PD-AAS-120
9320644
ISN-42277

intrah

Trip Report # 0-113

Travelers: Ms.Emily Lewis,IHP Consultant
Dr.Robert Hosang,IHP Consultant

Country Visited: NIGERIA

Date of Trip: July 8 - August 2, 1985

Purpose: To conduct a Family Planning Clinical Skills Delivery Workshop in Imo State, Nigeria

Program for International Training in Health
208 North Columbia Street
The University of North Carolina
Chapel Hill, North Carolina 27514 USA

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....i

SCHEDULE OF ACTIVITIES.....iii

I. PURPOSE OF TRIP.....1

II. ACCOMPLISHMENTS.....1

III. BACKGROUND.....2

IV. DESCRIPTION OF ACTIVITIES.....3

V. FINDINGS.....5

VI. UNANTICIPATED ACTIVITY.....23

VII. CONCLUSIONS.....24

VIII. RECOMMENDATIONS.....25

APPENDICES

	Appendix A	Persons Contacted
	Appendix B	List of Participants
	Appendix C	Course Outlines
	Appendix D	Daily Training Schedule
	Appendix E	Pre-Test
	Appendix F	Map of Clinic Sites
	Appendix G	List of Local Government Areas and Population Data from Imo State
	Appendix H	Protocols Developed by Participants
	Appendix I	Curriculum of Ibadan FP Training
	Appendix J	Materials Used
*	Appendix K	Summary of Participant Reaction Forms
*	Appendix L	Participant Reaction Forms
*	Appendix M	Biodata Forms

*On file with INTRAH Data Management Service

EXECUTIVE SUMMARY

Dr. Robert Hosang and Ms. Emily Lewis were contracted by IHP to conduct a four-week family planning service delivery skills workshop for 15 senior health sisters and public health nurses, and five physicians. Only two physicians attended the workshop.

The workshop for 17 participants took place from July 8 to August 2, 1985. The training site was at Atta and, in addition, ten (10) clinic sites in Imo State and the PPFN clinic in Port Harcourt were used for practical sessions.

The first week of the workshop was devoted to reviewing reproductive anatomy and physiology, family planning methods and oral rehydration therapy. The remaining three weeks were used to establish family planning clinics at nine locations in the state and to recruit family planning clients so that clinical family planning instruction could take place. During this same period, protocols for each of the family planning methods were generated by the participants. At the end of the workshop, the objectives of the clinical preparation of 15 nurse clinicians competent in the skills of FP service delivery and of two physicians trained in the handling of referrals from a family planning clinic were accomplished.

The following is a summary of this report's recommendations:

1. The next workshop should take place not sooner than mid-September 1985 for not more than 12-15 participant nurses and midwives.

2. Members of the training team should be used as co-trainers and their performances should be evaluated.

3. There should be further discussions of the mode and timing of integration of family planning into pre-service nursing, midwifery, and public health schools, using the prepared curriculum.

SCHEDULE OF ACTIVITIES

7/2/85	Arrival in Lagos 5 PM
7/3/85	Met with USAID Representative Judy Jacobsen at U.S. Embassy
	Traveled to Port Harcourt and on to Owerri, in Imo State 6 PM
7/4/85 to 7/7/85	Owerri - Meetings with Commissioner of Health, Permanent Secretary and Project Coordinator
7/7/85 to 8/2/85	Based in Atta, Imo State

Many days were spent at clinic sites away from the training center. The following is a list of work sites.

Hosang	Lewis
7/17 Aba site visits	7/10 Owerri General Hospital
7/18 Owerri General Hosp.	7/11 Owerri PPFN
7/19 Orlu	7/18 Owerri PPFN
7/22 Okigwe	7/22 Port Harcourt
7/23 Umuahia	7/23 Port Harcourt
7/25 Owerri	7/24 Port Harcourt
7/26 Isiala Ngwa	7/25 Owerri PPFN
7/27 Lagos	7/26 Orlu
7/29 Ibadan	7/29 Okigwe
7/30 Port Harcourt	7/30 Umuahia
7/31 Port Harcourt	7/31 Isiala Ngwa
8/1 Owerri	

8/3/85 Departure from Owerri 1 PM via Port Harcourt, Lagos to London

I. PURPOSE OF TRIP

To conduct a Family Planning Service Delivery Skills workshop for 15 senior health sisters and public health nurses, and 5 physicians.

II. ACCOMPLISHMENTS

1. The training of 15 senior health sisters and public health nurses, and 2 physicians in family planning service delivery skills to a level of competency enabling them to work with minimal supervision.

2. The training of 2 physicians to understand their roles and responsibilities in the service delivery team.

3. The establishment of protocols for family planning methods to be used in the FP clinics statewide (including hormonal, barrier, IUCD, natural family planning methods, and ORT).

4. The establishment of 7 well-run family planning clinics in Imo State.

III. BACKGROUND

The workshop was planned to take place as activity #4 in the contract between Imo State and INTRAH. It was originally planned for 20 senior nursing sisters and public health nurses. It was later seen that the 15 members of the state training team would need family planning service delivery skills in addition to training and curriculum development skills if they were to train the personnel for the planned 126 family planning clinic sites. Priority was thus given for the first clinical training workshop to the members of the Imo State Training Team.

IV. DESCRIPTION OF ACTIVITIES

Trainers, co-trainer, and the participants of the Family Planning Service Delivery Skills workshop were housed at the Bishop Cockin Church Center at Atta, 20 km from Owerri in Imo State.

The training consisted of:

1. classroom review of the knowledge needed for FP service delivery;
2. supervised practice of the skills required (both with models and with actual clients at various clinic sites in Imo State); and,
3. discussions of appropriate responses to both current and traditional attitudes towards pregnancy spacing in Imo State.

A pre-test and several reviews were carried out at intervals to evaluate learning.

Proposed clinic training sites were visited by the trainers during the first week; the first clincal practice was begun on July 11; Weeks Two, Three, and Four were devoted to practice at one or more clinic sites with one of the trainers as preceptor for two to five trainees per clinic. During this period, participants not involved in clinic practice worked in groups with the remaining trainer to fill

in gaps in knowledge and to complete the various contraceptive methods protocols. These protocols will be used as a procedure manual at each Imo State family planning clinic site.

A list of trainees can be found in Appendix B.

A statement of the course objectives and a daily schedule can be found in Appendices C and D.

A map of the clinic sites used during the training can be found in Appendix F.

V. FINDINGS

Demand for Services in Imo State

There seem to be no large significant cultural or religious barriers to acceptance of modern methods of contraception in Imo State. Judging from the response to intensive client recruitment during this training period, and the responses of individual clients presenting themselves for service, an intensive IEC campaign will result in large numbers of women requesting contraceptive services.

Subfertility is reported to be a problem; pending further investigation, our small sample of persons requesting counselling for conception problems indicates that, at least in rural areas, careful history-taking and counselling by well informed nurse clinicians may reduce the need for medical consultation. Many couples were found to have limited awareness of the timing of ovulation.

Pre-Service Training

Family planning has been included in the curricula of professional nursing and midwifery schools, as well as the School of Health Technology and the School of Public Health. The level of knowledge of the tutor members of the state training team has been increased by the three (3) recent training activities. Improved pre-service preparation of

nursing personnel, including supervised clinical practice, will eventually obviate the need for special in-service training.

Role and Development of Training Team Members

The exact make-up and use of the training team or teams is still not clearly established. There are some arguments in favor of a centralized team based in Owerri to ensure uniformity and quality control. There are arguments in favor of decentralized training: ease of transport (both for training and follow-up), less expense, less time away from post, better integration of the family planning service delivery team and medical back-up.

These options were discussed with Mr. Izuwah and Mrs. Ogbonna. There is a possibility of a compromise involving centralized training for theoretical elements and decentralized training for clinical skills training. In the recommendations, the consultants have made suggestions as to how such a scheme might be implemented and tested in the next training.

Information from Meetings

Meetings with Mr. Izuwah

The following observations were made during various meetings with the Permanent Secretary, Mr. Izuwah.

7/4/85

During our first meeting, Mr. Izuwah was cordial and supportive. Mrs. Ogbonna noted that the proposed clinical service sites were not yet functional and therefore unavailable for clinical training.

7/18/85

After a visit to the proposed clinic sites in the Aba area to assess their training possibilities, Dr. Hosang discussed problems encountered in the course of this visit. The Permanent Secretary promised to meet with the medical staff at Aba in the hope of accelerating implementation of plans to develop training sites.

8/1/85

The following points were made by the Permanent Secretary at our last meeting.

- He observed that equipment flow was a potential limiting factor in the speed with which new clinic service facilities could become operational.

- He envisions the possibility of a two-level system with less well equipped, more peripheral facilities referring clients wishing IUCD insertions or other more technical services to the more elaborately equipped sites. This would make it possible to meet the goal of 126 functioning facilities by the end of 1986.

- He sees the role of physicians as essential in establishing referral mechanisms for the FP program.

- He envisions a token fee for service in the future, which may tend to reduce concerns on the part of PPFN that their clients will defect to state-operated facilities.

- He plans monthly review meetings with the FP staff and training team to plan future activities on an on-going basis.

Meeting with Dr. Eke

(Medical Director of the FP Program)

7/25/85

A meeting was convened to discuss medical issues related to choice of family planning methods and treatment of incidental findings at FP clinics.

Dr. Eke was asked to clarify policy on various issues and stated the following:

a) He is not in favor of promoting the use of Depo-Provera in the initial years of the program. He would prefer the use of an alternative injectable progesterone to avoid any public debate over Depo-Provera. He will not refuse prescription of Depo-Provera if requested by clients. He will not allow the use of Depo-Provera by breastfeeding women.

b) The treatment of sexually transmitted diseases will be according to the WHO recommendations in WHO publication, WHO/VDT 83.433 Current Treatment in the Control of Sexually Transmitted Diseases. However, FP nurse practitioners will not be allowed to treat without concomitant medical referral, e.g., the treatment of gonorrhoea must be approved by the physician. First-time vaginal discharge may be treated

by FP workers, but recurrent episodes should be referred.

c) He emphasized the need to ensure that all FP workers recognize their diagnostic and technical limitations and for them to err on the side of conservatism.

d) He approved the use of the OCP in HbSS sicklers and in clients with superficial varicose veins.

e) He will not approve the use of the IUCD in nulliparas.

f) He recognizes the problem of poor cooperation by many but not all of the senior medical officers in the government service and is working on the problem.

g) He has not arrived at a firm decision with regard to antibiotic prophylaxis for IUCD insertion. He advised that for the moment, antibiotic prophylaxis is indicated whenever there is multiple instrumentation of the uterine cavity at insertion.

Clinical Facilities

The first clinic sites to be established in Imo State are listed below. All sites were visited and the individuals responsible for their maintenance and supervision were interviewed. The sites are rated according to their counselling privacy, waiting area, adequacy of the examining room, lighting and suitability as a training site. Nine sites were open, but not all were fully functional as of July 31, 1985. In summary, seven clinics within one hour or less of Atta have been rated as suitable for clinical service delivery training for the next generations of trainees. Aba township clinics are not currently suitable as training sites.

CLINICAL SITE FACILITIES - IMO STATE

(* facility is open and operating at least once a week)

TOWNSHIP/ VILLAGE	SITE	COMMENTS
Orlu * (urban)	Health Office	General: clean, well organized Waiting: adequate Counselling: not private Exam room: good Lighting: good Suitable for training
Okigwe* (urban)	General Hospital	General: clean, small Waiting: poor Counselling: private Exam room: very small Lighting: good Unsuitable for training

Okigwe* (urban)	Health Office	General: satisfactory Waiting: poor Counselling: private Exam room: adequate Lighting: good Suitable for training
Opakala* (rural)	Health Clinic	General: satisfactory Waiting: good Counselling: private Exam room: very good Lighting: no electricity Suitable for training
Bende* (rural)	Maternity Center	General: well located, small Waiting: poor Counselling: private Exam room: very small Lighting: no electricity Unsuitable for training
Owerri* (urban)	General Hospital	General: clean, well-organized Waiting: convenient Counselling: very private Exam room: excellent Lighting: good Suitable for training
Aba (urban) (temporary site)	General Hospital	General: inadequate space, no plumbing Waiting: none Counselling: private Exam room: small Lighting: no electricity Unsuitable for training
Isiala Ngwa* (rural)	General Hospital	General: well located, in same building as hematology & microbiology lab. Good storage space Waiting: Good Counselling: private Exam room: adequate Lighting: good Suitable for training

Umudim* (rural)	Health Clinic	General: very satisfactory rooms including storage Waiting: Excellent Counselling: private Exam room: very roomy Lighting: no electricity, but excellent lighting from window above eye level Very suitable for training
Nwaorieubi* (rural)	Health Clinic	General: very satisfactory rooms, including storage Waiting: adequate Counselling: private Exam room: roomy Lighting: no electricity Suitable for training
Umuahia (urban)	General Hospital	General: Not yet commissioned -excellent location next to antenatal & postnatal clinics & referral OB/GYN for that zone -3 excellent rooms & storage, waiting verandah & sluice room. Counselling: private Exam room: excellent Lighting: good Ideal for training

In addition, the facilities operated by the PPFN (Planned Parenthood Federation of Nigeria) at Owerri and Port Harcourt were used for training during this workshop. The personnel were cordial and helpful. However, there is greater control of quantity and quality of training experience in clinics under the direct control of the MOH.

