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JHPIEGO

A Johns Hopkins Program For International Education In Reproductive Health

EVALUATION

Fiscal Year 1987

JHPIEGO, a private, nonprofit corporation, is affiliated with The Johns Hopkins University and funded primarily by the Agency for International Development. JHPIEGO's mandate is to increase the availability of improved reproductive health services in developing countries and to increase the number of health professionals in developing countries with knowledge and skills in modern reproductive health care, especially family planning services.

In its approach, JHPIEGO:

- Facilitates the strengthening of reproductive health education in medical and nursing/midwifery schools and other teaching institutions.
- Supports short-term educational programs for medical, nursing and midwifery school faculty, trainers, key service providers, and administrators.
- Advocates the incorporation of reproductive health services into primary health care.
- Develops innovative educational programs for health care professionals.
- Provides trainees and their institutions with up-to-date educational materials and supports the development of local educational materials.
- Provides medical equipment for reproductive health services to the institutions of program participants.
- Maintains a network of reproductive health care professionals in developing countries who act as project directors and consultants for JHPIEGO-supported educational programs.

JHPIEGO essentially is a catalyst for the improvement of reproductive health. Leading health care professionals in developing countries propose and manage the programs; JHPIEGO provides technical guidance and funding.

Since 1974, JHPIEGO has supported educational programs for more than 55,500 health care professionals and medical and nursing/midwifery students from 6,700 institutions in 122 countries. A total of 12,100 doctors, 7,800 nurses, midwives, or paramedical workers, 1,500 administrators, and 34,100 undergraduates have participated in these programs. For the majority of health professionals, clinical training has been in voluntary surgical contraception, anesthesia for outpatient gynecological procedures, IUD insertion, or treatment of sexually transmitted disease. The vast majority of program participants were trained at in-country and regional centers, with just over 2,600 attending courses in the United States.

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EXECUTIVE SUMMARY

This Evaluation Report covers the time period of the first program year, May 1, 1987 to April 30, 1988, for the new Cooperative Agreement (DPE-3045-A-007004) between USAID and JHPIEGO. The format for this year's Evaluation Report differs from previous years in two important ways. First, rather than being a comprehensive quantitative statement of accomplishment, it provides a more detailed discussion of selected programs from various geographic regions. The second change involves dividing the discussion of program activities into two sections: one dealing with the examination of clinical training programs and the other involving the analysis of didactic programs.

The intent of this revised format is to provide an in-depth analysis of the entire range of JHPIEGO's international program activities by the end of the agreement period. Accordingly, different activities will be analyzed and discussed each year.

As each program was examined four questions were used to guide the discussion:

Why was the program undertaken?
What was learned during the course of the program?
What recommendations were developed as a consequence of the program activities?
How are these findings being used by JHPIEGO?

The report begins with the clinical training section and draws examples from programs in Colombia, Turkey, and Brazil. In the second section the didactic training programs from Nigeria, the Philippines and the JHPIEGO Education Center in Baltimore are analyzed. The third section of this report addresses the findings of these various evaluative activities and their implications for programming in other regions. Finally, the report closes with a brief review of the recommendations derived from this evaluation process and a discussion of how they are being used to guide future program planning.

Evaluation Tools:

As JHPIEGO focusses attention on the quality of training (both process and content) and training impact, attention has been given to the ways in which these aspects of evaluation are dealt with. Virtually all training programs include pre and post-test and course evaluation tools. These tools are usually program or project specific and have been developed by the in-country staff. Copies of these instruments are usually sent to JHPIEGO for review prior to their implementation.

A second source of information provided directly to JHPIEGO is the Annual Participant Survey (APS) form distributed 6 to 12 months following course participation. Data from the APS forms enables us to verify earlier reports and support various findings with anecdotal references for additional detail. These data often have led to a modification of the project while it was in process.

Findings from selected JHPIEGO programs were:

1. Program impact on skills and training is revealed in portions of the APS form and in special evaluative efforts such as the procedure undertaken by Dr. Roebuck in Nigeria. Her report documented change in medical school curriculum as a consequence of a JHPIEGO sponsored curriculum workshop twelve months earlier. It also revealed some of the long-term impact of JHPIEGO's endoscopy training programs. Provision of equipment and trained personnel, generated in earlier JHPIEGO programs, enabled the training institutions to provide observational experiences to medical students on FP topics.

2. The APS forms from Colombia revealed a different kind of impact. The trainees responded favorably regarding their training and documented a positive shift in attitudinal change from a mind set of disinterest to one of desire for further continuing education.

3. The in-country curriculum development programs have contributed to the strengthening and updating of reproductive health curriculum content for both medical schools and colleges of nursing. As stated earlier, Nigeria presents an example of the updating of medical school curricula. The Philippine project through the ADPCN is producing a reproductive health syllabus for each year of the baccalaureate curriculum. The field visits incorporated with each year of the project reveal the ways in which the syllabi are included in the teaching routine of the nursing faculties.

<u>Summary of JHPIEGO Training Activities</u>:

Statistics from all JHPIEGO programs have been compiled to provide a comprehensive view of training accomplished in Fiscal Year 1987. The region with the most nations participating in JHPIEGO courses whether US-based, regional or national has been Africa (TABLE 8). The greatest number of in-country training programs has occurred in the Latin American/Caribbean (LAC) region with 584 separate courses (TABLE 9). It should be noted that in LAC 368 of the 584 (63%) training courses involved brief didactic courses offered to undergraduate medical and nursing school students. If these courses are excluded the distribution by region becomes:

Asia/Near East:	116 (26.0%)
Africa:	117 (26.4%)
LAC:	216 (48.6%)
Total	444 (100%)

Perhaps the most revealing aspect of the JHPIEGO training activities for FY 1987 is shown in TABLE 10 which summarizes all training activities by type (didactic versus clinical), content and type of health care provider trained. Significant findings revealed in this table are:

- Skill (clinical) training is included in all major JHPIEGO activities with IUD training heading the list. Training of physicians in minilap has increased as compared to previous years.

- Updating reproductive health knowledge and improving faculty communication and teaching methodology is our most important didactic training activity.

Medical equipment and/or educational materials are distributed in conjunction with each training course offered by JHPIEGO. Standard educational packages have been designed by the JHPIEGO staff for use with the 'didactic' training programs. They are supplied to the in-country project staff for distribution to course participants at the time of training. As noted in the following TABLE 10, the region receiving the most educational packages has been Africa (719).

Distribution of medical equipment occurs following satisfactory completion of clinical training. Most of the IUD training has been done in Latin America and Africa where 402 and 392 kits have been distributed respectively. Wherever the clinical training has focussed on laparoscopic and minilaparotomy techniques, this equipment has been provided to the trainee. The installment of laparoscopic equipment has been done through field visits which include observations of the trainee's clinical and surgical techniques. (A summary of all equipment/instruments and educational material is presented in TABLE 10.)

Conclusions:

How successful have we been in answering the four questions posed in the introduction? As shown in the accompanying table (TABLE 11) sufficient data is available to answer each question for most programs/activities evaluated in this report. Despite some weaknesses in the data, detailed observations about JHPIEGO's projects can be made. The in-country projects undertaken during the first year of the new Cooperative Agreement were either a continuation of earlier program activities (NCA-103 and NSP-20) or at the request of national agencies (NCA-59, NCA-86 and NCA-117). The Latin

American projects focussed on the training of service providers while the Asian, Near Eastern and African programs focussed on the training of trainers.

The second question addressed what JHPIEGO learned this year. Three projects involved interdisciplinary training (Colombia, Turkey and Brazil). Reports from Turkey indicate that this approach has been well received. The reports from Latin America did not address this approach to training. JHPIEGO needs to gather additional information about the training programs to determine how it can promote interdisciplinary cooperation and collaboration.

