply at the same clinic	20.0	20.0	8.3	15.4
3. Told by service provider that condom can protect her against sexually transmitted diseases	25.0	20.0	25.0	7.7

*Significantly different from experimental group with Z-value > 2.0 or < -2.0.

Health Status (Overall and Reproductive) and Behavior

Over 90 percent in both experimental and control groups rated their overall health status as good the month prior to the survey date in CS1 and CS2 (**Table 6.4**). Negligible

proportions were hospitalized anytime in the past 12 months with normal childbirth in both surveys or other conditions not related to reproductive health as the main reasons. When visiting a health facility in the past 12 months for a problem, that problem as diagnosed by the service provider is generally related to contraceptive use (above 20 percent in both study areas in CS2) and pregnancy and delivery (above 10 percent in both study areas in CS2). However, the proportion of experimental cases visiting a health facility for a contraceptive problem is significantly lower than the proportion of control cases. The reverse pattern holds true with pregnancy and delivery.

About 65 percent of women in the experimental and 75 percent in the control areas experienced prolonged labor of more than 12 hours during delivery of last pregnancy in the last three months before the intervention. The proportion increased among the experimental cases but decreased among the control cases after the intervention.

The reproductive problems showing substantial proportions in both experimental and control groups, are itchiness or irritation, and bad odor in vaginal area, severe lower abdominal pain which was not related to menstruation and problem in controlling urination. Significantly lower proportions of women with these problems in the experimental than control groups is evident at CS2 with comparable and higher proportions shown in both groups at CS1. The other reproductive problems were experienced by less than 10 percent of the cases in both experimental and control areas in CS1 and CS2.

Table 6.4: Distribution in Percent of or Average Measure for Married Women Aged 15-44 years According to their Health (Overall and Reproductive) Status by Group (Experimental and Control, Community Survey 1 and Community Survey 2), Province of Pangasinan

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	**Control**	**Experi-mental**	**Control**
N[a]	**1003**	**997**	**851**	**876**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Health Status the month prior to Survey Date				
Good (never bed-ridden)	94.4	92.8	98.5	97.4
Fair (majority of the time not bed-ridden)	5.5	6.2	1.4	2.5
Poor (bed-ridden)	0.1	1.0	0.1	0.1
2. Hospitalized anytime for the past 12 months	**4.2**	**6.4**	**5.4**	**6.5**
a. Pregnancy and delivery related	0.1	-	0.8	0.8
Postpartum/antepartum bleeding	0.5	0.5	-	0.2
Obstructed or prolonged labor	0.1	0.2	-	0.1
Abortion	-	0.1	0.2	0.2
Ectopic pregnancy	0.1	-	0.1	-
Normal childbirth	1.8	1.3	1.4	1.0
Caesarian section	0.2	0.8	0.4	1.1
b. Gynecological (uterus or breast or gall bladder, or others)	0.2	1.2	0.4	0.6
c. Problem related to contraceptive use				
d. Other conditions not related to reproductive health	0.2	0.3	0.4	0.2
	1.0	2.0	1.7	2.3
3. When visited a health facility in the past 12 months for a problem diagnosed by service provider as related to:				
a. Pregnancy and delivery	7.2	2.4	17.5	12.0*
b. Gynecology	1.2	1.1	3.3	2.9
c. Contraceptive use	5.5	8.3	21.0	27.3*
4. Experienced prolonged labor more than 12 hours during delivery of last pregnancy in the last three months	**N=136**	**N=84**	**N=135**	**N=101**
	64.7	75.0	71.1	54.5*
5. Had a problem in controlling urine in the last three months	8.5	10.2	6.8	4.8
6. Had this urine problem limiting her daily activities in any way	23.5	29.4	17.2	31.0*
7. Had pain in the lower abdomen	9.5	10.3	6.6	6.8
8. Had frequent need to urinate	9.0	10.5	7.5	7.8
9. Had very sudden urge to urinate	9.2	8.0	5.1	5.4

(Table 6.4 continuation)				
Variable	Community Survey 1		Community Survey 2	
	Experi-mental	Control	Experi-mental	Control
10. Had burning or stinging	7.5	6.6	7.1	6.2
11. Had blood in the urine	1.0	0.8	0.4	0.5
12 Had a problem with abnormal vaginal discharge over the past four months	6.3	6.6	4.1	4.1
13. Had itching or irritation in her vaginal area	73.0	72.7	68.6	77.8
14. Had noticed a bad odor in her vaginal area	66.7	71.2	85.7	83.3
15. Had any severe lower abdominal pain which was not related to menstruating	57.1	53.0	37.1	27.8
16. Had the abnormal vaginal discharge limiting her daily activities in any way	6.3	10.6	11.4	13.9
17. Had a fever	9.5	19.7*	20.0	8.3*
18. Had any problem with menstrual period lasting more than 10 days	2.1	3.5	3.0	4.6
19. Had any problem of bleeding or spotting between periods for more than one day	3.6	7.4	6.4	7.9
20. Had any problem of unusually heavy bleeding	1.4	3.1	3.0	1.7

[a]Base for all the variables except those with specified N.
*Significantly different from experimental group with Z-value > 2.0 or < -2.0.