Clinical Service Delivery Training Course at UCH, Ibadan, Oyo State

Forty nurses from Imo State will be sent to Ibadan for clinical service delivery training during the next year. (Source: Grace Ogbonna, Project Coordinator, Imo State).

The first group of ten attended the course beginning July 29, 1985. A visit by Dr. Hosang was organized to coincide with the beginning of this course.

Some interesting observations of the Ibadan training include:

1. Ninety percent (90%) of the IUD insertions at Ibadan are Lippes loops.

2. The uterus is not sounded prior to Lippes loop insertion.

3. Fifteen (15) pelvic examination on postpartum clinic patients are required as part of the training.

4. The clinical experience is primarily hospital based with minimal field clinical exposure.

5. Information is presented in a lecture format during the training.

The details of the curriculum are contained in Appendix I.

Evaluation of Participants

1) Responses to the pre-test given to the 17 trainees showed the retention of information to be good. They recalled the contraceptive knowledge acquired during curriculum preparation. The range of grades obtained in the pre-test was from 70% to 90% correct answers given. Pre-test examples are attached as Appendix E. Other tests were given to evaluate new learning throughout the course. These were not graded. The group thoroughly reviewed the material in the classroom and during clinic practice sessions.

2) Protocols were prepared by the trainees to define the conditions and requirements governing counselling and application for each contraceptive method. The protocols for the following methods can be found in Appendix H: natural family planning, diaphragm, condoms, foam and foaming tablets, and IUCD. The protocols for hormonal methods of contraception were prepared but not typed before the consultants' departure. All these protocols will benefit from review and revision during the next training.

Field Based Evaluation of Participants

1) The 17 participants were evaluated on their communication skills by observing them at community presentations or presentations at infant welfare clinics.

The dynamic interaction between the presentors and their audience and the active audience participation was of a very high standard. Particularly notable was the ease with which the men in the audience entered into the open discussion format and the ease with which difficult culturally-based issues were debated among the audience, guided by the presentors. These presentations were done by at least two presentors at a time. Visual aids made during the previous trainings had a very high profile in the presentations, as did the teaching of the ORT and family planning songs to the audience.

2) The ORT song has been played on many occasions on the state radio station and on TV spots (twice during our one-month stay). We are aware that at least in one primary school, the ORT song accompanies the morning hymn at least once per week.

3) The curriculum development workshop was profound in effect on the consolidation of the trainees' understanding of reproductive anatomy and physiology, and family planning methods--their use, side effects, and complications.

The pre-test exercise showed clearly that the retention of information was satisfactory. It made subsequent review in preparation for clinical application much easier.

A case in point is the segment on natural family planning, which was so well done and understood by all that our review of that material was redundant. In fact, their performance in this area was better than our proposed training objective prior to meeting the group. Therefore the participants trained the two physicians in NFP physiology and methodology.

4) Previous training in community health education was also assessed in the field. Participants were asked to take up to 2 days to "motivate the community" 3 to 4 days prior to a scheduled FP clinic activity. The responses in all cases were better than our expectations. In one clinic, 80 clients turned up, at least 15 with their spouses and 9 of the local Ezes who came to find out more about the program (actually to make sure "that the services advertised really existed"). [Source: Isiala Ngwa, Friday, June 28, ABA rural zone]. The average number of clients turning up was 25-40 per clinic site when CHE was done by the trainee.

These performances gave the distinct impression that the trainees had, presumably during the previous IEC and CHE training, developed the essential skills of motivating a community, especially a rural community, and that they were also efficient at doing it.

By contrast, two clinics developed close to the training sites at Atta (i.e. Umidim and Nwaoreubi) had CHE done by the local community nurses and their public health departments. The chiefs, Ezes and pastors of the local churches were involved in the exercise. They were given a full two weeks notice. In both these clinics, the average number of clients for FP services was four. In the case of Umidim, where the bulk of clients turned up, they had come for general medical services; presumably the message communicated was unclear about the specific services to be delivered. The following week, after corrective instruction was given to the field operatives, all the clients who came were there regarding subfertility problems-- another case of less than complete communication.

5) At the beginning of the clinical service delivery workshop, the needs assessment showed the number one priority of all participants was to attain competence in IUCD insertion. Only the co-trainer, Comfort Ukwanoke, had had any previous experience. All 17 participants by the end of the workshop had completed at least 10 supervised IUCD insertions; roughly 60% were Lippes loops.

Participants' dexterity with insertions was evaluated on an on-going basis. As is usually the case some started out well but improved only slowly. Others were shaky at the start and improved tremendously toward the end. Two

remained mediocre throughout and three were excellent throughout. We expect that the time period from the end of this workshop until mid-September will provide a period during which clinical skills will be consolidated. However, at the end of the workshop, there were five participants who showed the aptitude appropriate for constituting a clinical skills team for teaching pelvic examination and IUCD insertion.

6) The level of competence with hormonal contraception, as judged by participants' performance on the hormonal contraceptive post-test review, was satisfactory for 16 of the 17 participants, and performances of five participants were excellent.

7) The performances of the 2 physicians (who were not involved in the curriculum development workshop) on both the hormonal and IUCD post-test reviews were less satisfactory than any of those by the nurse participants. Corrective training was designed to cover these information gaps.

8) Among the 17 participants, 4 demonstrated characteristics important for classroom instructional exercises. Their FP knowledge was good, and two had previous teaching experience in the School of Public Health and the School of Nursing.

9) From our field activities, five participants demonstrated particularly good management/organizational skills. Their clinical services were well organized, and patient flow was orderly.

10) Although all participants were excellent at community health education, there were five who showed special interest in this area. These five had above average skills in visual aid production, song writing, singing and impromptu drama. These skills endow the group with rich potential for application in IEC.

Participants' Evaluation

Participants' evaluation of workshop from participant workshop forms is summarized as follows:

1) The objectives were very clear to most, and were mostly achieved.

2) The materials used were clear, easy to follow, up-to-date, accurate, and appropriate.

3) The overall evaluation on the reaction forms was very positive. The only suggestion of dissatisfaction was with reference to the facilities and arrangements. All

participants asked for a change of venue, although eleven (11) found the training site acceptable. The participants were also asked to complete an evaluation, Impressions of Training, in which some specific suggestions as to the accommodations were made as follows: (a) electricity should not be shut off at 10 PM; (b) each participant should have his/her own room; and (c) there should be a greater choice of menu items.

Transportation

Transportation was identified as a problem during previous training sessions. Transport becomes even more of a problem during clinical training due to the need for trainers and trainees to travel to clinic sites for interaction with clients. The consultants found transport from the MOH was often difficult to arrange, but transport in general in Imo State is available. There are many privately owned vehicles, and fuel is not a large budget item. The MOH has an established reimbursement procedure for health personnel's use of their own vehicles for duty travel.

VI. UNANTICIPATED ACTIVITY

At the suggestion of the USAID affairs officer in Lagos, Ms. Keys MacManus, contact was made with a senior level official of the Ministry of Health in Rivers State. The objective was to open dialogue on River State's plans for the introduction of a state-wide family planning initiative.

Contact was made with the Chief Medical Officer, Dr. Cookey. The CMO described the plans for FP in Rivers State as "still in the early stages".

VII. CONCLUSIONS

All 15 members of the Imo State Training Team have profited from the three training sessions they have had. They have a good theoretical background in contraceptive methodology and have developed excellent communication skills. They have now acquired service delivery skills. They can serve as clinicians in family planning clinics, can inform and educate the public, can provide in-service training to their co-workers and should be able to conduct service delivery skills training programs with some additional practical experience.

The limits of clinical responsibility of the FP nurse practitioners have been established. The nurses have been made aware of these limits. These limits will be communicated to the Health Management Board Medical staff by Dr. Eke.

Based on discussions with the Permanent Secretary, the objectives for the establishment of clinical services are clear. However, there seems to be no consensus on how a state training team should be constituted and how it will be deployed.

VIII. RECOMMENDATIONS

1) The next clinical skills workshop should be postponed to mid-September. This will allow those members of the training team who are responsible for clinics to consolidate their skills, make sure the clinics are running well, and establish a good client load so that the clinics designated as suitable for training can be used with maximum efficiency.

2) The workshops should continue to take place at the Bishop Cockin Center at Atta. The disadvantage of its being 20 km from Owerri is counterbalanced by its quietness and its closeness to other clinic practice sites. It is very well run, clean and relatively inexpensive. The issue of obtaining electricity for an additional hour or two at night can be resolved. The amount and kind of food served seemed to be very adequate. The provision of private rooms for each participant would increase costs prohibitively. There is a similar residential site at Orlu, but this could accommodate only eight persons at a time.

3) The following members of the state training team are recommended as co-trainers:

a) for Clinical Service Delivery:

Mrs. Comfort Ukanwoke

Dr. Dennis Iheonu

Mrs. Mercy Onyekivere

b) for Classroom Theory:

Mrs. Stella Dike

Mrs. Lydia Anomnachi

Mrs. Constance Onuoha

Mrs. Eunice Obi

The co-preceptors at the clinic sites will be:

Orlu	Mrs. Grace A. Novangoi
Okigwe Health Center	Ms. Abigail Onuekwusi
*Nwaorienbi	Mrs. Lydia Anomnachi or Mrs. Constance Onuoha
*Umudim	Mrs. Malinda N. Okoro
Owerri General Hospital	Mrs. Eunice Obi
Opakala	Mrs. Ola C. Opusonju
Isiala Nwga	Mrs. Ogonnaza I.T. Okonu

At these clinics, personnel trained at Ibadan will also be returning to act as co-clinicians as of September 6.

4) Graduates of the clinical workshop returning from Ibadan should spend two days with an Imo State graduate of this activity to learn the uterine sounding technique with metal sounds and to practice Cu-T insertion.

5) The clinical family planning workshop requirements in Imo State should include 15 pelvic examinations in postpartum clinics.

6) Community health education should continue to be an integral part of any service delivery curriculum.

7) The next clinical family planning workshop should include the following objectives:

a) Evaluation of the training capacity of co-trainers.

b) Evaluation of clinical services for maintenance of standards.

c) Evaluation of clinicians in their role as preceptors.

d) Clinical service delivery training of 12-14 participants.

8) Based on the trainers' recent experience with the very limited number of women attending FP clinics for IUD

insertion, the relatively short (four weeks) workshop training period, and noting that participants have had no prior family planning training in theory or practice, the trainers recommend that a reduction in number of workshop participants be made to ensure complete exposure to family planning content and practice.

Estimating the use of 6-7 clinics operating once a week which see 6-7 clients for IUD insertion per week, the trainers project that 44-168 clients are available for the workshop's practicum component over a four week period. The trainers suggest, therefore, that no more than 14 participants be invited for the next training session.

9) The question of the composition and deployment of the state training team should be addressed and a plan should be drawn up for the specific assignment of each trainee to a site or a role (in-service or pre-service training) to reduce anxiety on the part of participants.

10) Immediate steps should be taken to integrate the FP curriculum developed in May-June 1985 into schools of Nursing, Public Health and Health Technology, and Midwifery. The tutors from the schools who were participants of the May/June curriculum development workshop should be responsible for this integration.

11) Physicians selected for participation in the training should be those who are already assigned to this project or who have demonstrated an interest in family planning or been designated in-charge by the Medical Officer, e.g., Dr. C. Nwafor at Isiala Ngwa.

12) After the next clinical skills workshop the trainees should be placed in an in-service attachment in an already operational clinic to develop additional skills in community health education.

13) Based on discussions with Dr. Eke, Depo-Provera is presently not promoted as the injected progesterone. Given that Ibadan has been using Depo-Provera, the Medical Director might be encouraged to discuss the pros and cons of Depo-Provera with the unit in Ibadan. Meanwhile, alternative injectable progesterone supplies; e.g. Noristerate, Norethindrone enanthate (NET) should be explored.

14) The Ministry of Health should find out from Africare or others the rate of supply of equipment for new clinics, so that training can be suitably paced.

In the event that training capacity outstrips equipment supply, at least one fully equipped clinic capable of

providing all services should be established in each of the 21 local government areas (see Appendix G).

15) During the management and evaluation workshop scheduled for mid-November, a practical application of the workshop might be the use of a few of the existing clinics as case studies in management.