There is a need for different approaches to assessment and evaluation to enhance the effectiveness of in-country project staff and provide further guidance for JHPIEGO program planning. Until recently, the emphasis at JHPIEGO has been on delivery of program activities and reporting. In addition, those evaluative activities conducted have been primarily related to numerical verification of performance.

INTRODUCTION

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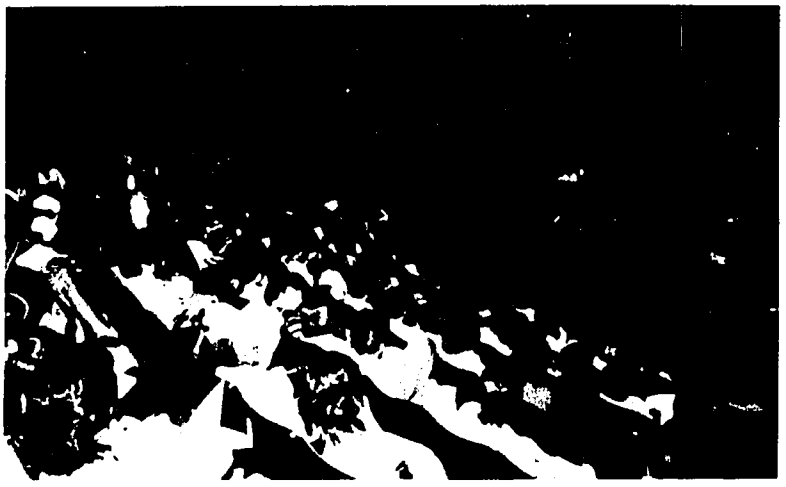
*For purposes of this report programs are designated as "clinical" if the primary activity(ies) is to impart new or improved physical or laboratory skills, e.g., learning to insert an IUD. By contrast a "didactic" program is one in which the teaching process is conducted primarily in a classroom setting.



CLINICAL TRAINING PROGRAMS

The three programs discussed in this section were located in Colombia, Turkey, and Brazil. The first two programs focus on teaching knowledge and skills pertinent to the insertion of intrauterine devices (IUDs) and management of problems. Both programs involved training an interdisciplinary group of health professionals, achieved a nationwide outreach and integrated their activities with those of related governmental agencies. However, despite many similarities, they are two quite different programs. The third program involves the training of interdisciplinary teams to provide VSC services, both minilap and laparoscopic tubal ligation.

NCA-59 Columbia "The Reproductive Health and IUD Training Program for General Practitioners and Nurses"

Background:

The Colombia Social Security Institute (ISS) is a national system that covers approximately 40% of the country's workforce. The Institute has a health services division which provides medical services to clients covered under the ISS through a National Health Services Program which is organized by regions. In 1981 a report issued by the Health Services Division concluded that three major reasons for hospitalization of women of child-bearing ages were 1) complication of pregnancy, birth and post-partum period, 2) abortion, and 3) certain types of perinatal morbidity. Based on these findings the ISS began a program in human fertility in 1982 which included, as one of its goals, the intent to respond to the demand for human fertility services. The Institute approached the Asociacion Colombiana Para el Estudio de la Poblacion (ACEP), a private, non-profit population research and education organization, for assistance in training ISS health personnel. ACEP requested JHPIEGO's collaboration in this training activity. The course developed by ACEP with JHPIEGO's assistance provided clinical training for health professionals in family planning techniques and prepared general practitioners to prescribe and manage individuals using oral contraceptives and IUD's. The program's emphasis was on the preparation of physicians, and a total of 618 general practitioners were trained over the span of four years. Nurses were included in the training programs in much smaller numbers and initially received only didactic preparation. During the course of the project, it was determined that the nurses needed to have clinical training as well to enable them to insert IUD's. Therefore, by the end of two program cycles, 166 nurses had received this training.

Program evaluation procedures, in-country, involved several types of activities including:

1. administration of pre- and post-tests,
2. course evaluations, and
3. clinical practice evaluations.

In addition, JHPIEGO distributed the Annual Participant Survey (APS) to all those attending the course. Finally, baseline data from the participant's Individual Application Forms (IAF) were analyzed to determine their appropriateness to receive this training.

Results:

1. As indicated above, the in-country evaluative efforts led to some program changes such as the provision of clinical IUD training for nurses. Furthermore, this procedure enabled project staff to identify a pattern of attitudinal change that occurred among the health professionals in the Cali region. For example, at the time training programs were first begun in the region, health professionals were indifferent to the course; however, as the courses continued, health professionals began to exhibit a more active interest in the training opportunities.

2. Seven cities were selected as training site: Barranquilla, Bogota, Bucaramanger, Cali, Medellion, and Pereira. One candidate selection criterion was that two-thirds of the trainees were to come from health care facilities located in training site cities and one-third from outlying areas. Training statistics indicate that this selection criterion was met. Using data from the IAFs and APSs, it was possible to determine the geographic distribution of those being trained. Figure 1 shows the distribution of trainees by city of training with an inset noting the number of physicians and nurses participating in each area. Generally speaking, newly trained professionals were distributed throughout the populated areas of Colombia.

3. Because the training was conducted by region, an in depth analysis was done of the APSs and IAFs received from participants in Cali to obtain a more accurate description of those attending the training courses [See APPENDIX A]. This analysis indicated that as desired, 91% (total trained, 77) of the ISS physicians, who received training, were general practitioners.

FIGURE 1 COLOMBIAN TRAINING BY SITE

4. The physicians major professional activity according to the information provided in the IAF was direct patient care. Regarding their current clinical activities, 81% reported inserting IUDs during the 12 months since training and 83% reported providing family planning counseling. Analysis of the APS survey suggested that the participants felt that the training had an impact on the quality of the FP services offered by them. Evidence supporting this is suggested by the improved capability to diagnose pelvic diseases and infertility and to provide FP counseling.

5. TABLES 1 and 2 compare characteristics of the regional participants in Cali with those from all areas of Colombia. This analysis reveals that 69% of the physicians in Cali were in the 40 to 59 year age group as compared to 52% of the other Colombian participants. One could assume that since the physicians in Cali are older they are more likely to continue their practice within the ISS system. However, fewer female physicians (11%) received training in Cali as compared to the other Colombian participants (20%).

Discussion:

A major impact of this program has been a change in attitude regarding the role of nurses in the provision of FP services within the ISS health care system. There were a number of requests that registered and auxiliary nurses be involved in the training. These comments indicate an evolving recognition of nurses as potential providers of FP services, particularly IUD insertion. This shift in attitude, one of the major intents of the program, was not expected to occur before the end of the third program cycle. However, the demand for the expansion of the role of nurse in FP services during the second program cycle indicated that the change occurred much more earlier.

The appropriateness of the training supported by JHPIEGO is evidenced by the course participants' reports of the impact it has had on the quality of FP services trainees now provide at the ISS centers. A second indicator of the importance participants placed on this type of training is their (the trainees) repeated requests for expansion of the clinical component.

TABLE 1

COMPARISON OF REGIONAL PARTICIPANTS
IN CALI WITH ALL COLOMBIAN PARTICIPANTS
BY AGE

Ages	Number of Participants Regional (77)+	(All) (296)
30 - 39	23 (30%)	121 (46%)
40 - 49	29 (38%)	91 (35%)
50 - 59	24 (31%)	46 (17%)
60 - Over	1 (6%)	6 (2%)
TOTAL	77 (100%)	264* (100%)

+Indicates total number of participants in each sample.
*Indicates that there are 32 missing values for this sample.