Accessibility to Service Delivery Points and Utilization of FP and Health Services

The average travel time from residence to nearest BHS is less than 10 minutes for both study groups (CS1 and CS2) (Table 6.5). The corresponding average travel time to nearest RHU is close to 20 minutes.

Before the intervention, around 15 percent of both study groups and after the intervention, about 40 percent visited a health facility in the past 12 months for some problem. The service provider diagnosed this problem as being related to pregnancy and delivery, gynecology or contraceptive use. While some of the experimental cases, 32 percent of CS1, and 100 percent of CS2 experienced a miscarriage, none of their counterparts in the control areas sought anyone for treatment. A similar proportion (about 30 percent) of both study groups CS1 and CS2, sought anyone for advice or treatment for a problem about controlling urination experienced three months before the survey date. Significantly more women at CS2 in experimental than control areas sought advice or treatment about problems occurring during urinating. In Table 6.4, it was shown that significantly lower proportions of women in the experimental than control areas had such a problem. The improvement in accessibility to reproductive health services after the

intervention may be a reason for more women seeking advice on this matter in CS2. Close to 20 percent sought anyone for advice or treatment for problems of abnormal vaginal discharge (the proportion among the experimental group unchanged in CS1 and CS2) and menstruation related problems (the significant difference between the study groups is maintained in CS1 and CS2).

Table 6.5: Distribution in Percent of or Average Measure for Married Women Aged 15-44 years According to Variables Related to their Accessibility to Service Delivery Points and Utilization of Health Services, by Group (Experimental and Control, Community Survey 1 and Community Survey 2), Province of Pangasinan

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	**Control**	**Experi-mental**	**Control**
N	**1003**	**997**	**851**	**876**
%	**100.0**	**100.0**	**100.0**	**100.0**
A. Accessibility to Service Delivery Points				
1. Average travel time (in minutes) from residence to nearest:				
a. Barangay Health Station	9.37	9.11	8.41	7.46
b. Rural Health Unit	20.47	15.83	17.71	15.17
B. Health Service Utilization				
1. Visited a health facility in the past 12 months for some problem and the service provider diagnosed this problem as being related to pregnancy and delivery, gynecology or contraceptive use	14.9	15.3	41.4	42.1
2. Sought anyone for treatment mostly physicians, public or private for any last non-livebirth (miscarriage) between September 1997 and date of interview	31.6	-	100.0	-
3 Sought anyone for advice or treatment with her problem in controlling her urine	35.3	35.3	31.0	28.6
4. Sought anyone for advice or treatment for any problem while urinating between May, 1997 and date of interview	31.1	27.4	24.5	18.5*
5. Sought anyone for advice or treatment for her problem with abnormal vaginal discharge	22.2	31.8*	22.9	22.2
6. Sought anyone for advice or treatment for any menstruation-related problem three months, before date of interview	37.7	14.4*	24.7	19.8*
9. Attended to birth of last child in the last three months and date of interview				
Doctor (private)	11.5	10.2	11.5	8.3*
Doctor (public)	4.1	8.6*	3.1	11.1*
Nurse (public or private)	0.9	1.4	0.4	1.0
Midwife	54.1	52.6	56.5	50.8*
Hilot	29.2	27.0	27.7	28.8
Others	0.2	0.2	0.8	-

*Significantly different from experimental group with Z -value > 2.0 or < - 2.0.

Midwife is the most popular birth attendant of those delivering their last child in the last three months prior to the interview. The experimental group showed a significantly higher proportion than its control counterpart on this variable. The hilot is the next most popular birth attendant in both study areas and CSs.

Quality of Care

In this section we assess if there has been improved information exchange in the experimental areas. The analysis is however limited to clients who have ever tried FP and who ever-visited the service delivery point anytime from January 1997 to survey date. **Table 6.6** presents the relevant variables (background variables and those directly related to information exchange). Since there are only very few experimental cases who had their last contact with a BSPO in January 1997 or later (2 in CS1 and 9 in CS2), the analysis in this section is confined to FP ever users who recently visited the service delivery point.