APPENDIX A

Persons Contacted

APPENDIX A

Persons Contacted

Imo State

MOH

Mrs. Brigitte Nwanko, Commissioner of Health

Mr. Izuwak, Permanent Secretary

Dr. Eke, Medical Director of Project

Mrs. Grace Oybonna, Project Director

Mr. Raphael Ude, Director, Health Education Unit

Health Management Board

Dr. H. Akanwa, OB/GYN in charge of FP Service, Owerri General Hospital

Dr. Nwachukwu, Chief Consultant Surgeon, ABA General Hospital

Dr. Ananaba, Chief OB/GYN, Aba

Dr. K. Ukoba, Chief Medical Officer, Okigwe

Dr. P. Anya, Consultant OB/GYN, Umuahia

Dr. Chima Nwafor, Senior Medical Officer, Isiala Ngwa

Mrs. Augustina Chimundu, FP Clinic, Owerri General Hospital

Matron C.I. Obi, Aba General Hospital

Local Government Areas

Mrs. Achilike, Nwaorieubi Health Center

Mrs. Onokah, Maternity Nurse, Nwaorieubi Health Center

Mrs. Ogumanne, in charge of Maternal Child Health, Umudim

Mr. Ogu, Community Health Assistant in charge of Dispensary, Umudim

International

Ms. Keys MacManus, AID Affairs Officer

Ms. Judy Jacobsen, AAO Assistant (interim)

Ms. Grace Delano, Fertility Research Center, Ibadan

Ms. Susan Rich, Population Crisis Committee

Mr. Alan Alemian, Africare

Dr. Miriam Labbok, Johns Hopkins University, Consultant to AID

Mrs. Manley-Rollins, Director, PPFN, Port Harcourt

Dr. Tasie Tolulope, Medical Director, PPFN, Port Harcourt

Other

Right Reverend Dr. B. C. Nwaukiti, Bishop of Owerri

Eze Erick Vdrji, Chief, Umudim

Mr. Peter Ogara, President of Umudim Union

Reverend and Mrs. Jerry and Ginger Lang, Administrators of Bishop Cockin Center, Atta

APPENDIX B

List of Participants

APPENDIX B

List of Participants

Ministry of Health

Lydia N. Anomnachi (Mrs.), Owerri,
Senior Health Tutor

Stella A. C. Dike (Miss), Aba HS,
Senior Public Health Sister/Tutor

Atim O. Jibueze (Mrs.), Aba,
Senior Midwife Tutor

Anne Nkwoh (Mrs.), Aba Sch. Health,
Principal Health Sister

Mercy C. Onyekwere (Mrs.), Owerri,
Health Sister/Tutor

Health Management Board

Eunice U. Obi (Mrs.), Owerri
Senior Nurse Administrator

Malinda N. Okoro (Mrs.), Owerri
Senior Nursing Sister

Edna O. Onyegere (Mrs.), Aba,
Senior Nursing Sister

Florence A. Oparagwu (Mrs.), Okigwe,
Senior Nursing Sister

Ola C. Opusunju (Mrs.), Umuahici
Senior Nursing Sister

Ministry of Local Government

Grace P. Ezumah (Mrs.), Umahia,
Principal Health Sister

Grace A. Nwangri (Mrs.), Orlu,
Assistant Chief Health Sister

Abigail A. Onuekwusi (Miss), Obregive,
Assistant Chief Health Sister

Constance O. Onuoha (Mrs.), Owerri,
Principal Health Sister

Ogonnaza I. T. Ukonu (Ms.), Aba Region,
Principal Health Sister

Physicians

Sylvester C. Mbagna

Dennis C. Iheonu

Co-Trainer

Mrs. Comfort Ukanwoke, Principal Health Sister,
Inspectorate Unit, MOH

APPENDIX C

Course Outlines

APPENDIX C

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	7/8 Introductions	Team Building Exercise	8:30 — CLINICAL SESSIONS — 12:00		
PM I	Needs Assessment	Review of Pretest	Review of Pelvic Anatomy	Review of Reproductive Cycle	Review of Conception and Implantation
II	Pretest	Plans of clinical sessions and afternoon program discussed.	ORT Review	The pelvic exam	The birth control pill
8:30 AM 12:00	7/15	CLINICAL SESSIONS			
I	Sex. Transmitted Diseases	Discussion Case Studies from previous week's clinic	Prescription of method	Abnormal pelvic palpation	Counselling exercise
PM II	Barrier Methods Condom, Diaphragm Foam	IUD insertion Practical session using models	Class exercise in choice of method	Counselling the woman with fibroids and the adolescent	Protocols for treating sexually transmitted diseases
8:30 AM 12:00	7/22	CLINICAL SESSIONS			
I	ORT Test	Gynecologic Problems	Infertility	Natural Family Planning	Post Test Design Discussion with homework to follow
	Referrals Who, What, When	Protocol for Referrals	Review of ORT Test Generation of Protocols for ORT	Case Studies of Previous Week's Clinical Sessions	Protocols for Infertility Diagnosis and Treatment
8:30 AM 12:00	7/29	CLINICAL SESSIONS		Post Test	Post Test Evaluation
I	Submission of Post Test Questions	Equipment Maintenance	Building a Clinic Population		
	Future Planning Essentials of a well-run Service	Record Keeping			Party

IMO STATE

FAMILY PLANNING SERVICE DELIVERY

WORKSHOP/CLINICAL

Trainers: 2 IHP Consultants

Trainees: 15 Members of State Training Team
5 Physicians

Goals: to perfect clinical skills required for the provision of family planning services and ORT

to acquire the capability of transferring clinical skills to other health workers

to develop protocols and standards for clinical service delivery

Objectives: At the end of the workshop the participants will have demonstrated ability to:

interview patients to obtain a complete medical, gynecologic and obstetrical history;

counsel patients to select an appropriate contraceptive method;

perform a screening gynecologic examination including breast, pelvic, and extremities and overall assessment--blood pressure, weight, and appropriate laboratory tests if available;

prescribe the required contraceptive method, including IUCD insertion if indicated;

manage the follow-up of each client's method and possible side-effects or complications, including possible referral;

select appropriate infants and toddlers for ORT therapy and instruct responsible parent in how to maintain adequate hydration; and,

design in-service training courses for other health personnel with appropriate training methods.

Expected Outcomes

A team of staff clinically prepared to provide family planning services and to train other health workers for clinical expertise in:

- counseling
- prescription of methods
- management of methods

Protocols for use of each family planning method including initial examination required, introduction of method and follow-up required for:

- natural family planning methods
- hormonal contaception
- intrauterine contraception
- barrier contraception

Protocols for referral of family planning problems.

Protocols for gynecologic problems normally encountered in family planning clinics:

- vaginitis, cervicitis
- endometritis, salpingitis, infectous or sexually transmissible diseases
- cervical fibroids and cancer

Protocols for infertility diagnosis and treatment.

Derivation of list of standards for each category of personnel in the service delivery of family planning.

Protocols for oral rehydration therapy.

Duration: July 8 - August 2, 1985

Place of work: Owerri or other designated area(s).

APPENDIX D

Daily Training Schedule

DATE July 8, 1985 day one

TRAINING DESIGN

3JECTIVE: Participants have learned about trainers, have identified needs and objectives of workshop and taken and reviewed (in part) a pre-test.

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:30	Introductions	Trainers will introduce themselves or each other. Participants will briefly introduce themselves, i.e., one outstanding thing about me you should remember. Participants will	Labels?	
	9:30	Needs Assessment - Problem Identification	be asked to make a list of at least five problems encountered in establishing clinic service. Pairs of participants will reduce list to five or six. Two pairs will compare and reduce again. One group of four will put list on newsprint. Other groups will discuss and add or subtract or change.	Pens or pencils Paper	
		Problem Solving	Group will discuss which of these problems can be solved by training, which by management.	Newsprint Marking Pens	
		Break			
		Problem solution, planning	Group reviews scheduled and plans for first week of training as it relates to problem identification.		
		Pre-test	Participants write responses to pre-test questions.		took 1.5 hour
	1:00	Lunch Break			

DATE July 8, 1985

TRAINING DESIGN

DAY: 1, cont.

BJECTIVE:

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	3:00	Perceived Needs	Review of physiology, part of pre-test Trainer uses pyramid technique to reveal expectations of participants. Trainer helps group to relate perceived needs to problems.	Pens paper pencils	to be done Tuesday a.m. with objectives
			Slides from Jamaica	slide projectors and sheet or screen	
			Participants and trainers discuss present client situation at clinics and help trainers make plans to visit clinic sites.		

DATE July 9, 1985

TRAINING DESIGN

DAY: 2

3JECTIVE:

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00	Where are We?	Trainers and trainees discuss use of techniques such as grab-bag, reflection, where are we, daily feedback for trainers and decide what and how they wish to use these training of trainer techniques Participants asked to lead these sections of training.		
	9:00	FP service delivery	Task analysis Brainstorm tasks for service delivery Analyze knowledge, skills, attitudes required Task analysis		
	10:30	Break			
	11:00	Physical and pelvic	Task analysis		
	11:30	Pelvic exam	Trainer reviews procedure-demonstration on Gurney model. external genitalia, BUS, use of speculum, bimanual and recto-vaginal exam.		
	1:00-2:30	LUNCH			

DATE July 9, 1985 cont.

TRAINING DESIGN

DAY: 2

JECTIVE:

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
2:30	IUCD inser-tion	Trainer reviews IUCD insertion technique- participants practice and demonstrate technique of doing pelvic exam and IUCD insertion.			

DATE Jul 10, 1985

TRAINING DESIGN

DAY: 3

JECTIVE:

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00	Pelvic Exam and IUCD insertion	Participants continue demonstration of pelvic exam and IUCD insertion technique on Gurney and other models.	Gurney model, IUCD insertion model gloves water specula cu7 Lippes Loops and introducers cut's	observation by trainers & other participants Participants make notes & give feedback.
	9:30		Three participants and one trainer to Owerri Gen. Hosp. FPC for clinic experience.	Transport sterile gloves IUCDs	Eunice Malinda Constance
	10:30	Tea Break	Remaining trainer and participants review IUCD complications and contraindications using case study and grab bag		
	1-2:00	LUNCH			
	2-3:30		Review by trainer of common abnormalities & problems encountered during FP physical & pelvic exams	List of 10 problems	Not completed
	4-5:00		Three participants review instructions for clients wishing to use Natural Family Planning Methods	Mercy, Stella, Anne	

DATE July 11 - DAY 4

TRAINING DESIGN

JECTIVE:

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:30-3:30 pm	Clinic experience for 7 participants	One trainer and 7 trainees to PPFN/Owerri clinic. One participant gives health education talk explains all methods. Participants interview and counsel clients. Each participant has a client for IUCD insertion.	Transport Grace E, Abigail, Lydia, Florence, Anne, Atum, Ogo	Trainees all did 1st IUCD insertion w/ some difficulty - Anne's client not accomodated due to problem w/ polyps

DATE July 12 DAY 5

TRAINING DESIGN

3JECTIVE: Participants have reviewed all contraceptive methods as a basic for preparation of protocols for use in clinics.

·ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-10:30	Barrier methods	Participants in groups of 4 discussed, wrote up and present detailed descriptions of mode of action, use, effectiveness and side effects of diaphragm foam and foaming tablets condom spermicidal creams & gels	Newsprint, marker, pens	Written wor as basis fo future protocol preparation
	10:30	tea break			
	11:00 - 1:00	Mechanical methods	Participants review IUCD comp-lications and contraindications		
	3:00-5:00	IUCD	Continued practice on models of insertion technique	Models CUT's Lippes Loops	

DATE July 15 DAY 6

TRAINING DESIGN

JECTIVE: Participants will have continued consideration of clinical responsibilities to client. Post-test to assess learning.

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-9:00	Clinic assignments & schedules	Trainers will present tentative plans for providing trainees w/ sufficient practice in pelvic examination & IUCD insertion. General discussion.	Newsprint; marker,pens	Final tentative schedule
	9:00-10:30	Gynecological problems	Trainer Hosang will guide discussion on common pelvic problems encountered in fp clinics - diagnosis, treatment, relation w/contraceptive method	Blackboard,eraser	Participation
	10:30	Tea break			
	11:00-1:00	Post test on IUCD insertion	Participants will respond to questions on test	stencilled test forms	responses to test
	3:00-5:00	Preparation for providing contraception	History taking: participants will brainstorm information needed on patient record. small groups will organize parts of record 1) social data (2)menstrual, gyn, and ob history (3) medical history Examinations - breast & thyroid abdominal & extremities, external & internal genitalia Objectives: trainer will lead group in discussion of reasons for doing the above examinations.		

DATE July 16, DAY 7

TRAINING DESIGN

JECTIVE:

iner	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-8:30	Where are we	Participants and trainers discuss future clinic assignments. Trainer arranges to visit ABA zone clinic sites 7/17.	Newsprint Marker Pens	Outlines on Newsprint
	8:30-10:30	Review of menstrual cycle	Trainers assist participants to crystalize their understanding of the role of each of the hormone stimulating factors and hormones in the development of the physiological events of the menstrual cycle.		
	11:00-1:00	The oral contraceptive pill	Participants divide into groups to discuss and develop outlines of the Mode of Action Contraindications, side effects complications, patient instructions, follow-up, protocols of the oral contraceptive pill		
	3:00-5:00	Continuation of above			

DATE July 17, 1985

DAY 8

TRAINING DESIGN

JECTIVE: One trainer and selected trainees have visited Aba, other trainer and tranees have discussed obstacles to client recruitment.

iner	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-5:00	ABA Zone site visit	Trainer travels to ABA zone to evaluate proposed clinic sites for use as areas of clinical practice	Transport participants from ABA zone	recommendations as to selection of clinical practice sites.
	8:00-10:30		Remaining trainer continues review of hormonal contraception.		
	11:00-1:00	Preparation for clinic activities	Trainer leads participants through an exercise to examine possible attitudes of clients. Participants are asked to draw up and discuss an outline of which local beliefs would seem to favor the adoption of family planning and which would be against.	Newsprint/marker/pens	Lively discussion & some disagreements.
	3:00-5:00		Participants wished to relieve their anxiety about clinic practice the following day. Trainers supervised continued practice doing simulated pelvic examinations on Gurney model, as well as practicing IUCD insertion techniques.	Gurney model; IUCDs and instrumentation; Searle Models for practice of CUT insertion.	