TABLE 2

COMPARISON OF REGIONAL PARTICIPANTS
IN CALI WITH ALL COLOMBIAN PARTICIPANTS
BY SEX AND PROFESSION

Sexes	Physicians Regional	All	Nurses Regional	All
Male	57 (89%)	192 (80%)	0 (0%)	2 (4%)
Female	7 (11%)	48 (20%)	13 (100%)	54 (96%)
TOTAL	64 (100%)	240 (100%)	13 (100%)	56 (100%)

NCA-86 Turkey "Clinical Family Planning Training Program for Medical and Paramedical Health Personnel"

Background:

The General Directorate of Mother Child Health and Family Planning (GD MCH/FP) has worked collaboratively with JHPIEGO on various national projects since 1980. The programs have ranged from curriculum standardization for medical schools to a microsurgery course and equipment repair and maintenance endeavors. Over the course of the eight year involvement with Turkish health personnel JHPIEGO has noted several changes in national population policy. The legislation of 1983 replaced a more restrictive law ratified in 1965. This new law made the GD MCH/FP the responsible agency for preparation of health cadres in FP services and provision of equipment and materials.

NCA-86, one of our more recent collaborative projects, was a comprehensive family planning training program with an emphasis on IUD insertion. The program was designed to 1) assist the Turkish government to start ten centers (each one to train health care workers to provide integrated family planning/maternal and child health services at district level health centers); 2) conduct a training of trainers (TOT) workshop for master trainers to refine training methodology and standardize training practices and certification procedures; and 3) provide clinical family planning training, including IUD insertion to general practitioners and paramedical personnel. The program used a multidisciplinary approach to training health professionals. Personnel from regions in Turkey which had not participated in previous programs were recruited. While many of the participants came from the central area of Turkey, there were representatives from two eastern and two western provinces. (See Figure 2.)

Results:

1. The training component of this project was the first experience Turkish personnel had in implementing a multidisciplinary course on reproductive health and the use of IUDs. An important consideration in the design of this project was the decision to train physicians, nurses and midwives together. This training format was accepted and met with positive results.

2. A total of 243 health professionals were trained during this project. A random selection of training centers was used to identify sites for the administration of an evaluation tool determining the extent of knowledge and skills retained from the training. All who participated in the evaluative exercise successfully demonstrated improved didactic and clinical knowledge.

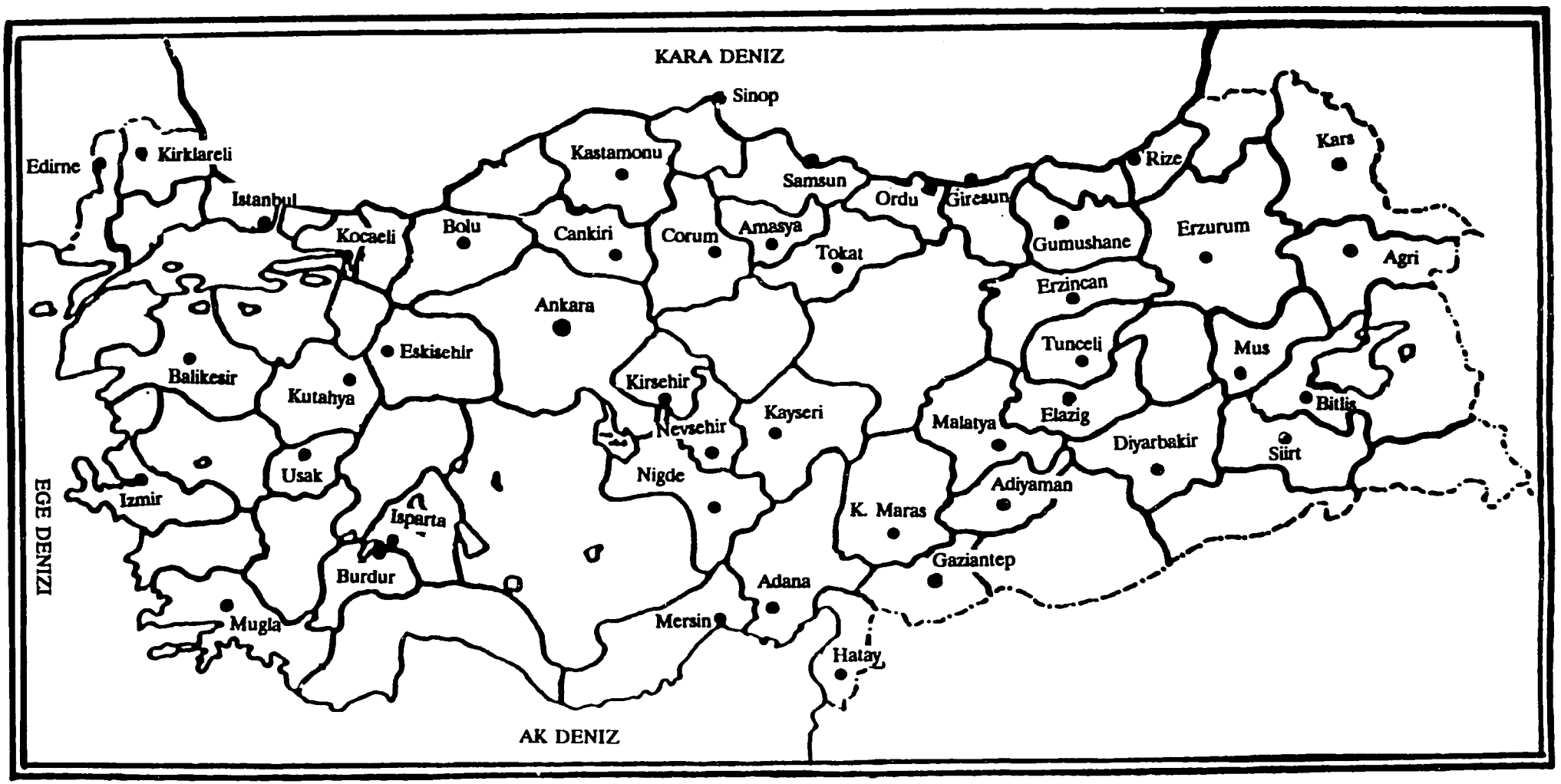


FIGURE 2 GEOGRAPHIC DISTRIBUTION OF TURKISH COURSE PARTICIPANTS

● Dots Indicate Home Provinces of Course Participants

3. Follow-up site visits were done at thirty institutions. The evaluation process involved the observation of clinical procedures, including a performance evaluation of the related health procedures and the performance of the health personnel in each center. All centers evaluated were found to be providing FP services and the trainees were actually using their new skills. Physicians, nurses, midwives and nurse-midwives were all providing IUD and FP services as intended by the training. Furthermore, the evaluators noted that services were provided more efficiently where nurses and physicians participated in the same training program.

4. Using data from the APS distributed 12 months following the training, it was possible to show some long-term effects of the program. Ten (31%) of the original 32 trainers responded to the survey. The respondent's educational backgrounds reflect the interdisciplinary nature of the project: 2 physicians, 7 nurses and 1 nurse midwife. The data in TABLE 3 suggest that the course had an impact on the skills of the participants. A majority of the respondents (90%) felt that the training improved their job performance. These comments are supported by the fact that 90% also reported using the skills learned during the course, as well as teaching them.

TABLE 3

TRAINING OF TRAINER COURSE PARTICIPANT'S RESPONSES TO THE JHPIEGO ANNUAL PARTICIPANT SURVEY

Number of Responses	Response To: Usefulness of Training Since Course Participation
9	- use skills learned in the course
9	- teach or provide clinical training in Reproductive Health
5	- teach physicians
9	- teach nurse midwives
8	- teach nurses
8	- teach concepts learned in the course
9	- teach use of the IUD and birth control methods
10	- feel patient counseling is important
3	- actually perform IUD insertions since participating in the course
9	- identify professional self-improvement resulting from the course
3	- changed employment.