The first two variables under consideration in **Table 6.6** are background variables while the rest are directly related to information exchange. With respect to the background variables, as true in all public SDPs, the midwife is the main provider of FP during the R's recent clinic visit. The majority of the experimental and control cases reported waiting less than 30 minutes before they were served by the service provider during their most recent visit at the service delivery point for FP. Notably, significantly more clients in the control areas waited for services the least (less than 30 minutes) than those in the experimental areas.

Let us turn now to a series of quality of care variables wherein improved information exchange could be assessed. A close examination of these quality of care variables indicates that the proportion of experimental cases declined after the intervention for most variables under consideration. Among those variables that showed an increase in proportions are:

1. Felt she was in a private place where no one else could see her[a];
2. Felt she was in a private place where no one else could hear her[b];
3. Satisfied with the service provided her[a];
4. Thought that the service provider was friendly to her during that visit[c];
5. All questions answered to her satisfaction[c];
6. Received the method of her choice[a];

7. Knew about any other place to obtain a family planning method[a];
8. Clinic was cleaner than the other places[c];
9. Clinic opened longer at the best time for her[b];
10. Respondent planned to use some other services[a];
11. Health workers there are more competent[b]; and
12. Health workers there give more information about FP[c].

[a]With significant difference in CS1 but insignificant difference in CS2 between the study groups.
[b]With significant difference between the study groups in CS1 and CS2.
[c] No significant difference between the study groups in CS1 and CS2.

However, the trend for most of these variables among the control cases also shows an increase. Hence, it is very difficult to attribute the increasing trend among the experimental cases to improved information exchange. Only two of these many variables appear to indicate some improved information exchange because the control cases show a constant or declining trend. These are:

1. Felt she was in a private place where no one else could see her
2. Respondent planned to use some other services.

Table 6.6: Distribution in Percent of or Average Measure for Married Women Aged 15-44 years According to Selected Quality of Care Variables by Group (Experimental and Control, Community Survey 1 and Community Survey 2), Province of Pangasinan

Variable	Community Survey 1		Community Survey 2	
	Experi-mental	**Control**	**Experi-mental**	**Control**
N	**146**	**233**	**173**	**215**
%	**100.0**	**100.0**	**100.0**	**100.0**
1. Type of health care worker who helped R to get her contraceptive method at recent clinic visit				
Doctor	4.8	6.0	4.6	6.0
Nurse	0.7	0.9	1.7	2.3
Midwife	87.7	85.0	90.8	87.4
Barangay Health Worker	3.4	3.4	0.6	2.8
Others	3.4	4.7	2.3	1.4

(Table 6.6 continuation)				
Variable	Community Survey 1		Community Survey 2	
	Experi-mental	**Control**	**Experi-mental**	**Control**
2. Waiting time before R was served by that person				
Less than 30 minutes	76.7	81.5	65.3	92.1*
30 minutes to 1 hour	13.7	5.6*	27.2	3.3
Over 1 hour	5.5	1.3	5.2	2.8*
Can't remember/Don't know	4.1	4.6	2.3	1.9
3. Felt she was in a private place where no one else could see her	26.7	45.1*	37.6	44.7
4. Felt she was in a private place where no one else could hear her	26.7	44.6*	35.3	53.0*
5. Thought that the health facility was clean	93.1	77.2*	94.8	97.6
6. Satisfied with the service provided her	95.9	91.0*	97.7	98.1
7. Thought that the service provider was friendly to her during that visit	94.5	91.4	97.1	97.2
8. Was allowed to ask question by service provider during that visit	74.7	75.1	60.7	64.7
9. All questions answered to her satisfaction	76.0	78.5	95.4	95.8
10. Felt that she was given enough information during that visit to decide on the best contraceptive method for her	82.2	79.4	72.8	71.6
11. Felt that there were enough contraceptive methods available in the health clinic for her to choose from	77.3	68.5	11.6	32.6*
12. Assured by service provider that it was all right to switch to another method	59.1	55.6	12.0	29.5
13. Asked by service provider				
a. Whether she would like to have another child	50.3	34.6*	36.6	35.4
b. When she would like to have her next child	43.4	30.3*	27.9	26.4
c. If she was breastfeeding at that time	62.8	47.4*	32.0	39.2
d. About her medical history and current health status	51.0	37.7*	23.3	37.7*
e. About the date of her last menstrual period	65.5	65.8	40.1	51.9*
f. About the type of family planning method she would like to use	69.9	64.0	33.7	62.3*
g. About her past family planning experience	51.0	37.3*	29.1	33.0