DATE July 18 DAY 9

TRAINING DESIGN

JECTIVE: Some trainees have had an opportunity for clinical practice.

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-10:00	Report of ABA zone site visits	Trainer Hosang who visited ABA zone facilities gave evaluation of possible clinic sites and discussed future plans. A tentative clinical practice schedule was proposed and adopted. Those nurses in charge of clinics agreed to spend time recruiting clients.		
	10:00-3:00	Clinical practice	Half the group went to Owerri Gen. Hosp. They first practiced the technique of pelvic assessment on clients coming in for 6 weeks post-partum examination. They subsequently moved to FP clinic and selected clients requesting IUCD's. The other half the group repeated experience of previous week at PPFN,Owerri. Each participant performed at least one IUCD insertion under trainer supervision	All materials except cotton balls and solutions for asepsis provided by PPFN in their clinic Owerri FPC equipped with IUCD insertion kits from FPIA	Trainers evaluate

DATE July 19, DAY 10

TRAINING DESIGN

OBJECTIVE: Another group of trainees have participated in supervised clinical practice.

Trainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-5:00	Clinical Practice	Trainer Hosang to work with five trainees for clinical experience. Remaining trainees continued review of insertion technique and follow-up. Those with responsibility for clinics in Okigwe, Umuahia and Isiala Ngwa travel to home sites to recruit clients and prepare clinic site.	Transport provided by Orlu	Client & practitioner satisfaction

DATE July 22/Day 11

TRAINING DESIGN

3JECTIVE:

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-5:00		Trainer Hosang and 5 trainees to Okigwe, site of 2 clinics.	Lippes Loops CUTs Gloves, etc.	Client & participant satisfaction
			Trainer Lewis and 3 trainees to Port Harcourt PPFN.		
			One physician trainee, seven trainees begin work on protocols for IUCDs --	Paper/pens	Protocols
			Criteria for selection of client education and information given examination to perform follow-up.		

DATE July 23 - DAY 12

TRAINING DESIGN

BJECTIVE: Clinical practice continues at various sites.

·ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-5:00	Clinical Practice	Trainer Hosang and 5 other trainees to UMUAHIA & BENDE clinic sites Trainer Lewis and 3 trainees continue in Port Harcourt Physician trainee & remaining trainees work on IUCD protocols		

DATE July 24 - DAY 13

TRAINING DESIGN

3JECTIVE: The trainees have an outline of commonly encountered gynecologic problems

ainer	Time	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
	8:00-5:00		Trainer Lewis continues in Port Harcourt at PPFN Trainer Hosang reviews gynecologic problems encountered in clinics in classroom with physician trainees & 12 participants.		

DATE July 25 - DAY 14

DAY

ACTIVITY

TRAINING DESIGN

OBJECTIVE: Trainees have opportunities for clinical practice

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
8:00-3:00	Clinical Practice	Trainers accompany trainees to Owerri - half the group goes to PPFN/Owerri Half to Owerri Gen. Hosp.		

TRAINING DESIGN

DATE July 26

DAY 15

ACTIVITY Clinical Practice

OBJECTIVE: Trainees have opportunities for clinical practice

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
3:00-5:00		Trainer Hosang to Isiala NGWA with 3 trainees Trainer Lewis to Orlu with 4 trainees Remaining trainees prepare protocols for use of diaphragm.		

TRAINING DESIGN

OBJECTIVE: Trainees are able to continue acquiring expertise.

DATE July 29

DAY 16

ACTIVITY Clinical practice,classroom

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
8:00-5:00		Trainer Hosang in Ibadan to observe clinical training course given. Trainer Lewis to Okigwe with 1 physician trainee and 2 participants. Remaining trainees continue to develop protocols.		

TRAINING DESIGN

DATE July 30

DAY 17

ACTIVITY Clinical practice classroom

OBJECTIVE:

Trainees continue developing IUCD insertion technical proficiency.

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
8:00-5:00		Trainer Hosang supervises 2 trainees at PPFN Port Harcourt. Trainer Lewis supervises 5 trainees at 2 clinic sites in Umuahia Remaining trainees work on protocols.		

TRAINING DESIGN

DATE July 31

DAY 18

ACTIVITY Clinic practice

OBJECTIVE: Trainees improve technical proficiency in IUCD insertion.

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
8:00-5:00		Trainer Hosang remains in Port Harcourt with 2 trainees. Trainer Lewis takes five trainees to Isiala Ngwa. Remaining trainees have completed protocols on pills.		

TRAINING DESIGN

DATE August 1

DAY 19

ACTIVITY Classroom

OBJECTIVE: Trainees have been introduced to use of microscopes.
Trainees have begun evaluation of workshop.

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
8:30-10:30	Use of microscope	Trainers demonstrate use of microscopes provided by Africare to selected clinics. How to unpack and set up microscope. How to adjust table and lenses to see material on slide. Use of different lenses. Trainees learn to focus lens to observe specimen.	microscope, slides, cover slides, light source, sperm sample.	
11:00-1:00		Trainer Hosange to Owerri General Hospital with 3 trainees for last supervised clinical experience.		Most trainees were able to identify motile sperm on slide.
3:00-5:00		Trainees complete participant reaction forms		

TRAINING DESIGN

DATE August 2

DAY 20

ACTIVITY classroom

OBJECTIVE: Trainees have demonstrated understanding of use of sterilizer.

TIME	CONTENT/TOPIC	METHOD/INSTRUCTIONS	MATERIALS/RESOURCES	EVALUATION
8:30-10:30	Use of sterilizer	Trainers demonstrate use of sterilizers provided by Africare. Each trainee gives return demonstration of setting and releasing steam valves.		
11:00-1:00		Final evaluation. Trainees given opportunity to ask clarification on any points. Trainer Hosang clarifies treatment of STDs and use of injectable contraception as discussed with Medical Director Eke.		
4:00	CLOSING CEREMONY		Mr. Izuwah, Dr. Eke, Ms. Ogbonna, 16 trainees, 2 trainers.	

APPENDIX E

Pre-Test

F

FAMILY PLANNING REVIEW

1. Where does fertilization occur?

   A. Ovary
   B. Oviducts
   C. Uterus
   D. Vagina

2. Sperm deposited in woman's body retain the ability to fertilize an ovum for approximately how many days?

   One Two Three Four More than four

3. The egg, once it has been released from the ovary, is usually capable of being fertilized for ---------- hours.

4. After childbirth, ovulation can occur before the first menstruation.

   True False.

5. Name as many popular methods of birth control as you can.

   A. _____
   B. _____
   C. _____
   D. _____
   E. _____
   F. _____
   G. _____
   H. _____
   I. _____
   J. _____

6. Below is a calendar of a woman with a 30 day cycle. Menstrual bleeding occurs from day 1 to day 5 (circled). On what four days is this woman most at risk of pregnancy?

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

She is most at risk of pregnancy on days

_____ _____ _____ _____.

7. Usually, a woman menstruates about ------ weeks after ovaries release an egg.

8. Ova, or eggs can live up to ------- days once they are released into the tubes.

RHYTHM METHOD

9. The rhythm method is based on the fact that a woman can only get pregnant if she has intercourse around the time that she

_____.

10. Which, among natural family planning methods, can be combined in order to increase the chances for the couple of not having an unwanted pregnancy?

11. List two difficulties that may arise with natural family planning.

TUBAL LIGATION

12. Does a woman still ovulate after tubal ligations?

13. Does a woman still menstruate after tubal ligation?

14. The predominant cause of infertility in women is:

a. lack of synchronization between intercourse and fertile days during the cycle of women.

14. b. ovarian dysfunction

c. blockage of fallopian tubes following pelvic infection

Using the words from the WORD LIST, fill in the sentences below: (Not all the words have sentences they will fit.)

15. WORD LIST:

CERVIX	EJACULATION	FALLOPIAN TUBES
VAGINA	OVULATION	UTERUS
FERTILIZATION	CLITORIS	OVARIES.

a. During intercourse, the man's penis is inserted into the_____.

b. The meeting of sperm and egg is called_____.

c. A woman's eggs are stored in her_____.

d. The_____is a very small opening at the tip of the uterus.

e. Fertilization takes place in the_____.

f. A woman's_____is a small organ outside her body that is very sensitive.

g. The fertilized egg travels to the_____where it grows.

h. _____is the release of a mature egg by an ovary.

16. See next page.

17. See next page.

18. When properly positioned, a diaphragm covers the_____

_____

19. For best results a diaphragm should be used in conjunction with_____

20. The diaphragm may be inserted up to_____hours before intercourse, and still work effectively.

21. After intercourse, a diaphragm should be left in place at least_____hours.

22. A woman may need to change the size of diaphragm she is using if she has a baby, or if she:

_____;

23. The most important factor in successful use of the diaphragm is thought to be the patient's understanding of its use. Give the important items to be covered in patient instruction.

a)
b)
c)

24. How does the intrauterine device prevent pregnancy?

25. What are the contraindications to insertion of an intrauterine device?

26. What are the possible complications of having an intrauterine device inserted?

27. How soon after it is inserted, is an IUD effective? _____

28. The exact way an IUD works is not known, but scientists believe it probably works by: (check one)

( ) a. preventing ovulation.

( ) b. preventing implantation of a fertilized egg.

( ) c. blocking sperm from reaching the egg.

29. Sometimes a woman's body expels or pushes out the IUD by itself. When is this most likely to happen? (check one)

( ) a. during menstruation.

( ) b. during ovulation.

( ) c. during intercourse.

30. Check ( ) which of these sentences are true and which are false:

	TRUE	FALSE
a. If a woman gets pregnant with an IUD still inside her uterus, the IUD must be removed to protect the child.	( )	( )
b. The IUD is the second most effective method of contraception (after the pill).	( )	( )
c. During intercourse, the man's penis often touches the tip of an IUD.	( )	( )
d. When a woman decides to have a child, she should remove the IUD by pulling on the strings that are attached to it.	( )	( )
e. Two fairly common side effects of the IUD are slight cramping and a heavier menstrual flow.	( )	( )

31. Mrs. Fuller asks you what she should do in case she does not menstruate after a course of the pills. What do you answer?

32. When taking the pill, a woman counts the first day of menstruation as "day 1" and takes her first pill: (check one)

( ) a. as soon as she stops bleeding.

( ) b. on "day 5".

( ) c. immediately.

33. If a woman begins to bleed while taking the pills, she:

( ) a. should stop taking her pills

( ) b. should take two pills a day until bleeding stops, then continue cycle.

( ) c. should stop taking her pills and start again after 5 days.

34. If a woman forgets to take her pill one day and remembers the next day, she should:

_____

35. If a woman forgets her pills for 3 days, she should:

_____

36. If a woman is taking the "21-day " pills, she: (check one)

( ) a. never stops taking pills.

( ) b. begins each new pack 5 days after her last pill.

( ) c. begins each new pack 7 days after her last pill.

37. If she is taking the "28" day pills, she: (check one)

( ) a. begins each new pack 5 days after her last pill.

( ) b. never stops taking pills.

( ) c. begins each new pack as soon as she starts menstruating.

38. What two synthetic hormones are used in birth control pills?

1. _____

2. _____

39. Would you re-supply pills to a woman who:

	Yes	No
a. was having regular periods	____	____
b. was complaining of one swollen leg	____	____
c. was breast feeding and having periods	____	____
d. did not know if she was pregnant or not	____	____
e. is having chest pains	____	____
f. is having irregular periods	____	____

40. Which of the following would you consider as absolute contra-indication to the use of oral contraceptive pill? (Tick as many as apply)

(a) Grand multiparity
(b) Large fibroids
(c) Previous cesarean section
(d) Carcinoma of the cervix
(e) Age less than 15 years
(f) Heavy menstrual flow
(g) Malnutrition
(h) Recent amenorrhea
(i) Anaemia
(j) History of migraine
(k) Cancer of the breast
(l) Age over 45 years
(m) Sickle cell disease
(n) Hypertension
(o) Hyperthyroidism
(p) Leg varicosities
(q) Liver disease
(r) Obesity
(s) Diabetes
(t) Cervical erosion
(u) Previous history of infertility.

41. Injectable contraceptives:

a. are very effective	True	False	circle whether True or False.
b. can lead to amenorrhea	True	False	
c. can cause irregular bleeding	True	False	

42. To be used correctly, the condom should be: (check one)

( ) a. placed on the penis before the penis becomes erect or stiff.

( ) b. cleaned thoroughly before being placed on the penis.