Discussion:

The most helpful aspect of this program from JHPIEGO's planning perspective was the report generated from the two-day evaluation meeting held following completion of the project. Three of the major recommendations from this workshop were:

1. FP training must be included in all medical and midwifery schools.

2. The knowledge and skills taught during training at the individual centers should be standardized.

3. Appropriate logistical support for IUDs, condoms and pills was essential for a successful FP program.

NCA-103 Brazil "Reproductive Health and Family Planning Training and Development Center"

Background:

The Centro de Pesquisas de Assistencia Integrada a Mulher e a Crianca (CPAIMC) has worked with JHPIEGO in collaborative projects over the past nine years and is recognized as a leading organization in the FP movement in Brazil. During the years of collaborative involvement with JHPIEGO, CPAIMC has trained 1,011 health providers in two or three person teams (physician, anesthetist and nurse) to provide laparoscopic and minilaparotomy services to clients seeking tubal ligation in Brazil. Over 70% of those trained are currently on the staff of health care delivery facilities located in the Northeast and Southeast regions of the country. Only five percent of the trainees are located in the Centralwest region, the more sparsely populated area of Brazil.

Results:

1. A needs assessment conducted by CPAIMC in 1984 estimated that approximately half of the national training needs in laparoscopy had been accomplished. However, it was estimated that less than 10% of the training needs in minilaparotomy had been achieved. Consequently, CPAIMC and JHPIEGO agreed to phase down laparoscopy training and increase emphasis on minilaparotomy. As a result, during the period 1986 - 1988 JHPIEGO supported the training of only 35 physicians in laparoscopy as compared to 60 in minilaparotomy.

2. Part of the NCA-103 project also involved an update and evaluation meeting for physicians, previously trained in JHPIEGO-CPAIMC courses, conducted in December 1986. Of the two hundred individuals invited to attend, 183 participated in the meeting. The evaluation activities were organized by geographic region and focused on broad issues such as the social factors related to contraceptive use, local political support for contraceptive services, utilization of the knowledge and skills gained in the courses, shipment of materials and future training needs. The major findings of this meeting were:

    1. Despite socio-religious pressures to limit contraceptive services and use, the general populace continues to seek, accept and support FP.

    2. While interest in continuing the training for physicians remained, the need for training paramedical personnel in the field of reproductive health was recognized.

Discussion:

As a consequence of survey data collected in 1984 laparoscopy training was de-emphasized under NCA-35. Furthermore, JHPIEGO and CPAIMC expanded the minilaparotomy training through the use of regional training centers. In addition, although in the first program period training in minilaparotomy was limited to physicians, it was expanded to include auxiliary nurses during the second program period. The team approach, a central feature of the previous program was continued. Finally, health professionals from twenty of Brazil's twenty-six states participated in the courses.

DIDACTIC PROGRAMS

In this section only JHPIEGO projects which are primarily characterized by classroom activities were evaluated. The knowledge conveyed in the projects evaluated is heavily weighted with current information about reproductive health issues and the necessary skills for dissemination of this knowledge once participants have returned home. Nigeria and the Philippines provide examples of these types of programs. Both programs have a nationwide outreach. All of the medical schools in Nigeria (14) are involved in the first example and all of the Philippine Colleges of Nursing (126) are reached in the second. Only the Philippine project is still in progress. The third program evaluated is the Baltimore-based JHPIEGO Education Center (TJ-1). Only courses delivered in Baltimore during the first year of the new cooperative agreement were included.

NSP-20 Nigeria "Reproductive Health in Medical Education in Nigeria"

In January 1986, The College of Medicine at the University of Ibadan collaborated with JHPIEGO and hosted a two-day workshop to develop a plan to integrate reproductive health into the medical school curricula in Nigeria. In April 1986, the College of Medicine collaborated with JHPIEGO on a special project - A Deans' Conference - to improve the reproductive health component in the medical school curricula in Nigeria (NSP-20). Conference participants included provosts, deans and heads of departments of obstetrics and gynecology from existing medical schools and officials from the Federal Ministry of Health, Planned Parenthood, and the Population Bureau. (Nigerian medical schools are autonomous institutions and each one develops its own curricula since there is no national coordinating body to regulate curriculum content.) The participants' analysis of the respective curricula revealed that only one hour was devoted to teaching contraceptive technology. (This hour was included in the reproductive health section conducted on the obstetrics and gynecology rotation.) Related clinical experience was included in some colleges as an optional activity. With the information from the discussions, the analysis of the then current curricula, and the document drafted at the January 1986 workshop the participants developed an outline of the essential information and clinical skills of reproductive health which should be mastered by all medical students.

Results:

There was strong endorsement by the conference participants for substantially increasing the amount of time spent to learn reproductive health knowledge and skills, particularly FP. Recommendations included:

1. Increasing the time spent in Ob/Gyn to a minimum of 20 weeks

2. Requiring a minimum of 30 hours experience in family planning clinics

3. Increasing formal lecture hours on contraception to a minimum of four

4. Requiring interns (house officers) to spend a minimum of 30 hours in FP clinics

5. Testing medical students in their final examination on FP knowledge and skills

6. Increasing reproductive health educational materials at all medical schools.

The participants agreed that a follow-up evaluation should be conducted one year after the workshop to assess the curricular changes undertaken by the various schools of medicine.

Professor O.A. Ladipo, Director of the Fertility Research Unit, University College Hospital/ University of Ibadan conducted structured interviews with faculty and students from 13 of the 14 Colleges of Medicine. Dr. Flora Roebuck, Professor of Educational Foundations and a JHPIEGO consultant worked with Dr. Ladipo to design the evaluation procedures and analyzed the data.

The interviews revealed improvements in areas related to curricular guidelines. For example, the required learning experiences were expanded to include 14 hours of clinical work with 6 hours of related classroom activities. The major weakness noted in the educational experience was the lack of educational resources.

Other findings from Dr. Roebuck's report were:

1. The Trainer of Trainers (TOT) model was an effective approach to disseminating skills and information to widely dispersed members of a professional group.

2. The training resulted in the participants' use of teaching methods suited to the implementation of an integrated reproductive health curriculum in the preparation of nurses and midwives.

3. Significant progress has been made in the inclusion of family planning as part of an integrated curriculum in reproductive health.

4. The facilities and materials needed for instructional support in the new curriculum area of family planning were severely lacking. These deficits include a paucity of textbooks, library books, journals, audio visual teaching aids, demonstration models and facilities, and materials, samples and demonstration kits specific to family planning.

5. Courses (for health care tutors) in family planning and clinical skills should precede teaching methodology courses to enable effective delivery of information on family planning to students.

Recommendations:

1. Effects of the integrated reproductive health curriculum should be evaluated again in about 5 years, after graduates of programs implementing the curriculum have had some experience as service providers.

2. Planners of similar health care education programs should recognize the critical sequence evidenced in this report: the effective delivery of instruction in family planning services requires (a) that training in family planning clinical skills and concepts must precede training in teaching skills, and (b) that both kinds of training must be provided.

3. International funding agencies should give increased attention to assisting professional schools' exposure to family planning curriculum materials and instructional aids, including textbooks, library books, teaching models, and films and videos.

4. Continuing professional education for health care tutors, in all content areas, is a priority which needs to be addressed on a continuous basis.

5. The TOT model has been proven to be an effective method for disseminating skills and information; it should receive serious consideration during the planning of future program efforts.

NCA-117 The Philippines "Continuing Education for Professors of Reproductive Health in the Nursing Curriculum for Baccalaureate Nurse Candidates"

In 1986 the report, "An Assessment of the Population Component of the Nursing Curriculum" was completed under the sponsorship of the Commission of Population of the Philippines. Data from this study suggested that the competence of nursing graduates in the provision of FP services was inadequate. Consequently, JHPIEGO was asked to collaborate with the Association of Deans of Philippine Colleges of Nursing (ADPCN) to improve the reproductive health component of the baccalaureate nursing programs (BSN). The ADPCN is the only professional group focussing its attention on all aspects of professional nursing education in the country. The project was designed for implementation over the course of three years and included provisions for an evaluation at the completion of each year's activities. The final report for NCA-117 provided the summation and evaluative data for the first year of the project.