(Table 6.6 continuation)				
Variable	Community Survey 1		Community Survey 2	
	Experi-mental	**Control**	**Experi-mental**	**Control**
14. What the service provider did during R's visit				
a. Took blood pressure	76.6	70.2	56.4	63.2
b. Took blood sample	9.7	5.3	4.7	5.2
c. Gave a physical exam	35.9	25.9*	11.0	22.6*
d. Clearly explained how her family planning method works	67.6	48.7*	34.9	53.3*
e. Demonstrated how to use it	60.7	52.2	28.5	47.2*
f. Described its possible side effects	55.9	58.3	34.9	59.9*
g. Explained what to do if she experienced any problems before the next visit	55.9	48.7	30.8	50.9*
h. Discussed the possibility of changing methods if she is not happy with the method	61.4	56.1	32.0	54.7*
i. Told R about places other than this clinic	40.0	25.0*	25.0	38.2*
j. Told R when her next visit was going to be	69.0	61.4	37.8	69.8*
k. Explained the warning signs for the contraceptive method R selected	58.6	39.9*	25.0	45.3*
l. Told R about any contraceptive method that can prevent sexually transmitted diseases	10.3	15.8	13.4	8.0
m. Told R about any other method	33.1	36.4	15.7	24.5*
n. Promoted one method more than the others	34.5	22.8*	25.6	35.8*
16. Ever followed up by any service provider or outreach worker since last recent visit	18.6	21.1	9.3	15.1
17. Knew about any other place to obtain a family planning method	58.6	36.0*	71.5	65.6

(Table 6.6 continuation)				
Variable	Community Survey 1		Community Survey2	
	Experi-mental	**Control**	**Experi-mental**	**Control**
16. Ever followed up by any service provider or outreach worker since last recent visit	18.6	21.1	9.3	15.1
17. Knew about any other place to obtain a family planning method	58.6	36.0*	71.5	65.6
18. For those who knew any other place to obtain a family planning method and decided to go to this place because				
a. Clinic was closer to home	70.6	74.4	67.5	82.0*
b. Clinic was closer to place of work or the market	50.6	37.8*	44.7	48.9
c. Clinic offered the family planning method she wanted to use	82.4	72.0*	76.4	75.5
d. Clinic was cleaner than the other places	64.7	54.9	72.4	69.8
e. Not too long to wait in the clinic	80.0	69.5*	74.8	74.8
f. Clinic opened longer or at the best time for her	82.4	69.5*	85.4	77.0*
g. Clinic offered more privacy for her	40.0	52.4*	36.6	52.5*
h. R planned to use some other services	42.4	57.3*	61.0	51.8
i. Nobody would recognize R in that place	10.6	8.5	15.4	22.3
j. Clinic not as expensive as other places	49.4	65.9*	48.0	76.3*
k. Health workers there are friendlier	85.9	73.2*	79.7	77.0
l. Health workers there are more competent	76.5	59.8*	81.3	71.9*
m. Health workers there give more information about FP	69.4	68.3	78.9	71.2
19. Willing to recommend clinic recently visited to any of her friends or relatives who might want to use some form of FP	75.2	65.4*	65.1	85.4*
20. Ever recommended that place to any friend or relative	32.4	32.9	35.5	55.2*
21. Ever recommended that place to any friend or relative wanting to use FP	89.4	92.0	88.5	94.0

*Significantly different from experimental group with Z value >2.0 or < - 2.0.

Summary

The experimental and control cases were not strictly comparable on most of the demographic, socioeconomic, and cultural background variables. However, the experimental and control clients appear not to differ substantially on the variables of reproductive performance; behavior and intentions; contraceptive history; problems, behavior intentions and knowledge; health status (overall reproductive) and behavior; accessibility to service delivery points and utilization of FP and Health services; and main FP service provider and waiting time. Only two quality of care variables emerge as indicators of some success (Feeling she was in a private place where no one else could see her and planning to use some other services). Among most of the variables, a declining pattern is observed with the experimental cases. In those few variables where an increase occurs among the experimental cases, a similar increase is also evident with the control cases. It appears that in a span of five months, the expected improved information exchange in the experimental areas is not evident.

CHAPTER VII
SUMMARY AND CONCLUSIONS

The assessment of the effects of the three study interventions showed the following results:

Training

FP Counseling Training

Twenty-four service providers (doctors, nurses and midwives) who underwent training in FP counseling (experimental group) showed significantly higher average scores on **contraceptive technology**, advantages and disadvantages of methods, their side-effects and FP counseling skills, and **on quality of care** using the GATHER approach than those who were not trained (control group). However, the training on monitoring and supervision which focused on the nature and use of the CBMIS and the UNA did not result in any significant difference in scores between the experimental and control groups. This could probably be due to the fact that service providers were just 'oriented' to the UNA structure, and its recording, reporting and feedback mechanisms for one half day out of the 7-day live-in training.