( ) c. placed on the erect penis before any insertion of the penis into the vagina.

43. After ejaculation, a man should remember to: (check one)

( ) a. allow the penis to become soft before he removes it from the vagina.

( ) b. hold the rim of the condom tightly as he removes his penis immediately after ejaculation.

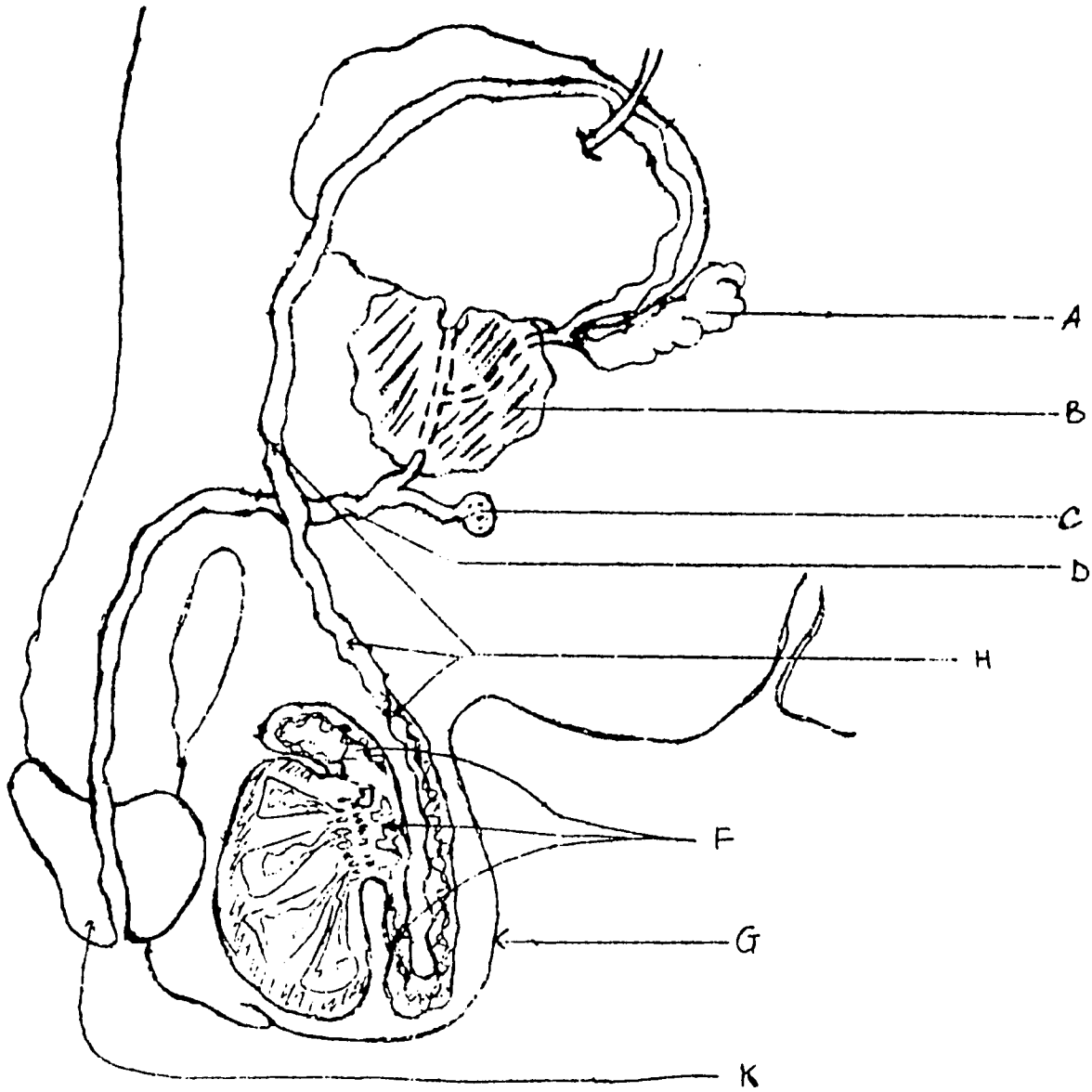
( ) c. take the condom off immediately to prevent it from leaking.

44. What method or methods are best for a grand multipara who does not want to get pregnant again.

a. Condom	____	____
b. Foam or foaming tablets	____	____
c. Pill	____	____
d. IUCD	____	____
e. Tubal Ligation	____	____
f. Depo-Provera	____	____
g. Vasectomy (for partner)	____	____

45. Which of the following is the greatest risk to a woman's health or life? (Underline one response)

1. the intrauterine contraceptive device (IUD)
2. pregnancy
3. the oral contraceptive pill
4. injectable contraceptives (depo-provera)
5. I don't know.



Label the parts of the MALE REPRODUCTIVE SYSTEM shown here.
Write the name of each organ in the correct space above.

Write the number of the word from the WORD LIST that fits each sentence below: (Not all the words will be used.)

WORD LIST			
	(1) TESTES	(4) COWPERS	(7) URETHRA
	(2) SCROTUM	(5) VAS DEFERENS	(8) SEMINAL VESICLES
	(3) EJACULATION	(6) FERTILIZATION	(9) PROSTATE

( ) a. A tube that transports both urine and sperm (at different times).

( ) b. Where sperm are produced.

( ) c. A gland that produces most of the fluid that makes up the ejaculato.

( ) d. Keeps the sperm at a healthy temperature by stretching or contracting.

( ) e. A tube that only transports sperm.

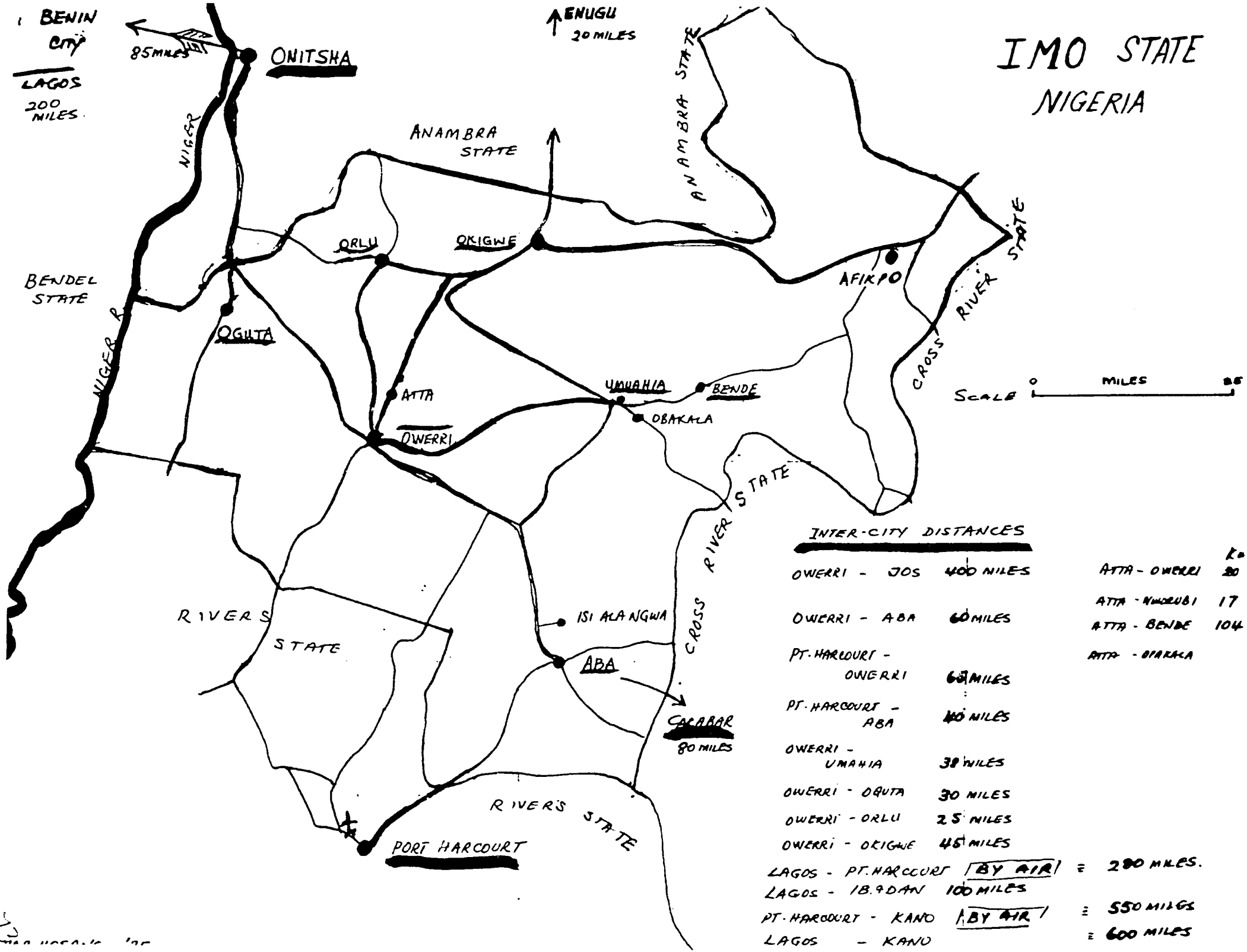
( ) f. The releasing of sperm and fluid through the penis.

( ) g. Two glands that clean urine of the urethra before sperm pass through.

APPENDIX F

Map of Clinic Sites

IMO STATE
NIGERIA



INTER-CITY DISTANCES

OWERRI - JOS	400 MILES
OWERRI - ABA	60 MILES
PT. HARCOURT - OWERRI	63 MILES
PT. HARCOURT - ABA	40 MILES
OWERRI - UMUAHIA	38 MILES
OWERRI - OGUTA	30 MILES
OWERRI - ORLU	25 MILES
OWERRI - OKIGWE	45 MILES

		Km
ATTA - OWERRI		20
ATTA - NWORUBI		17
ATTA - BENDE		104
ATTA - OBAKALA		

LAGOS - PT. HARCOURT (BY AIR) ≡ 280 MILES.
LAGOS - IBADAN 100 MILES
PT. HARCOURT - KANO (BY AIR) ≡ 550 MILES
LAGOS - KANO ≡ 600 MILES

APPENDIX G

List of Local Government Areas and Population Data from Imo State

BRIEF ON PROPOSED INTEGRATED FAMILY HEALTH PROGRAMME

APPENDIX G

POPULATION:

STATE:		1984	1985
TOWNSHIPS	NAMES OF LOCAL GOV'T. AREAS	6,168.590	6,322.841
ABA			
ABOH MBAISE	SAME	220.439	225.951
AFIKPO	SAME	318.506	326.470
AHIAZU MBAISE	FOR ORU	285.406	292.543
AROCHUKWU/OHAFIA	ISIAMA	198.327	203.287
BENDE	SAME	348.509	357.223
ETITI	SAME	188.962	193.687
IDEATO	URUALLA	399.589	409.581
IKWUANO/UMUAHIA	SAME	281.447	288.485
ISIALA NGWA	OKPUALA	261.421	267.958
ISUIKWUATOR/OKIGWE	SAME	287.163	294.344
MBAITOLI/IKEDURU	IHUD	419.732	430.228
MBANO	UMUELEMAI	352.827	361.650
NKWERRE/ISU	SAME	430.019	440.773
OBIOMA NGWA	ABA	342.622	351.189
OHAJI/EGBEMA/OGUTA	SAME	241.236	247.268
OHAOZARA	SAME	280.868	287.891
ORLU	SAME	306.356	314.016
ORU	MGBIO	245.096	251.224
OWERRI	+ NGOR OKPALA	205.957	211.108
UKWA	OKE IKPE	399.474	409.464
GROWTH:		154.634	158.501

The projections are based on the 1963 population census of Nigeria. A compound growth rate of 2.5% was applied to both Urban and Rural population. No account was taken of the massive movement of people during the Nigerian Crisis of 1966-1970 or the migration trends resulting from the creation of Imo State in 1976.

APPENDIX H

Protocols developed by Participants

APPENDIX H

PROTOCOL N.F.P

A. Introduction:- People who may be particularly interested in this method are:

1) Roman Catholics
2) Women whose husbands do not accept other methods
3) Clients who have contraindications to other methods

B. History Taking - a) Routine
b) Menstrual Cycle:

1) I f periods regular - suggest calendar and Basal body temperature method.
2) If periods not regular - suggest mucus and sympto-thermal method.
3) If menses last more than 8 days - do not recommend any of the methods.
4) If breast feeding - suggest mucus method.

C. Fertility Signs:

a) Basal body temperature - rise in temperature (1°)
b) Calendar method:- Find out clients longest and shortest cycle then:- Ist day of fertile period is -- shortest cycle minus 20 days.
- The last day of fertile period = longest cycle minus 10 days.

Use chart to illustrate.

Cervical mucus method. - mucus is watery, very clear, very elastic, slippery, sticky and stretchy (much like raw white of egg) at ovulation time.

OBSERVE THE FOLLOWING MUCUS SECRETION PATTERN.