Results:

1. A core group of Philippine nursing experts (10) developed a definition of reproductive health and a syllabus for Level II of the BSN program (the first year of nursing courses). This syllabus was distributed to all of the Colleges of Nursing (126) through a series of nursing faculty workshops which oriented the instructors to the content of the syllabus and provided exercises for developing teaching plans and related activities.

2. Evaluation site visits were conducted at the conclusion of the workshops to assess the way in which the syllabus was utilized by the college faculties. A total of 49 colleges in seven regions of the Philippines were visited by 4 nurse educators including one staff member from JHPIEGO. The visits were conducted using criteria and guidelines compiled by the members of the evaluation team. The findings were:

    a. A majority of the colleges had integrated the syllabus into their BSN program.

    b. Some course participants had developed learning reinforcement tools such as simulation games and interviews for use in their lectures.

    c. To ensure effective use of the integrated syllabus, the ADPCN should be assisted in conducting additional update seminars on reproductive health issues and academic skills courses for nursing faculty.

    d. The colleges are in need of additional educational materials on contraceptive technology.

Discussion:

JHPIEGO and the ADPCN have continued their joint commitment to improve the reproductive health component of the BSN curriculum through the project, TCA-15 which will develop a syllabus for the second year of nursing courses (Level III). In addition, the project staff will work with the JHPIEGO Program Officer to develop a new project to provide academic skills workshops to the nursing faculties.

JHPIEGO Education Center

Since 1972 the JHPIEGO Education Center has provided a wide range of educational experiences for health professionals from developing countries. While there is a continuing emphasis on issues in reproductive health, JHPIEGO has provided courses to enhance the effectiveness of individual performance in the areas of program planning, management and academic skills. A total of seven courses were offered during the first year of the new cooperative agreement, with two of them offered in French and the remainder in English. (See TABLE 4).

Results:

1. The majority of the program participants came from Africa (76) and the others from Asia (19), Latin America (14) and the Near East (13) for a total enrollment of 122. The bulk of the professionals were physicians (91) with smaller numbers of nurses (23) and administrators (8) participating in the courses emphasizing content unique to their daily activities (See TABLES 5 and 6). The male to female ratio of participants was 1.7:1 for this period.

2. Trainees identified as having language difficulties, through the use of an English Proficiency Test, were tutored to facilitate their understanding of course content.

3. Pre/Post-tests, course evaluations and attitudinal surveys were administered in each course. Other instruments used in selected programs included confidence skills questionnaires and impact surveys. These tools were designed and tested by the Education Center staff. The formal program overview provided by the Education Center staff at the conclusion of each program varied from course to course in the length of the narrative, the topics discussed and the items analyzed.

4. The courses evaluated were described as being informative and helpful by most of the participants in their course evaluations. Suggestions made by the participants were carefully reviewed and the courses have been modified to incorporate the participants' recommendations.

Discussion:

Six different courses were offered in the Education Center during Fiscal Year 1987, and as a result a variety of evaluation and assessment tools were used to assess the Center's training activities. There was however, some standardization of the procedures for course evaluation in that the same core of instruments (pre- post-tests, course evaluations, and attitudinal surveys) were administered in each course. This permits cross-course

TABLE 4

JHPIEGO EDUCATION CENTER COURSE CALENDAR
FISCAL YEAR 1987

Course Title	Language of Instruction	Dates	Training Spaces
Integrating Reproductive Health and Primary Health Care	English	May 4 - 22, 1987	16
Academic Skills in Reproductive Health for Medical and Nursing School Faculties	French	June 1 - 26, 1987	11
Reproductive Health for Administrators of Family Health and Family Planning Programs	French	September 14 - October 2, 1987	20
Gynecology and Obstetrics: An Update of Modern Technologies	English	October 12 - 23, 1987	20
Promoting Reproductive Health Through Management of the Infertile Couple and Control of Sexually Transmitted Diseases	English	November 9 - 20, 1987	22
Program Planning for Reproductive Health Services	English	February 8 - 26, 1988	20
Academic Skills in Reproductive Health for Nursing/Midwifery School Faculty Members	English	March 7, - April 1, 1988	13

TABLE 5

TRAINING CONDUCTED AT THE JHPIEGO EDUCATION CENTER DURING FISCAL YEAR 1987

Clinical	Targeted	Number Trained	Total Trained
Infertility/STD	Physicians	22	22

Didactic	Targeted	Number Trained	Total Trained
Ob/Gyn Technical Update	Physicians	20	20
Reproductive Health for Administrators	Administrators	3	
	Physicians	14	
	Nurses	3	
Program Planning	Administrators	5	
	Physicians	29	
	Nurses	2	36
Academic Skills	Physicians	6	
	Nurses	18	24

Notes - During FY 87 seven courses were held and a total of 122 participants were trained.

- The total number of persons trained in U.S. courses are physicians (91), nurses (23), and administrators (8).

- The regional distribution of participants in U.S. courses is Africa (76), Asia (19), Latin America (14), and the Near East (13).

TABLE 6

DISTRIBUTION OF MALE AND FEMALE US PARTICIPANTS
BY COURSE

	Course						
					Academic Skills		
Sexes	Inf/STD	Ob/Gyn Update	Admin.	Program Planning	Nurses	Physicians	Total
Male	18	14	13	27	1	5	78
Female	4	6	7	9	17	1	44
Total	22	20	20	36	18	6	122

comparisons regarding participant performance during training. The use of selected tools tailored to specific training activities, permits the identification of effective educational techniques which can further strengthen the courses conducted by JHPIEGO.

Slightly more than a third (36%) of the persons trained in the training center during fiscal year 1987, were female, as compared to 64% male. Occupationally, 18% (22) of the participants were nurses, midwives or nurse-midwives. Selection and recruitment activities should ensure that more nurses and women will participate in future JHPIEGO courses in accordance with the guidelines contained in the new cooperative agreement.

Presented below is a critique of one of the seven courses conducted during the 1987 program year. Similar reviews were performed on the remaining courses, but will not be discussed in this report.

Program Planning For Reproductive Health Services

As the previous cooperative agreement drew to a close, the Education Center offered a course on the integration of reproductive health services into basic health delivery systems. The participants' evaluative comments at its conclusion led to a revision of the course title, content and duration. The retitled course, "Program Planning for Reproductive Health Services" was offered in the Education Center on two occasions (May and February) during the first year (Fiscal Year 1987) of the current cooperative agreement.

A comparative analysis was done of the lectures offered in the original course and the course offered in February, 1988. As a result of this, it was determined that the number of lectures should be increased from 14 to 23. This action was not the mere addition of new lectures, but a comprehensive change in the theme of the course. Only five lecture topics were retained from the original course. The first time the course was offered, it included two lectures on the role and use of paramedical personnel in reproductive health care. Neither of these lectures were included in the new course. The number of lectures on program planning were increased from one to eight. Three new lectures on the various aspects of child survival were added to the course.

The new course description identified the characteristics of the intended audience as those health administrators who were responsible for program planning and implementation at provincial, regional and national levels. Of the twenty-one participants, two were nurses, four were administrators and the rest were physicians. Based on the current selection criteria all candidates were considered appropriate.

For this course several types of assessment tools were used to evaluate:

1. The trainees

   - English Language Proficiency Test
   - Knowledge Gained Test (Pre- and Post-test)
   - Attitudinal Changes Survey
   - Confidence Skills Questionnaire

2. Course content and teaching methodology

   - Trainees formal evaluation of each course

3. The Speakers

   - Trainees formal assessment of each speaker, demonstration, seminar or field trips.

Selected comments regarding the analysis of data collected on this course are contained in APPENDIX B. The comments were abstracted from the Course Report prepared by Dr. Giraud Foster, Associate Director, Education Center. They illustrate the detail by which each course is evaluated. As noted the reports are circulated internally and enable JHPIEGO regional and support to keep abreast of the Education Center's activities and how the trainees from their regions performed.