Supportive and Facilitative Supervision Training

The 3-day training of 10 provincial, municipal and barangay supervisors and midwives on supportive and facilitative supervision showed that the average posttest score among those who were trained was significantly higher than their own average pretest score or that of the control group. The training significantly increased the trainees' knowledge on counseling and supervision but did not make a significant change on knowledge of contraceptive technology. This was probably because the training assumed that the trainees had prior knowledge of contraception which probably was outdated since most trainees received their basic FP training a long time ago.

Training of the Unmet Need Algorithm (UNA)

The BSPOs were trained to masterlist **all** married women of reproductive age (MWRA 15-49 years) in their community using UNA Form 1. The BSPOs did some exercises in filling up the UNA Form 1 Parts A, B, and C. The Municipal Population Officers (MPOs) were taught how to supervise the BSPOs in filling up the UNA Form 1 and were trained on how to consolidate the data generated from the completed form1 using Report Forms 1 and 2.

One-on-one coaching was done by the Provincial Population Officer (PPO) and the PPO staff until all BSPOs have mastered the use of the UNA Form 1.Monthly meetings were held among MPOs and BSPOs in December 1997 and January 1998 to ensure proper filling of the UNA Form 1. By February 1998, the monthly meetings included the RHU personnel for the purpose of action planning. During the monthly meetings, close coordination among population workers were spelled out, and their roles and functions were clarified. A referral form was developed by the PPO staff and copies were distributed to BSPOs and service providers for use starting in March 1998.

Intervention Impacts on Readiness to Provide Services and Quality of Care

Readiness to Provide Services

Services. Almost all SDPs in both experimental and control clinics provided similar varieties of contraceptive methods and reproductive health services at baseline. IUD, RTI counseling and IEC provision showed greater increases in experimental areas than in the control and post-baseline.

Infrastructure. Fewer SDPs in experimental areas had auditory and visual privacy in their examination areas than those in the control areas at baseline. However, at post-baseline, SDPs in the experimental areas showed a greater improvement in privacy than in control areas.

Staff. Medical and paramedical staffing in SDPs did not vary between experimental and control areas at baseline and post-baseline survey. The assignment of BSPOs and BHWs to work fulltime at the MCH/FP section was more prevalent in the experimental than in the control areas, but the proportions increased at post-baseline in both areas, with the experimental areas showing a clear advantage over the control areas.

IEC. SDPs in experimental and control areas were equally well-stocked with family planning IEC materials at baseline and post-baseline surveys. Although the experimental areas were slightly disadvantaged compared to control SDPs at baseline in the announcement of the availability of FP services and more materials in antenatal and post-natal child welfare, nutrition, FP information sheet and sample of contraceptives, the experimental SDPs improved in their possession of these materials at post-baseline. About two-thirds of SDPs in both areas offered health talks and FP at baseline, but this proportion showed a greater increase in the experimental than in the control area at postbaseline.

Record Report/Inventory/safekeeping. A higher percentage of experimental than control SDPs at baseline maintained complete and well-ordered client records and logbooks(TCLs), and sent statistical reports to higher units, inventory and safekeeping of FP supplies. At post-baseline, experimental SDPs showed significant improvement while control SDPs showed only a modest improvement at best on these matters.

Supervision. Experimental and control SDPs received comparable supervisory visits at baseline and post-baseline surveys. The supervision was more on administrative matters (records, supplies, monitor performance) than on the provision of services (supportive supervision). At baseline, a lower proportion of experimental than control SDP staff were supervised in providing clinical services, and this increased substantially in the experimental area while it declined in the control area at post-baseline.

Quality of Care

Choices of Methods. Discussion between the service provider and the new FP client of various methods instead of just one method appeared to be better in the experimental

areas compared to the control areas before and after intervention, particularly methods like the pill, condom, and IUD. More clients in the experimental than in the control areas were told about other methods in addition to what they received at baseline and post-baseline.

Screening Unsafe Choices. At the outset, higher proportions of service providers in the experimental than in the control areas screened out breastfeeding women with fewer children from pill use than those in control areas. On the other hand, higher proportions of service providers in the control than experimental areas screened out the unmarried, the older women and those without husbands consent for pill use. At post-baseline, service providers in the experimental area became more prudent and cautious in providing pills to clients than in the control areas particularly by screening out older (>35 years), younger (<20 years), breastfeeding, and unmarried women and those without husbands consent. On the other hand, the proportions of service providers in the control area who screened women with fewer children from pill use declined significantly at post-baseline. Providers in both study areas did not differ significantly in screening clients from DMPA use at baseline. At post-baseline, more providers in the experimental areas screened out the young, breastfeeding, unmarried women and those without husband's consent for DMPA use than in the control areas. The reverse holds true for those with only one child being screened out more by the providers in the control areas compared to their counterparts in the experimental areas.