MENSTRUAL CYCLE	MUCUS CHARACTERISTICS	SENSATIONS
1. MENSTRUATION Action: Refrain from sex	Mucus may or may not be present. If present, menstrual flow may obscure the mucus.	Wet and Lubricative
2. PRE -(OVULATORY INFERTILE PHASE) Action: a) If dry - not fertile. b) It is possible that dry phase may be very short or absent. If we refrain from sex.	Mucus may or may not be present, will be whitish in colour, sticky, thick, cloudy and when exposed to air becomes dry.	Dry sticky

MENSTRUAL CYCLE	MUCUS CHARACTERISTICS	SENSATIONS
3) Fertile phase Action: Refrain from sex if you don't want a baby.	Mucus is still sticky, Opaque but becomes sticky with visible nodules, and a little stretchy.	moist to wet
4) Most fertile phase of peak of fertility (Ist day of raw egg white like mucus) Action: Ovulation has taken place so refrain from sex.	Mucus becomes watery very clear, very elastic, slippery and sticky, very much like raw egg white in consistency.	Wet and lubricative
5. Post Ovulatory infertile phase Action: 3 days after the peak is safe and so can have sex. Safe till her next menses.	Mucus may or may not be present. No mucus days are dry days. If present, muous changes to become whitish or yellowish in colour, become sticker, thick and less elastic, almost totally cloudy and semi-solid in consistency.	Dry sticky or moist.

D. USERS INSTRUCTIONS: ON MUCUS METHOD

1. If pregnancy is desired

   1) Watch for the days of stretchy mucus
   2) Have intercourse on this day
   3) Abstain alternate days before having intercourse to enhance husband's fertility.

2. If Pregnancy is not desired

   1) Abstain during menstruation
   2) Abstain on days when mucus is stretchy and for at least three days after wards.
   3) Abstain on days of intermenstrual bleeding and for at least three days after wards.
   4) While learning the method, abstain on alternate "days" prior to the onset of slippery mucus.

ii. ON BASAL BODY TEMPERATURE

   1) Take temperature every day, the same time before coming out from bed in the morning.
   2) Use a glass thermometer which is placed at the bed side previous night.
   3) Chart accurately on temperature chart
   4) Use visual aids and charts to illustrate method.

ii 5) Ovulation day is that the temperature rises.

iii. ON CALENDAR METHOD:

a) Ovulation day - is 14 day to next menstruation

b) Fertile period is two days before and two days after.

USERS INSTRUCTION ON CALENDAR METHOD

a) Ovulation day - is 14 day to next menstruation

b) Fertile period is two days before and two days after ovulation.

c) Use visual aids and charts to illustrate method.

FOLLOW UP:

1) All requests must be recorded

2) Number of visits recorded

3) Evaluation

a) First visit - two weeks after

b) Subsequently - monthly x 3 for review

c) At the end of three months collective evaluation of all acceptors.

QUESTIONS TO ANTICIPATE FROM CLIENTS:

1) What if I see no dry period?

Answer: It means the woman has short period and has ovulated during menses.

Instruction: Do not have sex during menses.

2) If you do have persistent pap like discharge what do I do?

Answer: If you don't want a baby refrain from sex because the stretchy mucus may be marked in the pap like discharge.

PROTOCOL- DIAPHRAGM

1. **History Taking:**

   Routine history taking

   Particular attention to:

   a) Body weight
   b) Parity
   c) Pelvic operation

2. Counsel on Diaphragm

3. **Physical Examination:**

   a) Routine
   b) Speculum:- Look out for the following and refer

   1) Cervical erosion (2) Cervicitis (3) Colpitis
   4) Cervical polyp
   5) Rectocele and cystocele (6) Uterine prolapse

   Where 1 - 4 are severe refer to doctor
   In case of 5 and 6, see 4 below.

4. **Selection of Types:**

CONDITION	FLATS	COILS	ARCHS	NONE
1. Normal vaginal size and contour	+	+	+	-
2. Unusual vaginal size and contour	-	+	+	-
3. Mild Anteflexion	-	-	+	-
4. Mild Cystocele	-	-	+	-
5. Mild Retroversion	-	-	+	-
6. Mild Uterine Prolapse	-	-	+	-
7. Severe Anteflexion	-	-	+	+
8. Severe Cystocele	-	-	-	+
9. Severe Uterine Prolapse	-	-	-	+
10. Severe Retroversion	-	-	-	+

All infections of the cervix - refer for treatment.

5. **FITTING/INSERTION - (A) Position**

   1) Sitting at the edge of the bed/chair
   2) Squatting
   3) One leg on the stool
   4) Lying position as convenient.

B. HOW TO SIZE

1) Use different sizes of diaphragm fitting rings to determine the size that fits best.

2) If fitting rings not available, use real diaphragm.

TECHNIQUE

a) Application of jelly in the dome and around the rim - about one teaspoonful.

b) Take the appropruate position as above and insert.

c) Insertion: .) Hold diaphragm with the dome down

ii) Press the opposite sides together between thumb and the third finger.

iii) Spread the lips of the vagina with your free hand.

iv) Still holding the com-pressed diaphragm with the dome down, push gently inwards along the rear wall of the vagina as far as it can go.

v) With your index finger, push the front rim of the diaphragm up until it is locked in place just under the pubic bone.

vi) With your index finger ensure that the diaphragm is in place.

N.B It is important that the cervix is covered with the diaphragm confired by palpating the cervix through the of the diaphragm.

d) Then ask the client to repeat the procedure herself.

e) The client should also demonstrate that she is able to remove the device on her own before leaving the clinic.

6. USERS INSTRUCTIONS:

1) insert-not longer than two hours before coitus.
2) Subsequent sex - apply more jelly with applicator.
3) Remove 6 - 8 hours after the last sexual act.
4) CARE/STORAGE: Wash with mild soapy water

- Rinse thoroughly and dry with a clean towel
- Store in its container
- Do not apply powder or vaseline

CONDITION FOR REFITTING DIAPHRAGM

a) After abortion or delivery
b) After pelvic surgery
c) Weight gain or loss of 10 lbs or more

d) After 18 months use the diaphragm

REFERRAL:

1. HISTORY:

a) Vaginal irritation
b) Excessive vaginal discharge
c) Prolapsed uterus
d) Vesico vaginal fistula
e) Repeated P.I.D
f) Recto - vaginal fistula

(2) EXAMINATION:

a) Cervical erosion
b) Cervicitis
c) Colpitis
d) Rectocele
e) Cystocele
f) Warts
g) Vestco V. listula
h) Recto V. fistula

HOW TO REFER:

1. Fill the referral form
2. Advice client on referral
3. If possible book an aoppointment for client
4. If possible go with client
5. Give client condom back up.

WHAT TO EXPECT:

1. Treatment - where the client comes on vaginal cream which may preclude the use of the diaphragm temporarily encourage to continue with the back up method - (condom)

QUESTIONS THAT YOU MAY BE ASKED BY THE CLIENT:

1. Q. Will the prolong use of rubber and spermicide give me cancer?

Ans. No.

2. Q. Will repeated insertion of cream or jelly not lead to my feeling messy and cream dripping down my legs

Ans. No; should not be any more messy than the normal coitus without cream.

3. Q. Will I react to the rubber?

Ans. - but if it does, report to clinic

4. Q. Will the diaphragm not fall out when I am moving?

Ans. No, but may cause discomfort if wrongly fitted.

5. Q. Shall I enjoy sex with the diaphragm in place?

Ans. Yes.

6. Q. What if my husband complains of feeling the diaphragm.

Ans. Normally your husband should not feel it, if he does report to clinic with fitted diaphragm.

7. Q How long can I use one diaphragm.

Ans. Use for 18 months and come for checking of diaphragm which may or may not need changing.

PROTOCOL ON FOAM:

1. History taking - routine

2. Counsel client on foam

3. USER'S INSTRUCTION:

   1) The client should lift the black stump on the can to ensure there is foam in the container

   2) Make sure the client shakes the container vigorously at least 20 times

   3) Fill applicator with foam

   4) Client lies on her back

   5) Insert foam when ready for intercourse

   6) Subsequent intercourse additional foam

   7) Client should not get up again after applying foam before intercourse

   8) Client should not douch immediately after intercourse

   9) Keep a spare container of foam at the bed side - ready for use.

   10) Care and storage - wash applicator with warm soapy water and dry after each use.

5. FOLLOW UP: Client should come for supply when necessary.

6. Problems and How to deal with them:

   1) Burning sensation - find out when it occurs: If after use of foam stop use and give back up. (condom)

   2) Vaginal discharge: Examine client, take H.V.S. for C/s. stop use and give back up treat.

   3) Bleeding: Stop use of foam, take history and refer

   4) Itching: Stop use of foam, give back up and treat the cause of the itch.

CONDOM PROTOCOL

1. CLIENT SELECTION:-

   a) Men

   b) Women who collect condoms for their husbands.

   c) Women who need back up for other contraceptive methods. e.g. missing pills, women breast feeding.

2. HISTORY TAKING ROUTINE

3. INSTRUCTION TO USERS

   a) Remind client to keep extra condom around.
   b) Use new condom for each subsequent intercourse.
   c) Demonstrate application of condom with a stiff object.
   d) Hold the rim of the condom, roll to base of penis.
   e) Allow ½ inch space for collection of sperm at the tip of condom.
   f) Withdraw penis few mins. after ejaculation by holding the rim of the condom against the penis while removing the penis from the vagina.
   g) Remove the condom from the penis
   h) Wrap in a tissue or newspaper placed under the bed and remove immediately and dispose in the dust bin/pit latrine.

4. FOLLOW UP:

   a) If any allergy, stop use of condom
   b) What sizes?; no sizes (free sizes), it stretches to fit the biggest penis.
   c) It has different colours signifying nothing but for attraction.
   d) If it slips off - remove and use a new one.
   e) You are not to reintroduce the penis into the vagina after removing condom because the sperm trickling down from the penis may cause pregnancy; if penis is still errect and there is urge for another coitus use a new condom.

PROTOCOL FOAMING TABLETS:

1. History taking - routine
2. Counsel client on foam tablet
3. Give one tin of foam tablet containing about 20 tablets
4. Insert one tablet of foam deep into the vagina 10 - 30 mins before coitus.

   Demonstrate Insertion of Foam Tablet
5. Subsequent intercourse additional foam tablet.
6. Keep a spare tablet of foam at the bed side - ready for use
7. FOLLOW UP: Client should come for supply when necessary
8. Problems and How to deal with them

   Refer to notes on foam problems.

   The client should be advised how to insert the foaming tablet. One method may be to hold the tablet between the thumb and index finger. Holding the labia apart with the free hand, the tablet is inserted into the vagina. Then the index finger is used to push the tablet further into the vagina.

   The client should then be given a tablet to insert while in the clinic to ensure that technique is understood.

   Questions on Foam Tablet:

1. Q: My husband complains of itching around the penis after intercourse with foam tablet.

   Ans: Insert the foam tablet and have a love play for about 30 minutes to allow the tablet dissolve and spread into the vagina.

2. Q: Do I soak it in water before inserting into the vagina.

   Ans: No! push it into the vagina as demonstrated by the clinician.

3. Q: How does it dissolve in the vagina

   Ans: The cervix secretes fluid which moistens the vagina. This fluid helps the tablet to dissolve.

4. Q: How long before intercourse should I insert the tablet.

   Ans: Insert it in 30 minutes before intercourse.

5. Q: Should I wash inside my vagina after intercourse.

Ans: No. (i) Washing the vagina will suppress action of the foam on the sperm.

ii) Since the spermicidal action of the foam has been altered, pregnancy can result.

6. Q: How does foam tablet work to prevent pregnancy?

Ans: As spermicidal agent - it kills the sperm.

7. Q: As it kills the sperm does it burn my vagina too.

Ans: No! The action or effect of foam is strong enough to burn your vagina.

IUCD PROTOCOL

Selection of Clients

1. History Taking

a) Name (b) Address (c) Age (d) Level of Education.

B. Summary of Clients Knowledge on IUCD

a) Source of information
b) Type of IUCD requested
c) Why the choice of the particular type
d) Previous contraception used.

C. Obst/Gynae. Hx:

- Parity - live children - abortion/Ectopic
- Date of last Delivery
- Mode of delivery, if c/s, refer to doctor
- Last normal menstrual period, duration, regular or irregular
- Hx recent P.I.D., dysmenorrhoea, Oligo or menorrhagia
  P.I.D incidence and severe dysmenorrhoea with menorrhagia will contraindicate IUCD insertion.
- Vaginal discharge.

D. Medical Hx:

- R/O hx of abdominal pain
- Severe anaemia

E. Surgical Hx: R/O Recent abdominal and genital/Uterine Surgery.

2. Investigations:

a) Physical examination:-

Examine client from Hair to Toe, recording any abnormalities - e.g. Previous scars.

b) Pelvic Examination:

- Empty the bladder, Palpate the abdomen note any mass, tenderness.

c) Bimanual Exam:

- Uterine size (if under 5 cm do not insert IUCD)
- Uterine position - mobility
- Adnexia - tenderness
- R/O pregnancy.

d) **Speculum Exam:**

View the cervix to exclude any abnormality such as

a) Erosion Refer to doctor
severe cervicitis Refer to doctor

b) Cervical Polyp

c) Discharge - Profuse and foul - treat before insertion as this points to infection.