For this course the evaluation process documented the participants' satisfaction with the content and format, giving the course planners some assurance that the newly implemented revisions were effectively done. Comparison of the types of tools used to evaluate this course versus those used in the earlier version revealed the following:

1. The same three trainee assessment tools were used in both courses; however, in the second course an additional tool, the Attitudinal Changes Survey, was used.

2. Evaluation of the course content and teaching methodology, although employing the same format, was considerably more detailed in the second course.

3. The speaker assessment tool used in both courses was the same, and for both the majority of students rated the quality of the presentations as very well (A) and their usefulness at very useful (A) to useful (B).

Recommendations:

With the present cooperative agreement the emphasis of the Education Center's activities has gradually been shifting away from physician to non-physician (nurse, midwife or administrator) participants, and from strictly medical to more health oriented offerings. As such it is recommended that the Education Center:

1. Continue to develop course offering that more closely reflect the reproductive health training needs of devloping countries.

2. Where possible standardize the course evaluation process so that comparisons can be made at least, between courses of similar content and format.

Because of the decreased funding for Education Center activities in the new cooperative agreement an ad hoc task force has been established to:

1. Redefine the Center's objectives.

2. Determine alternative sources of funding for the center in order to substantially reduce central costs.

SUMMARY OF JHPIEGO TRAINING ACTIVITIES

Statistics from all JHPIEGO programs have been compiled to provide a comprehensive view of training accomplished in FY 1987. The region with the most nations participating in JHPIEGO courses whether US-based, regional or national has been Africa (TABLE 7). The greatest number of in-country training programs has occurred in the Latin American/Caribbean (LAC) region with 584 separate courses (TABLE 8). It should be noted that in LAC 368 of the 584 (63%) training courses involved brief didactic courses offered to undergraduate medical and nursing school students. If these courses are excluded the distribution by region becomes:

Asia/Near East:	116 (26.0%)
Africa:	117 (26.4%)
LAC:	216 (48.6%)
Total	444 (100%)

Perhaps the most revealing aspect of the JHPIEGO training activities for FY 87 is shown in TABLE 9 which summarizes all training activities by type (didactic versus clinical), content and type of health care provider trained. Significant findings revealed in this table are:

- Skill (clinical) training is included in all major JHPIEGO activities with IUD training heading the list. Training of physicians in minilap has increased as compared to previous years.

- Updating reproductive health knowledge and improving faculty communication and teaching methodology is our most important didactic training activity.

Medical equipment and/or educational materials are distributed in conjunction with each training course offered by JHPIEGO. Standard educational packages have been designed by the JHPIEGO staff for use with the 'didactic' training programs. They are supplied to the in-country project staff for distribution to course participants at the time of training. As noted in TABLE 10, the region receiving the most educational packages has been Africa (719).

Distribution of medical equipment occurs following satisfactory completion of clinical training. Most of the IUD training has been done in Latin American and Africa where 402 and 392 kits have been distributed respectively. Wherever the clinical training has focussed on laparoscopic and minilaparotomy techniques, this equipment has been provided to the trainee. The installment of laparoscopic equipment has been done through field visits which include observation of the trainee's clinical and surgical techniques. (A summary of all equipment/instruments and educationalmaterial is presented in TABLE 10.)

Evaluation Tools:

As JHPIEGO focusses attention on the quality of training (both process and content) and training impact, attention has been given to the ways in which these aspects of evaluation are dealt with. Virtually all training programs include pre and post-test and course evaluation tools. These tools are usually program or project specific and have been developed by the in-country staff. Copies of these instruments are usually sent to JHPIEGO for review prior to their implementation.

A second source of information provided directly to JHPIEGO is the APS form distributed 6 to 12 months following course participation. Data from the APS forms enables us to verify earlier reports and support various findings with anecdotal references for additional detail. These data often have led to a modification of the project while it was in process. The addition of a clinical IUD segment for nurses in the Colombia program is one example of how a course was modified while still in process.

Findings from selected JHPIEGO programs were:

1. Program impact on skills and training is revealed in portions of the APS form and in special evaluative efforts such as the procedure undertaken by Dr. Roebuck in Nigeria. Her report documented change in medical school curriculum as a consequence of a JHPIEGO sponsored curriculum workshop twelve months earlier. It also revealed some of the long-term impact of JHPIEGO's endoscopy training programs. Provision of equipment and trained personnel, generated in earlier JHPIEGO programs, enabled the training institutions to provide observational experiences to medical students on FP topics.

2. The APS forms from Colombia revealed a different kind of impact. The trainees responded favorably regarding their training and documented a positive shift in attitudinal change from a mind set of disinterest to one of desire for further continuing education.

3. The in-country curriculum development programs have contributed to the strengthening and updating of reproductive health curriculum content for both

TABLE 7

COUNTRIES REPRESENTED BY COURSE PARTICIPANTS DURING FISCAL YEAR 1987

AFRICA	ASIA	LATIN AMERICA	NEAR EAST
Algeria	Bangladesh	Antigua	Egypt
Benin	Cook Islands	Barbados	*Iraq**
Botswana	Indonesia	Belize	Morocco
Burkina Faso	Malaysia	Brazil	*Tunisia
*Burundi	Nepal	Colombia	Turkey
Cameroun	Papua New Guinea	Costa Rica	
Central African Republic	Pakistan	Dominica	
Congo	Philippines	El Salvador	
Cote d'Ivoire	Sri Lanka	Grenada	
Gambia	Thailand	Guatemala	
Ghana		Haiti	
Guinea		Honduras	
Kenya		Jamaica	
Lesotho		Mexico	
Madagascar		Peru	
Mali		*St. Kitts	
*Mauritania		St. Lucia	
*Niger		Trinidad	
Nigeria			
Rwanda			
Senegal			
Somalia			
Sudan			
Tanzania			
Tchad			
Togo			
Uganda			
Zaire			
*Zambia			
Zimbabwe			

* - Indicates US course participants only.
** - Non-USAID funded.

TABLE 8

REGIONAL DISTRIBUTION OF IN-COUNTRY AND REGIONAL COURSES, WORKSHOPS, AND CONFERENCES SPONSORED BY JHPIEGO DURING FISCAL YEAR 1987

	NUMBER OF COURSES					
		*Undergraduate				
Region	Postgraduate	Medical	Nursing	Workshops	Conferences	Total Events
Africa	114	0	1	2	1	118
Asia	64	0	0	6	5	75
Latin America	183	5	368	1	27	584
Near East	41	0	0	0	0	41
Total	402	5	369	9	33	818

* - Undergraduate nursing in Africa took place in Cote d'Ivoire.

- Undergraduate medical training in Latin America was held in Guatemala.

- Undergraduate nursing training in Latin America was conducted in Colombia and Mexico.

TABLE 9

TRAINING CONDUCTED AT THE JHPIEGO EDUCATION CENTER DURING FISCAL YEAR 1987

Clinical	Targeted	Number Trained	Total Trained
Laparoscopy	Physicians	202	
	Nurses	158	360
Minilaparotomy	Physicians	137	
	Nurses	47	178
Clinical (Combination of Skills)	Physicians	52	
	Nurses	74	126
IUD Insertion	Physicians	515	
	Nurses	411	
	Instructors	81	1,007
Anesthesia	Physicians	37	
	OR-Nurses	85	122
Infertility/STD	Physicians	19	19
STD	Physicians	58	
	Nurses	74	132
Microsurgery	Physicians	12	12

Didactic	Targeted	Number Trained	Total Trained
Repro. Health Update	Physicians Nurses	122	707
Perinatal (Child Health)	Physicians	21	21
Neonatal (Child Health)	Physicians	24	
	Nurses	34	58

TABLE 9 (continued)

TRAINING CONDUCTED AT THE JHPIEGO EDUCATION CENTER DURING FISCAL YEAR 1987

Didactic	Targeted	Number Trained	Total Trained
Academic Skills	Physicians	12	
	Nurses	187	199
Curriculum Development	Nurses	119	
Trainer of Trainers	Physicians	24	
	Nurses	142	166
Information, Education Communication (IEC)	Social Workers	25	25
Reproductive Health For Administrators	Administrators	21	
	Physicians	30	
	Nurses	15	66
Undergrad. Reproductive Health Training for Students	Medical Students	500	
	Nursing Students	8,274	
Conference/ Workshops	Administrators	87	
	Physicians	452	
	Nurses	351	890

Notes - The total number of persons trained in-country and regional courses during FY 87 is 12,981; Africa (1,643), Asia (522), Latin America (10,412), and the Near East (404). The Africa region training total includes 100 nursing students. In the Latin America/Caribbean region 500 medical students and 8,174 nursing students were trained.