Information Giving. The information provided by service providers on the method accepted was comparable between experimental and control groups at baseline survey. At post-baseline, significantly higher proportions of service providers in the experimental than control areas explained side effects. Larger proportions though not significant of service providers in the experimental areas than in the control areas informed clients on how the accepted method was used, its advantages, disadvantages, what to do if problem occur, and the possibility of switching methods or supply source. Higher though insignificant proportions of providers in the experimental than in the control areas asked new and returning FP clients about spacing or limiting plans, nature of client's sexual relation, breastfeeding status, problem or concern about a method and FP discussion with husband.

Appropriateness and Acceptability of Services. There was a high level of client satisfaction for services received in both experimental and control areas. Almost all FP clients were generally satisfied with their visit to the SDP and generally felt that they received the information they wanted.

To recapitulate, the experimental and control SDPs were comparable in their readiness to provide services at baseline. This included a variety of contraceptive methods, auditory and visual privacy in their examination areas, medical and paramedical staffing, IEC materials and supervision received. However, at postbaseline, the awareness created by the FP counseling and supervision trainings on the various elements of quality of care has probably moved experimental SDPs to positions of advantage compared to the control SDPs particularly on auditory and visual privacy, IEC (FP and health talks), and administrative supervision. The one area where experimental SDPs had an advantage was on recording and reporting. Significant improvement was shown by experimental over control SDPs at postbaseline on the maintenance of complete and well-ordered client records and logbooks as well as transmission of reports to higher levels.

Of the six elements of quality care (Bruce Framework, 1990) the GATHER training by the service providers in the experimental area significantly improved the way clients were informed about the various methods of contraception, explained how they were used, their advantages and disadvantages, told clients about other methods in addition to the method they received, and screened of unsafe contraceptive choices than service providers in the control areas. Expectedly, significantly higher proportions of FP clients in the experimental than in the control area expressed satisfaction for the prompt FP service they received, and for the fact that they were not made to pay for FP services.

Modified Situation Analysis for BSPOs

BSPO Readiness to Provide Services

Over 90 percent of BSPOs in the experimental area received BSPO training at baseline compared to 96 percent of BSPOs in the control area. At postbaseline, a significantly higher percentage of BSPOs in the experimental area (96.4%) received training than in the control area (86.1%).

Of the duties BSPOs mentioned that they received training on, a significantly higher percentage of BSPOs in experimental than control areas mentioned masterlisting (26.8% vs. 4.2%) while **no** significant differences were found between the two groups on duties such as motivation of clients, counseling, referral and resupply.

At postbaseline, BSPOs in the experimental and control areas reported comparable duties and responsibilities except for their participation in the clinic workplan, where significantly more BSPOs in the experimental than in the control area reported this activity at postbaseline. This is the one area in which the BSPO intervention may have had a positive effect. The fact that this proportion was declining in the experimental and control groups indicates that the situation could have been worse in the experimental area were it not for the intervention.

Observation and Reporting of BSPO Activities

The observation of BSPOs' activities showed that at postbaseline, significantly higher proportions of BSPOs in the experimental area prepared the masterlist of MWRAs (Form 1 Part A), and the Monthly Service Delivery Ledger (Form 1 Part C) than in the control area. Significantly higher proportions of BSPOs in the experimental area used the masterlist to plan BSPO visits for the next month than in the control area.

The Unmet Need Algorithm (UNA)

Data collected from the UNA Form 1 shows that as of April 1998, the BSPOs masterlisted 2,460 MWRAs in Bugallon and 3,446 MWRAs in Pozorrubio, representing a completion rate of 42.7 and 58.9 percent in Bugallon and Pozorrubio, respectively.

Using data from the masterlisted women between January to April 1988, the percentage of MWRAs in **high health risk** was 88.8 percent for Bugallon, 81.5 percent for Pozorrubio and 84.5 percent for the entire experimental area. On the other hand, only 25.3 percent of MWRAs in Bugallon, 29.2 percent in Pozorrubio and 27.6 percent in all of the study area have an **unmet need** for family planning.

The data further show that the greatest bulk of MWRAs with unmet need are also in high risk that is, 89.3 percent in Bugallon, 79.4 percent in Pozorrubio and 83.0 percent in all of the study areas.

The monthly or quarterly tabulations of data from the UNA permits the tracking of contraceptive use among women with unmet need, those at high health risk and those at both health risk and with an unmet need.