3. [illegible]

Timing of Insertion:

a) Best time for insertion is during menses,

1) Rule out pregnancy

2) Cervix is dilated, insertion is less traumatic

b) Post - partum - at six weeks

c) If longer than 6 weeks, and client has not see menses due to lactation, ask:

1) if she has had intercourse and when

2) if any contraception was used

3) if she has witnessed any loss of blood no matter how small (may indicate ovulation)

If answer to 1 is "yes" and to 2 "NO" R/O pregnancy by bimanual and pregnancy test. An alternative cheaper method is to do bimanual, and have her return in 4 weeks for 2nd bimanual and insertion if negative. In this case, please

→ ASSURE USE OF BACK-UP METHOD.

4. **Insertion Procedure:**

a) Reassure client now that you are about to insert IUCD

b) Explain procedure simply to her

c) ~~Apply~~ Insert Speculum

d) Apply Tenaculum after cleaning the cervix with cotton buds dipped in savlon (Position of Tenaculum 11 - 1 pm)

e) Sound the uterus slowly and gently - direction of sound corresponds with the lie of uterus. If uterus less than 5 cm, no IUCD.

If uterus less than 6.5 cm use Cu-T.

If uterus more than 6.5 use Cu-T/Lippes Loop

f) Load IUCD adopting sterile procedure

g) Insert IUCD by slow push or withdrawal method as appropriate

h) Remove the introducer

i) Observe client's condition, R/O dizziness, abdominal cramping, bleeding/other discomforts.

j) Remove tenaculum and check for bleeding, if any, apply pressure.

k) Cut string (if necessary) leaving 2" from the cervix.

l) Remove speculum and make client comfortable.

m) Allow client few minutes (if necessary) on the couch before getting up.

5. Anticipated Problems During Insertion:

1) Cramping:

a) During sounding - stop procedure. If it stops, sound uterus gently and slowly. If cramping continues mildly, give two (2) tablets of aspirin and observe client.

b) During insertion:

- Stop procedure
- Unload the IUCD
- Treat client as in (a)

2) Severe Post Insertion Pain:

(Vasovagal Reaction)

- Observe client's pulse - if below 50, call for help, otherwise make client comfort and reassure her.

6. Instruction After Insertion

Client Education:

a) Advise client on

i) Personal Hygiene

ii) Feeling of strings after each menses.

iii) Intercourse with husband/partner (client may want to know how soon after insertion she can have intercourse.

- She can have intercourse in 4 days or sooner if she is comfortable.

b) Follow Up Visits

- Ist visit - 12 weeks after insertion (sooner if she has any problem.)
- 2nd visit at 6 months
- 3rd visit at 1 year of insertion
- Subsequent visits - yearly.

APPENDIX I

Curriculum of Ibadan FP Training

APPENDIX I

APPLICATION FOR FAMILY PLANNING TRAINING
FERTILITY RESEARCH UNIT
DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY
UNIVERSITY COLLEGE HOSPITAL
IBADAN

NAME: _____

SEX: _____ DATE OF BIRTH _____ STATE OF ORIGIN _____

BUSINESS ADDRESS: _____

NAME OF IMMEDIATE SUPERVISOR: _____

POSTAL ADDRESS: _____

_____

TITLE OF PRESENT POSITION _____

DATE POSITION RESUMED _____

PERMANENT ADDRESS: _____

_____

PREVIOUS EDUCATION: _____

_____

_____

PREVIOUS TRAINING AND EXPERIENCE: _____

_____

_____

_____

Why do you need to attend this training Programme? _____

_____

_____

_____

How useful will this training be to you in your present job?

_____

_____

Please describe your current job: _____

_____

_____

Do you have the permission of your superior to attend this course? Yes/No

Do you have sponsorship to attend the Course? Yes/No.

Would you need accommodation? Yes/No

_____
Signature

_____
Date

Please return the completed form to the:-

Coordinator of Training Programme,
Fertility Research Unit,
Department of Obstetrics & Gynaecology,
College of Medicine,
University College Hospital,
Ibadan.

FAMILY PLANNING TRAINING PROGRAMME
FERTILITY RESEARCH UNIT
DEPARTMENT OF OBSTETRICS & GYNAECOLOGY
COLLEGE OF MEDICINE, U.C.H., IBADAN.

NEEDS ASSESSMENT TOOL

In an effort to provide training pertinent to your need, we would like you to please complete this form. This will assist us to determine:

1. What you know
2. How we can assist you in attaining more knowledge specific to your needs.

Name: _____ Date: _____

Permanent Address: _____

_____

State _____

1. What do you hope to achieve by attending the Family Planning Course? _____

2. What job or position do you currently hold? _____

3. Describe briefly the activities you perform in this post _____

4. What do you think will be expected of you when you return home? _____

5. What will your job be? _____

6. What knowledge and skills will you be expected to use in your job? Be specific please. _____

7. In your present post or job are you strictly involved in:

	Tick Response	
	Yes	No
Teaching of Students	____	____
Training of Staff	____	____
Administration	____	____
Clinical Teaching	____	____
Supervision of Staff	____	____
Patients Care	____	____
Coordinator of FCU	____	____

/2.

Best Available Document

92

If your answer is 'Yes' to any of the questions, please comment briefly on your activities.

_____

_____

_____

8. Of the following tasks listed, please tick those which you currently know how to perform and those in which you would like additional training.

Area	Currently Performed		Additional training needed	
	Yes	No	Yes	No
a. Obtain &record clients' history.	____	____	____	____
b. Perform clients'record keeping.	____	____	____	____
c. Perform Physical examination.	____	____	____	____
e. Perform pelvic "	____	____	____	____
f. Perform Pap Smear	____	____	____	____
g. Perform Lab Pregnancy test.	____	____	____	____
h. Counsel for contraceptives	____	____	____	____
i. Witness Insertion of IUD	____	____	____	____
j. Insert IUD	____	____	____	____
k. Set trolley for insertion of IUD	____	____	____	____
l. Prescribe oral contraceptive	____	____	____	____
m. Prescribe condom and instruct user	____	____	____	____
n. Prescribe foam & instruct user	____	____	____	____
o. Measure for diaphragm	____	____	____	____
p. Diagnose and Manage P.I.D.	____	____	____	____
q. Diagnose and manage vaginal discharge.	____	____	____	____
r. Give health talks on MCH/FP	____	____	____	____
s. Case presentation	____	____	____	____
t. Others: Please list and be specific.	____	____	____	____

FAMILY PLANNING TRAINING PROGRAMME
FERTILITY RESEARCH UNIT
DEPARTMENT OF OBSTETRICS & GYNAECOLOGY
COLLEGE OF MEDICINE
U.C.H. IBADAN.

Service Providers

Date/Day	Time	Topics	Lecturer
Mon.	A.M. 8 - 8.15	Orientation	.....
	8.15-8.30	Unit Tour	
	9.30-9.	Needs assessment	
	9.-11.	Pre - Test	
	11 -11.15	Break	
	11.15-12.	History of Family Planning	
	12 - 1.30p.m.	Anatomy & Physiology of male & female reproductive system.	
	1.30-2.30p.m.	Break	
	2.30-3.45	Menstrual cycle & Disorders	
	3.45-4p.m.	Grouping & Distribution of Text Books.	
Tues	A.M. 8 - 9.30	Introduction of all contraceptive methods, traditional & Modern	
	9.30-11	Physical & Pelvic exam.	
	11 - 11.15	Break	
	11.15 -1.15	Intra uterine contraceptive device machanism, contraindication, side effects. Technique of insertion, sterilization of equipment.	
	1.15 -2.15	Break	
	2.15-3.30	Hormonal contraceptive mechanism, contra-indication, side effects, usage, etc.	
	3.30-4.p.m.	Film, (a) conception & contraception. (b) Pelvic exam.	
Wed.	A.M. 8-9.30	Natural Family Planning Method, usage, etc.	
	9.30-10.45	Gynaecology pathology Ectopic Breast, uterine, cervical abnormalities, P.I.D & Management	
	10.45-11	Break	
	11- 12 p.m.	Vaginal & Urinary infection.	
	12 - 1.30p.m.	Infertility investigation and management.	
	1.30-2.30	Break	

/2

Date/Day	Time	Topics	Lecturer
Wed.	2.30-3.30	Permanent contraceptive method, male and female	
	3.30-4 p.m.	Film on Permanent contraceptive	
Thur.	A.M. 8-9.45	Barnet method. Mechanism, contraindication, side effect, usage care etc.	
	9.45-10	BREAK	
	10 -11.30	Maternal child health and family planning.	
	11.30-12.30	Contraceptive for Breast Feeding mothers.	
	12.30-1.30	BREAK	
	1.30-2.30	Cytology I	
	2.30-3.30	Cytology II	
Fri.	A.M. 8 - 9	Health education & F/P	
	9 -9.45	Practical in Audio visual Aids	
	9.45-10	BREAK	
	10-11 a.m.	Sociology	
	11-12noon	Psychology/Anthropology	
	12-1 p.m.	Public Health aspect and epidemiological technique for evaluating F/P.	
	1 - 2 p.m.	BREAK	
	2-3 p.m.		
	3-4 p.m.	Planning & Organisation	
Mon.	A.M. 8-9.30	Adolescent Sexuality problem	
	9.30-10.45	Family life education	
	10.45-11	BREAK	
	11-12.30	Sexually transmitted disease.	
	12.30 - 1	Film on sexually trasmitted disease.	
	1-2 p.m.	BREAK	
	2-4 p.m.	Religion & Family planning.	
Tues	A.M. 8-9 a.m.	Population dynamics	
	9-10.	Vital statistics	
	10.10.45	BREAK	
	10.15-11.30	Motivation&Counselling.	
	11.30-12.30	Clinic setting/Record keeping.	
	12.30-1.30	BREAK	
	1.30-4p.m.	Commodities management	

/3.

95

Date/Day	Time	Topics	Lecturer
Wed.	A.M.	Common problems with contraceptive methods and management.	
	9.30 -- 11	Patients flow.	
	11 -- 11.15	BREAK	
	11.15--12.30	Concept of supervision	
	12.30-1.30	BREAK	
	1.30--2.45	Nutrition and drug interaction.	
	2.45--3.45	Concept of C.B.D. Film-conception & contraception	
Thur.	A.M. 8.30-9.30	Minor gynaecological procedures	
	9.30--10.30	Recent/future advances in contraceptive technology	
	10.30--10.45	BREAK	
	10.45--11.30	Pregnancy testing Diagnosis Problems in Interpretation Errors Home pregnancy testing	
	11.30--1 p.m.	Concept of ORT in the treatment of diarrhoea: (1) Use of Unicef kit (2) S.S.S.	

FAMILY PLANNING TRAINING PROCEDURE
CLINICAL PRACTICE

DAY	1ST WEEK	2ND WEEK	3RD WEEK	4TH WEEK
27.5.85 Mon.	- Observation of Clinic Procedure - Clinical Practice	3.6.85 - Clinical Practice S.T.C. - ½ of G.2 Pregnancy Test - ½ of G.3 Case Presentation - Gr.3	10.6.85 - Clinical Practice - S.T.C. - ½ of Gr.1	7.6.85 - Clinical Practice - Practical Examination 2 p.m.-4 p.m. - Post - Test Paper I
28.5.85 Tue.	- Clinical Practice - Preg. Test - ½ of Group 1	4.6.85 - Clinical Practice Preg. Test - ½ of G.2 Role Play - Gr. 2	11.6.85 - Clinical Practice - - S.T.C. - ½ of GR. 1 Cytology - Group 2	18.6.85 - Clinical Practice Practical Examination - 2p.m.-4p.m. Post Test - Paper 2
Wed.	- Clinical Practice Health Education: I.W.C. Group 2 Counselling on Ward W4 G3	5.6.85 Clinical Practice - Counselling on Ward W4 G1 Health Education. I.W.C. G2 Case Presentation G2	12.6.85 Clinical Practice STC Gr 3 - Health Education I.W.C. G1 Project Presentation	19.6.85 - Clinical Practice - Project Presentation - Groups 1 & 2
Thur.	- Clinical Practice - Preg. Test - ½ of Gr. 1 S.T.C. - ½ of Gr. 2 Role Play - Gr. 3	6.6.85 - Clinical Practice Preg. Test - ½ of Gr. 2 S.T.C. - ½ of Gr. 3 Role Play - Group 1	13.6.85 Clinical Practice Cytology - Group 3	20.6.85 - Clinical Practice - Evaluation
Fri.	- Clinical Practice Preg. Test - ½ of G.3 Counselling on Wards SE 4 Gr. 2 - Health Education P.N.C. Gr. 1	7.6.85 - Clinical Practice - Counselling on Ward SE 4 Gr. 1 Health Education P.N.C. Gr. 2 - Case Presentation - Gr. 1.	14.6.85 - Clinical Practice Cytology - 2 Health Education. P.N.C. Gr. 3	21.6.85 - Clinical Practice - Graduation

SPECIAL INSTRUCTION

- 1ST DAY:

ALL TRAINEES ARE EXPECTED TO COMPLETE:

(a) 5 Pelvic Exam. under supervision.
(b) 5 Witness Cases of I.U.D. Insertion.
(c) Commence Insertion.