- JHPIEGO sponsored 402 post-graduate courses, 374 undergraduate courses for medical and nursing students, 9 workshops and 33 conferences at in-country and regional training centers.

- A total of 1,351 educational packages was shipped by JHPIEGO for use by the trainees and training institutions during the courses. In addition, 67 laprocators, 88 minilap kits and 854 IUD kits were donated to the trainees' home institutions to facilitate the use of their new skills upon completion of their training.

TABLE 10

REGIONAL DISTRIBUTION OF MEDICAL EQUIPMENT AND EDUCATIONAL MATERIALS DURING FISCAL YEAR 1987

Region	Medical Equipment			Standard Educational Packages
	Laprocators	Minilap Kits	IUD Kits	
Africa	20	15	392	719
Asia	25	25	0	266
Latin America/ Caribbean	13	47	402	366
Near East	9	1	60	0
Total	67	88	854	1,351

Note - JHPIEGO supports 8 equipment maintenance (RAM) centers to facilitate the repair of medical equipment shipped to institutions reached through its training programs. Regionally, two centers are located in Africa (Ghana & Nigeria), 2 in Asia (Philippines & Thailand), while Latin America and the Caribbean have one center located in Brazil, and 2 are in the Near East (Morocco and Turkey).

- The educational packages shipped include textbooks, reproductive health pamphlets, and Population Reports.

- Other educational materials shipped include 107 films, 117 slide sets, and 116 anatomical models.

medical schools and colleges of nursing. As stated earlier, Nigeria presents an example of the updating of medical school curricula. The Philippine project through the ADPCN is producing a reproductive health syllabus for each year of the baccalaureate curriculum. The field visits incorporated with each year of the project reveal the ways in which the syllabi are included in the teaching routine of the nursing faculties.

Conclusions:

How successful have we been in answering the four questions posed in the introduction? As shown in the accompanying table (TABLE 11) sufficient data is available to answer each question for most programs/activities evaluated in this report. Despite some weaknesses in the data, detailed observations about JHPIEGO's projects can be made. Regarding the first question, the in-country projects undertaken during the first year of the new Cooperative Agreement were either a continuation of earlier program activities (NCA-103 and NSP-20) or at the request of national agencies (NCA-59, NCA-86 and NCA-117). The Latin America projects focussed on the training of service providers while the Asian, Near Eastern and African programs focussed on the training of trainers.

The second question addressed what JHPIEGO learned this year. Three projects involved interdisciplinary training (Colombia, Turkey and Brazil). Reports from Turkey indicate that this approach has been well received. The reports from Latin America did not address this approach to training. JHPIEGO needs to gather additional information about the training programs to determine how it can promote interdisciplinary cooperation and collaboration.

The recommendations gleaned from question three are specific to each project. They identify a need for different approaches to assessment and evaluation to enhance the effectiveness of in-country project staff and provide further guidance for JHPIEGO program planning. Until recently, the emphasis at JHPIEGO has been on delivery of program activities and reporting. In addition, those evaluative activities conducted have been primarily related to numerical verification of performance. Two part-time professional staff have been added to the Monitoring and Evaluation Unit to broaden the scope of JHPIEGO's capabilities in this area. Dr. Shushum Bhatia has had extensive experience in operational evaluation of clinical training programs and will strengthen this aspect of program development and follow-up. Dr. JonnaLynn Mandelbaum has had experience in educational assessment and related activities. The addition of these two people together with the current staff of the unit enhances JHPIEGO's capabilities to develop new evaluative strategies for the organization and its programs.

TABLE 11

ANALYSIS OF SELECTED CLINICAL AND DIDACTIC TRAINING PROGRAMS DURING FISCAL YEAR 1987

Agreement	Why Program Was Done	What Was Learned	Recommendations	Current Use By JHPIEGO
Colombia NCA-59	To respond to request for training	Skills taught may not be used	Plan in-country assessment of trainee skill performance	Program development officer (LAC) is in Colombia discussing evaluation plan w/ Project Director
Turkey NCA-86	To support MOHSA's effort to improve RH services	Multidisciplinary approach was well received	Maintain support of interdis-ciplinary projects	The AINE Assoc. just visited the country to develop additional program initiatives
		Skills are used on the job	Assist in planning for future program monitoring and evaluation	
Brazil NCA-103	To continue earlier training efforts	There is a need to expand training efforts among non-physician health providers	Explore means of supporting the nurse's role and responsibility in RH	TCA-21 trains nurse auxiliaries for assistant role in minilaparotomy
Nigeria NSP-20	To improve RH component in medical school curriculum	Faculty had weak teaching skills	Promote faculty development in medical schools	TSP-1 provides academic skills in RH to faculties of Nigerian med schools

TABLE 11 (continued)

AN ANALYSIS OF SELECTED CLINICAL AND DIDACTIC TRAINING PROGRAMS DURING FISCAL YEAR 1987

Agreement	Why Program Was Done	What Was Learned	Recommendations	Current Use By JHPIEGO
Philippines NCA-117	To improve RH education in Colleges of Nursing	In-country experts capable of preparing materials Nursing faculty are weak in teaching skills	Continue project for final 2 levels of BSN program	TCA-15 develops the Level III RH Syllabus Academic Skills Course for Nurses in development
JHPIEGO Ed. Center	Provides RH update and teaching skills for health care providers.	There is a need to implement a more effective follow-up after completing the program.	Revise approach to evaluation to enable comparison of courses of similar content and format.	Ad Hoc Education Center established to redefine the activities of the Center.

APPENDICES

AN ANALYSIS OF COLOMBIAN TRAINING (NCA-59)

Total Sample: 77

I.

Age	Crude No.	%	Median Age
30 - 39	13	20.31	34.5
40 - 49	26	40.63	43.4
50 - 59	24	37.50	52.6
60+	1	1.56	
Total	64	100.00	

II.

Sex	Physicians	%	Nurses	%
Male	57	89.00	0	0
Female	7	11.00	13	100.00
Total	64	100.00	13	100.00

The proportion of male physicians to female physicians is 8 to 1.

III. Education

91% of the selected physician trainees were general physicians, the targeted group for the course.

IV. Institution of Origin

Institution	Physicians	%
Instituto de Seguros Sociales (ISS)*	33	51.50
Centro de Atencion Basica (CABS)	25	39.00
Clinics	5	8.00
Hospital	1	1.50
Total	64	100.00

*A more in-depth cross-analysis with the structure of the ISS' health care system is required, as 51.5% of the respondents did not specify the type of their institutional affiliations.

V. Average Time Spent by Physicians at ISS

15% of physicians spend over 80% of their professional time at the ISS. All physicians except three spent at least 50% of their professional time at the ISS.

Average time physicians spend at institutions other than ISS is 33%.

VI. Patient Care

55 physicians, or 86% of the 64 sampled, spend 100% of their time caring for patients.

9 physicians of the 64, or 14%, spent an average of 61% of their professional time caring for patients.

5 physicians held administrative positions 29% of their time.

3 physicians spend an average of 12% of their time in research.

VII. Clinical Training

Only 3 physicians of the 64, or 4.6%, had previous clinical experience in IUD management and other contraceptive clinical procedures.