For prioritizing women for family planning services, the unmet need classification has greater appeal because it identifies fewer MWRAs who may be more predisposed to use family planning and therefore promotes the efficient use of program resources.

The contraceptive prevalence obtained by the UNA of 43.4 percent in all of the study areas was validated by the community survey conducted in March 1998 during a sample survey of MWRAs in the experimental areas and showed a prevalence of 46.7 percent. This shows that the recently installed UNA is capable of reliably tracking contraceptive prevalence, and therefore is a valuable tool for program planning, monitoring and evaluation at local level.

Intervention Impacts on FP Use and Drop-out

The data collected by Community Survey 1 and Community Survey 2 are used to establish whether or not the interventions have had an effect on the achievement of the intermediate objectives of improving the length of use of contraceptives and reduction in FP drop-outs.

Analysis of the demographic, socio-economic and cultural variables showed that the experimental and control cases were not strictly comparable. Reproductive performance showed slightly higher proportions ever-pregnant, average number of pregnancies and living children among the experimental than among the control samples of MWRAs. The other variables did not differ between the control and experimental sample of MWRAs. Reproductive intentions showed slightly longer spacing intervals among the control relative to the experimental MWRAs, indicating that the FP counseling and supervision could not have influenced these patterns. It is worth mentioning here that the presence in the control area of a sterilization center (of AVSC) greatly strengthened the FP program in the control area.

Contraceptive prevalence at the outset was significantly higher in the control (50.1%) than in the experimental area (44.5%). This indicates the lack of equivalence between the two groups before the interventions were applied. At postbaseline, there was a 2.2 percentage points increase in the experimental groups while the control group likewise showed an increase of 7.9 percentage points in the postbaseline.

Excluding sterilization use from the overall prevalence in both groups to remove the AVSC advantage present in the control group at baseline rendered the two groups comparable in prevalence at the outset (38.7% in experimental and 38.0% in the control). However, at postbaseline, contraceptive prevalence in the control (45.6%) was still significantly higher than the experimental (40.0%) group. One factor present in the experimental area that may have prevented contraceptive prevalence from increasing despite the intervention, is the experimentation with payment for contraceptive supplies and services. In contrast, all FP supplies and services in the control area are given free of charge.

The second proxy measure taken to reflect the extent of drop-outs was the difference between ever-use and current use. At baseline survey, the proxy drop-out rate was 34.5 percent in the experimental (Ever tried = 79 minus current use = 44.5) compared to only 23.4 percent in the control area. At postbaseline, the drop-out rate in the experimental reduced to 31.8 percent while this remained constant at 23.7 percent in the control area. One could surmise that the study interventions may have influenced this slight reduction in drop-outs of the experimental area.

Only two quality of care variables turned out to be important indicators of success of the intervention. These are sense of privacy and plan to use some other services.

Conclusions/Recommendations

1. The FP counseling training was effective in upgrading the knowledge of service providers on contraceptive technology, advantages and disadvantages of methods, their side-effects and on quality of care.

2. Facilitative/supportive supervision training was effective in increasing trainees' knowledge in counseling and supervision but did not significantly change knowledge on contraceptive technology. There is a need for supervisors to be updated on recent developments in contraceptive technology. There is also a need to strengthen the facilitative supervision component through more practice with the coaching technique.

3. The low effectiveness of the UNA training can be traced to the novelty of the concept and the lack of a direct local translation of the concept of "Unmet Need", and the lack of a direct local translation of such a difficult concept requires longer training that should include a practicum employing the coaching technique.

4. The experimental and control SDPs were comparable in their readiness to provide services at baseline, such as variety of contraceptive methods, auditory and visual privacy in their examination areas, medical and paramedical staffing, IEC materials and supervision received. The awareness created by the FP counseling and supervision trainings on the various elements of the quality of care has probably moved experimental SDPs to positions of advantage compared to the control SDPS particularly on auditory and visual privacy, IEC (FP and health talks), and administrative supervision.

5. The training on the GATHER approach has significantly improved the way clients were informed by service providers about contraceptive methods. Significantly higher proportions of FP clients in the experimental than in the control area expressed satisfaction with the FP services they received.

6. BSPOS in the experimental and control areas were comparable in their readiness to provide services in the areas of masterlisting, IEC/M, referral, resupply of contraception, follow-up and advocacy at baseline survey. At postbaseline, significantly more BSPOs in the experimental area participated in the clinic workplans. Significantly higher proportions of BSPOs in the experimental area accomplished the masterlisting of MWRAs than in the control area.