- COUNSELLING & MOTIVATION

Venue	Time
I.W.C.	9.a.m.
P.N.C.	10 a.m.
Wards	10.30 a.m.

- ACTIVITIES TO BE ARRANGED IF TIME PERMITS

(1) Film Show
(2) Visit Planned Parenthood
(3) Visit C.B.D. Programme
(4) Observe use of Ultrasonograph.

POSTPARTUM EXAMINATION

THE NURSE/MIDWIFE ASSUMES RESPONSIBILITY FOR:

Evaluating the physical findings and reporting to the Resident Physician any deviations from normal. Interpreting the physical findings to the patient. Ordering medication or treatment for specific conditions as directed by the physician. Making the necessary inter and intra-agency referrals for continuing care for social, financial or health problems.

PROCEDURE:

Perusal of patient's available records, postpartum ward, discharge forms and Nurse/Midwifery record. Patient empties bladder and removes bra and pants.

Initial Interview:

Postpartum course:
- Health Status
- Psychological and Social
- Re-adjustment
- Home management.

Baby's progress:
- Health status
- Medical supervision

PHYSICAL EVALUATION:

General:

Eyes _____ Teeth _____ Throat _____ Neck _____

Referrals _____

B.P. _____ Pulse _____ Respirations _____

Abdominal:

Tone: Flabby _____ Firm _____ Rigid _____

Skin: Striae _____ Linea Nigra _____ Scars _____

Diastasis: Width _____ Exercises Taught _____

Contour: Irregularity _____ Masses _____ Hernia _____

Contact: Pain _____ Tenderness _____ Exact location _____

PELVIC EXAMINATION:

Explain: the procedure to the patient

Relaxation: of the abdominal and pelvic floor muscles is essential for a successful and comfortable examination. If tension develops, stop, relax and reassure the patient and help her with relaxation techniques before continuing the examination.

...2/

Remember to palpate with the flat of your fingers. It may help you to keep your vaginal hand relaxed to place your right foot on a stool with your right arm resting against your right thigh or hip. Then all forward and downward pressure will be exerted by leaning against your elbow.

External Genitalia:

GENERAL:

Discoloration _____ Inflammation _____ Irritation _____

Masses _____ Adhesions _____ Anatomical Abnormalities _____

Protrusions _____ Carincle _____

Fistulas _____ Fissures _____ Ulcerations _____

Scars _____ Chanere _____

Specific:

Vulva: Varicosities _____ Condylomata _____

Ulcerations _____ Discolorations _____

Oedema _____ Fissures _____

Clitoris: Size _____ Adhesions _____

Internal:

Discharge:

Colour: Clear _____ White _____ Creamy White _____

Yellow _____ Bloody _____ Frothy _____

Caseous _____ Gray-Green _____

Postpartum Lochia:

Rubra _____ Serosa _____ Alba _____

Odour Foul _____ Menstrual _____

Consistency: Cheezy _____ Bubbly _____

Menstrual History:

Duration _____

Interval _____

Amount _____ Clots _____

Dysmenorrhea _____

....3/

Bimanual:

Method: Insert examining finger into vagina obliquely, maintaining downward pressure until each of the fingers is in the lateral fornices with the cervix between.

Cervix:

Position: Anterior _____ Midline _____ Posterior _____

Lateral _____

Consistency: Soft _____ Firm _____ Cystic _____

OS: Closed _____ Open _____

Bleeding on digital contact _____

Method: Spread labia with two fingers of the left hand and insert finger of the right hand an inch into the introitus. Press upward and outward on the urethra, "Milking" it and the Skenes Gland.

Urethra & Skenes: Tenderness _____ Masses _____

Exudate _____ (Colour & Consistency) _____

Method: Sweep fingers laterally and palpate the area of the Bartholin's Gland between the finger and Thumb on each side.

Bartholin's Gland: Tenderness _____ Inflammation

Colour: Exudate ____ (consistency & odour) _____

Introitus: Nulliparous _____ Parous _____

Gaping _____ Hymenal Tags _____

Perineum: Scars _____ Lacerations _____

Healed _____ Unhealed _____

Episiotomies _____

Method: With two fingers, spread the vaginal orifice and ask patient to bear down or cough.

Support: Cystocele _____ Rectocele _____

10 Slight deviation

20 Advanced nearly to the introitus

30 At the introitus or beyond urethrocele _____

Stress Incontinence _____

.....4/

100

Musculature Integrity: Firm _____ Work _____

Method: Insert the vaginal fingers further and ask the patient to tighten or pull up.

Exercises taught _____

PELVIC EXAMINATION

Internal Speculum:

Method: Spread the Labia with two fingers of the left hand and insert the closed speculum in an oblique plane with the index and first finger holding blades until it is beyond the hymenal ring. Be careful to exert downward pressure while inserting and removing the speculum and during the examination to avoid the sensitive anterior structures.

Turn the speculum to the horizontal plane and when the shorter, upper blade is just in front of the cervix lift the anterior blade with the thumb lower.

Manoever the anterior blade so that when the speculum is widely opened the cervix will come into the position between the blades. Secure the blades in position by tightening the screws of the speculum.

Vagina Mucosa:

Colour: Pink ____ Patchy white ____ Strawberry _____

Mucosa: Clean _____ Cheesy _____ Plaques _____

Swellings: Cysts _____ Polyps _____ Tumor _____

Scars Lacerations _____ Adhesions _____

Cervix: Colour: Blue _____ Pink _____ Hypertrophic _____

Configuration of O^s: Slit ____ Oval ____ Palulous _____

Discharge: Colour _____ Consistency _____ Odour _____

Scars: _____ Adheasions _____ Brosions _____ Cervicitis _____

Acute _____ Crhtonic _____ Nabolhiancysts _____

Polyps _____

Simanual:

Method: The normal uterus is a movable organ within limits. The cervix is anchored, but the body of the uterus is free to move in the antero-posterior plane. In the bimanual examination the uterus can be manipilated or displaced for thorough palpation because of the cardinal ligament laterally and the uterosacral ligaments posteriorly. Pressing upward in the anterior fornix or on the cervix will rotate the uterus backward. Also, bringing the cervix forward will rotate

...../5

101

the uterus backward (retrodisplacement). Pushing backward from the anterior fornix will bring the uterus forward.
Lifting up on the cervix with the fingers in the lateral fornices will bring the uterus upward toward the abdominal hand.
Lifting the vaginal index finger in the left lateral fornix. Will rotate the uterus to the patient's right and vice-versa.

Uterus:

Size: (in Weeks) _____

Contour: Smooth _____ Irregular _____ Nodular _____

Mobility: Moveable _____ Fixed _____

Consistency: Hard _____ Firm _____ Boggy _____

Location: Midline _____ Dextroversion ____ Sinistroversion _____

Height: In finger breadths _____

Position: Anteflexed _____ Retroflexed _____

Midline _____ Retroverted _____

Bimanual:

Method: Palpate the adnexa. Place the vaginal fingers in the right lateral fornix and the abdominal hand in the area of the right iliac-crest. Bring the hands together and move them toward the midline. The vaginal fingers will best define the ovaries as they slip between the fingers while the abdominal hand will have to press the adnexa firmly towards the vaginal fingers.

Adnexa: Non-Palpable _____ Palpable _____

Tender _____ Swelling _____

Method: Wash the vaginal secretions from your glove and apply additional lubricating jelly. Insert the index finger beyond the anal sphincter. Often, more definite information can be obtained by the combined recto-vaginal examination.

Rectal: Hemorrhoids _____ Mass _____

Strictures _____ Tone _____

Adhesions _____ Fistulas _____

Pain _____ Tenderness _____

PAPANI COLAOU SMEARS

TECHNIQUE:

The diagnostic value or accuracy of the Papanicolaou Smear is considerably influenced by the method of obtaining the material and preparing the slide.

1. Speed is essential to prevent drying of the cells.
   (a) Have the slide correctly labelled (in pencil) before taking the smear.
   (b) Keep the slide with the smear away from the lighted lamp.

2. The Papanicolaou smear is taken before the bimanual examination is done.

3. No lubricating jelly is to be used. Tap water may be used to bubricate the speculum.

4. Use a sponge stick and 2 x 2's to gently remove any material on the cervix that might obscure the cells: muscus, blood, discharge.

5. The Ayne Spatula is used to obtain cells from the squamccolumna junction of the cervical os. The end of the spatula is notated a full 360 degrees in the os.

6. Quickly spread the material on the clean, marked slide making the layer as thin as possible and then spray the slide, holding the can six inches from it.

CLASSIFICATION OF PANANICOLAOU SMEARS

CLASS:

1. Smear contains only normal cells or insufficient cells.
2. Smear contains cells having some atypical features, but none suggesting malignancy. Trichomonas may produce a Class 2.
3. Smear contains cells having abnormal features, suggestive of, but not definitive for malignant cells.
4. Smear contains malignant cells.
5. Smear contains malignant cells, more bizarre than Class 4.

CLASSIFICATION OF CANCER OF THE REPRODUCTIVE ORGANS

STAGE I. Non-invasive-Carcinoma in Situ-Epithelial lining involvement.

II. Carcinoma extending beyond the cervix to invade the vagina (except for the lower third) but not spreading to the pelvic wall.

III. Carcinoma extending to the pelvic wall, or the lower third of the vagina.

IV. Involvement of the bladder, rectum, and metastasis, possibly systemically.

BREAST EXAMINATION

A. Examiner _____

B. Patient's History:

Breast Changes: Size _____ Shape _____ Sensations _____

Pain _____ Abnormalities _____

C. Examination:

1. Position of patient: Supine _____ Erect _____

107

2. Time of examination: Premenstrual _____ Postmenstrual _____

3. Inspection:

(a) Breasts:

(1) Contour: Normal _____ Irregular _____

Pendulous _____ Flat _____

(2) Color: Normal _____ Red _____ Orange _____

3) [illegible]: Peel _____

(3) Size: Small _____ Average _____ Large _____

(4) Markings: Striae _____ Dimeling _____ Moles _____

Ulcerations _____ Dialated Veins _____

(b) Nipples and areolae:

1. Nipples: Erect _____ Flat _____ Inverted _____

Retracted _____

2. Appearance: Normal _____ Caked _____ Fissured _____

Inflammed _____

4. Palpation:

(a) Breasts:

(1) Support: Adequate _____ Inadequate _____

(2) Tension: Engorged _____ Taut _____ Soft _____

Edema _____

(3) Texture: Smooth _____ Granular _____ Nodular _____

If Nodular: Moveable _____ Fixed _____

Solid _____ Size _____

Location _____

(4) Touch: Temperature _____

(b) Nipples and Areolae:

Discharge: Lactating _____ Bleeding _____

Purulent _____

(c) Axillae, Supraclavicular, Mediastical:

(1) Nodules: Present _____ Absent _____

Moveable _____ Fixed _____

Location _____ Size _____

(2) Other: _____

(d) Breast Self Examination:

Taught _____ Return Demonstration _____

Practiced _____ Frequency _____

104

PRACTICAL

CUMULATIVE CLINICAL RECORD

IUD Witness (5 cases)	Date	Case	Instructor's Signature
Pelvic Examination (At least 5 before Inserting IUD)			
Insertion of I.U.D. At least 15.			
Physical Examination At least 5.			

Breast Examination at least 5	Date	Case	Instructor's Signature
Clients History taken at least 15			
Counselling for BCM at least 10			
Prescribing Hormonals at least 5			
Follow up Hormonals at least 5			

106

Prescribing Chemical and Mechanical Methods	Date	Case	Instructor's signature
Follow up IUD at least 10			
Removal of IUD (5)			
Demonstrate Diaphragm Fitting on Dummy at least 1			
Pap Smear(at least 2)			
Pregnancy test (2)			
Health talk (3)		CLINIC	
Case presentation (2)		TOPIC	
Field Trip (1)			

FAMILY PLANNING UNIT

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

COLLEGE OF MEDICINE

UNIVERSITY OF IBADAN

I.U.C.D. INSERTION AND EXAMINATION OF PATIENT ON OTHER CONTRACEPTIVE METHODS

DATE	NAME	EXTERNAL GENITALIA	VAGINA	FORNICES	CERVIX	UTERUS	ADNAL ADNEXE	TYPE OF IUCD/CONTRACEP-TIVE METHOD	COMMENT

FAMILY PLANNING TRAINING PROGRAMME

RECORD OF LECTURES

Date	Topic	Lecturer's signature

APPENDIX J

Materials Used

APPENDIX J

Materials Used

Basic Texts

Family Planning Methods and Practice: Africa
(distributed during previous training)

Curriculum developed by trainers during previous training

Reference

Hatcher et al
"Contraceptive Technology" 1984-85

Bogue, Donald J.
" Counselling Clients for Family Planning"
(pamphlet)

"American Journal of Nursing" Self-instruction Manuals
Patient Assessment:
Examination of the Female Pelvis
Parts I and II

Omni Educational Materials
Ortho Products, Somerville, NJ
Ginny Model
Lindi Model