Responses to Selected Questions in the Annual Participant Survey (APS)

How to improve the clinical training component (Questions 8E and 8F6)?

62% of the respondents suggested that greater emphasis should be given to the clinical training component. However, according to several respondents, the ISS does not provide its family planning services at the outpatient services level where the general practitioners provide their services. Family planning services are provided through their Ob/Gyn services.

31% reported that the clinical training component was too technical and relied to heavily on pelvic models for demonstration instead of observing procedures being performed on patients at the clinics.

It also was suggested that clinical practice objectives should be better defined and adapted to the needs of the area and the population where those objectives were to be carried out.

13% of those who responded felt that lack of availability of intrauterine devices when they returned to their home clinics was an impediment to performing the skills learned.

Value of the course (Question 9)

20% of the respondents viewed the knowledge acquired as a vehicle to help their clients make decisions about family planning. Many expressed the opinion that obtaining knowledge concerning risk factors in pregnant women had greatly increased their confidence level in assessing clients and making clinical decisions.

42% of the respondents believed educational information, including audiovisuals, would be extremely valuable in continuing to update their family planning knowledge.

Many also stated that obtaining more family planning information for their clients and ISS beneficiaries was paramount to fulfilling family planning objectives.

10% of those who answered this question stated that all personnel, including the auxiliary nurses should take the course and be included in the clinical training component.

APPENDIX B

MEMORANDUM

****

TO: Dr. Theodore M. King
Dr. Laurel Cappa
Ms. Charlotte Ellis
Mr. Robert Lande
Mr. Wilbur J. Wallace
Dr. Clayton Ajello
Ms. Ethna Johnson
Ms. Constance Husman
Dr. Jonna-Lynn Mandelbaum
Dr. Ronald Magarick
Ms. Deborah Dean
Dr. Marian Damewood

FROM: Dr. Giraud V. Foster

SUBJECT: Program Planning for Reproductive Health Services, February 8-26, 1988

****

This is the second time this course has been presented in English in its present form. The organization and much of the teaching was carried out by Dr. Clayton Ajello. Dr. Ajello's participation came about because a prototype course was poorly received two years ago.

I am happy to report that in the present course the trainees were well selected, considerable learning occurred, and the course was well evaluated by the trainees themselves. JHPIEGO fulfilled its USAID obligations to teach a Reproductive Health module: eleven core lecturers were given. All trainees worked on Maternal and Child Health Plans and all received copies of the following lectures from the new JHPIEGO Training Manual with slides included: Health Benefits of Family Planning, Oral Contraceptives, Sexually Transmitted Diseases and AIDs.

Selection of Candidates:

Of the 21 candidates, two were nurses, four were administrators, and the rest were physicians. Four trainees scored below 80 in their English test. They were interviewed by (Dr. Foster) and found to have more than adequate English language skills. Two of the doctors admitted that they did not try to do well on their language skills test. Although an Entry Skills Test was not administered, a number of conclusions can be drawn from the Pre-Test scores. First, as a group nurses and administrators did much poorer on their Pre-Test scores than did physicians demonstrating a lower level of knowledge in reproductive

health. Second, of the four administrators and two nurses, three scored above the average on their language skills test and three below, demonstrating that their language backgrounds were not an impediment in the course. Third, the mean of the language comprehension test scores was 86.90±8.12, a value not dissimilar from other JHPIEGO Training Center courses.

Course Outcome:

Based on the results of pre- and post-test scores the mean increase in knowledge gained was 17.38±0.96%. This is somewhat less than the usual value observed when compared with previous JHPIEGO Education Center courses. Because most of the participants scored above average on their pre-tests, this may be a partial explanation as to why their learning increments were not greater.

The Confidence Skills Questionnaire was again administered in this course. Trainees were asked to state their confidence in carrying out 13 tasks inherent in the objectives of the course. The questionnaire was administered before and after the course. The mean±1 standard deviation of the Pre and Post-Tests were x and y respectfully. In this test 1.0 indicated "cannot perform", 2 "can perform but poorly", 3.0 "can perform", and 4.0 "can perform with confidence". The scores indicate that the trainees considered that what they learned was appropriate for the goals set out for them. The improvement in confidence was similar to that in the previous course. The change was 0.73±0.55 which is close to one order of magnitude on the five point rating scale, or 14.8±1.00 percent.

Attitudinal Survey:

The bipolar Attitudinal Survey demonstrated improved attitudes toward contraception, population growth, management of family size, and improving child survival, but not maternal child health. All the changes, however, were too small to be significant (See Table). Of great interest was the trainees' scoring of population growth. While other reproductive health modalities were rated between the penultimate and highest positive affective score, population growth was given lower than positive affective score, population growth was given lower than mid-level scorers both before and after the course. This may reflect that not all Africans look upon an increase in population in their country as undesirable. If our scores are really valid, maternal and child health programs will never succeed until this bias is overcomed.

TABLE 1. RESULTS FROM ATTITUDINAL SURVEY

Quality Assessed	Pre-Test Score	Post-Test Score
Contraception	+2.56 ± 0.55	+2.57 ± 0.69
Population Growth	-1.15 ± 1.60	-1.58 ± 1.95
Management of Family Size	+2.46 ± 0.88	+2.84 ± 0.31
Maternal Health	+2.74 ± 0.45	+2.62 ± 0.80
Improving Child Survival	+2.64 ± 0.53	+2.82 ± 0.32

(In this system +3 is the highest possible positive affective score, -3 the highest possible negative affective score and 0 is neutral opinion.)

Trainees' Evaluation:

Taking everything into consideration, five trainees rated the course as excellent, thirteen very good and three good. Seven reported that they learned a great deal while fourteen stated they learned quite a lot. The quality of the lectures was rated excellent by three and very good by twelve and good by six. Nine felt the course was excellent, five very good and seven good. Twelve out of the 21 members of the class felt there should be other lectures included in the curriculum. When asked what lecture should be deleted from the course, there was one request for removal of the lecture on child immunization, and a comment from another individual that the number of courses on medical subjects should be kept to a minimum since some of the class were not doctors. It was apparent that the trainees found a wide variety of lectures useful. The consensus was that the planning lectures were the most useful with the lecture on budgeting being second.

No one single aspect of the course was liked best by the students. Four of the attendees did, however, give high praise to the program planing exercises. Others mentioned the commitment of the organizers, the organization, attitude of the administration, the active participation of the staff, and the in-depth knowledge of the lectures. Complaints about what was not liked in the course included not enough time, the evening session, and failure of lecturers to take into account that the trainees did not have English as a primary language. Suggestions on how the course content or administration could be improved likewise were varied and included, the following: better if more time was allotted for the course, more social activities should be planned, more lectures on management should be given, lecturers who do not prepare their talks well should not be put on the program, working groups should be smaller, and more time should be spent on management, daily summations should be given, audiovisual facilities should be made available to the trainees, and data from participants' countries should be used in the program planning exercises.

Speaker Evaluation:

None of the speakers in this course was outstandingly rated. The highest number of A's given any one lecturer for a single lecture was 15. By these criteria only four lecturers were well received. Likewise there were no outstandingly poor lecturers, although the lecture on "Program Planning: Monitoring and Evaluation", received 7 Cs and 3 Ds.

Recommendations:

(1) This course appears well established. There is a need, however, in a future course to develop other lecturers in the event that Dr. Ajello might not be available to give most of the course.

(2) This course should be tried in French to see if it is of interest to Francophone Africans.

(3) The trainees' suggestions on how to improve the course should be given serious consideration when the course is being organized. Recommendations such as using relevant in-country data and giving out research project titles at the beginning of the course appear too good to be ignored.

(4) An in-depth questionnaire to investigate the trainees' attitudes toward population growth in their countries should be administered in the next few courses to find out why the trainees have a negative attitude to curtailment of population growth.