7. The UNA is an effective tool for the prioritizing women for FP services because it identifies far fewer MWRAs who may be more predisposed to use FP than the High Risk approach. Independent sample surveys have validated the accuracy of the UNA in reliably tracking contraceptive prevalence.

8. Using prevalence and the difference between ever-use and current use rates as proxy measures, the community survey **showed that the training interventions** were responsible for some improvement in prevalence in the experimental area. There was also some evidence of a reduction in the drop-out rates in the experimental area which was absent in the control area at postbaseline.

Lessons Learned

The study interventions were applied on selected communities where the LGU Family Planning Program may be considered strongest. It enjoys a high degree of political support from the provincial leadership. Its Population Program Officer is undoubtedly the most dynamic and committed in the country. Program performance indicators reflect an above average performance.

However, improvement in the quality of care through training interventions has its limits. For one, further improvements in an area with an already high level of performance is harder to achieve than in one with lower performance. For another, the study interventions were in line with the new program "paradigm shift" which attempts to change the old medical tradition of paternalism in the provision of contraceptive information and services to a user-oriented type of service provision as exemplified by clichés such as "follow the client not the method". Undoubtedly, a turn around in the way clients are to be served requires a longer time frame. Pangasinan is a conservative community and new ideas and approaches are not readily accepted. Moreover, clients still need the advice of service providers on the best contraceptive to use.

The transfer of administrative responsibility of the FP program from POPCOM to DOH in 1989 placed the outreach structure and its relationship with the DOH FP service delivery points in limbo. In some provinces, BSPOs were all turned into BHWs or as DSWD volunteers. Pangasinan is but one of the surviving outreach structures that have been recognized by the LGU as part of the Local FP program. In 1992, the implementation of the Local Government Code devolved most social services including health and family planning to the local government units. Discontinuities in program management were inevitable, particularly those that involved allocation of local funds for personnel travel and medical supplies, and the shift in administrative supervision from DOH central to the municipal mayor. Service providers are often hard to supervise because they feel the mayor is their "boss" or that their priorities are determined by what the "boss" says. In Pozorrubio, the MPO was unable to supervise and assist BSPOs due to other municipal priority concerns.

Interpretations of national policies on cost recovery and sustainability vary and often run counter to policies of free choice and accessibility. Contraceptive supplies are sometimes withheld by overzealous service providers when "donations" from the client are not forthcoming. There are also differences in the attitudes of service providers on the issue of "donations".

Coordination between the clinic service providers and outreach workers is observed to be weak. While the Population Program Officer (PPO) is very dynamic and capable of harnessing LGU support from local officials, it is doubtful whether such leadership is effective in tightening the coordination between clinic and outreach workers without the full support of the Provincial Health Officer (PHO). One of the constraints of the study is the change in PHO in late 1997 when the interventions needed greater supervision. The PPO's efforts in overseeing the study interventions was limited since the PHO is fairly new to the project concept and the paradigm shift. Threats to better coordination could be erased if the policies of cost recovery and the differences in attitudes towards "donation" were clarified and threshed out.

The low effectiveness of the UNA training was due to the novelty of the concept, to the low educational level of BSPOs, and to the reluctance of BSPOs to conduct their usual masterlisting and adding the UNA. This reluctance was traced to the lack of incentives for this added task. The PPO made representations to the provincial government for the transportation expenses of BSPOs to be reimbursed. The SA2 results showed that masterlisting was carried out better in the experimental than in the control areas. The study results pointed out the need to present the UNA in an easily understood term using the local language. There is also a need for tighter monitoring and more trouble shooting in the accomplishment of the UNA Form 1 to ensure their accuracy. There is need for MPOs to facilitate the monthly meetings and improve the use of UNA data in planning for outreach activities in the following month.

The experimental and control SDPs were not strictly comparable at baseline. The matching criteria used in the selection of experimental and control areas were inadequate to reflect the strength of the local FP program. Although the training interventions improved the service providers' knowledge in counseling and supervision, its impact was limited and served mainly to move experimental SDPs to positions of advantage relative to the control SDPs and most of the results were not statistically significant. One way of assessing program strength

is to conduct a rapid assessment, the results of which could have been an added parameter in the choice of study and control areas. Indicators such as FP service provider population ratio and outreach worker population ratio are imperfect bases for drawing the samples.

In sum, the study timeframe is too short to allow all interventions to show the expected impact. Selection of experimental and control areas need to be based on better indicators of program strength. Changes in key program personnel within the life of a study should be avoided as much as possible. Background characteristics of program managers should be an added criterion in the selection of study sites as well as the nature and types of service facilities (e.g presence of district hospitals providing VSC, facilities implementing cost recovery schemes, etc.).

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