



## Memorandum

Date January 6, 1982

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Christine Zahniser, M.P.H., Nurse Educator, FPED, CHPE

Subject Foreign Trip Report, (AID/RSSA): Bangkok, Thailand, September 21-26, 1981  
Training Course in Epidemiology, Problem Solving and Contraception Studies

To William H. Foege, M.D.  
Director, Centers for Disease Control  
Through: Horace G. Ogden  
Director, CHPE *[Signature]*

- I. SUMMARY
- II. DATES AND PLACES
- III. PURPOSE
- IV. CHIEF CONTACTS
- V. ACCOMPLISHMENTS
- VI. RECOMMENDATIONS

### I. SUMMARY

From September 21 through September 26, 1981 we conducted a course on problem solving and the use of epidemiologic methods in conducting contraceptive safety research studies in Bangkok, Thailand. Preparation and training for the course was a joint effort by CDC and the Population Council Southeast Asia Office. There were 12 course participants from 4 countries: 2 from Bangladesh, 3 from Thailand, 2 from Malaysia and 5 from Indonesia.

Two of the 3 objectives for the course were met by the time of completion of the course: 1) The course participants demonstrated an increased knowledge of epidemiologic principles by the end of the course and 2) Seven research proposals for contraceptive safety research studies were presented. The third objective of the course, the implementation of a single surveillance system in any participating country, remains to be observed at this date. It is proposed that similar training sessions be held 6 months, 12 months, and 18 months after the initial effort.

### II. DATES AND PLACES

Bangkok, Thailand - September 21-28, 1981.

### III. PURPOSE

To alleviate the paucity in Southeast Asia of personnel trained in the study of the safety of contraception, we were requested by the Ford Foundation, Population Council (Southeast Asia) and USAID to develop and implement a training course in the use of epidemiologic methods in contraceptive safety research (CSR). Our course objectives were:

- 1) to increase awareness of epidemiologic techniques,

- 2) to have at least one protocol for a CSR study developed by participants from each country by the end of the course, and
- 3) the implementation of at least one surveillance system by any one participating country, subsequent to the training course.

#### IV. CHIEF CONTACTS

##### Population Council

Dr. Jarrett Clinton, Senior Representative  
Dr. Andrew Fisher, Regional Advisor, Family Planning Research

##### World Health Organization

David Brandling-Bennett, M.D., D.T.P.H., Director Field Epidemiology Training Program

##### Family Health Division, Ministry of Public Health, Bangkok, Thailand

Tony Bennett, M.S., Visiting staff, Columbia University, Center for Population and Family Health.

##### Program for the Initiation and Adaptation of Contraceptive Technology (PIACT)

Dr. Atiqur Rahman Khan, M.B.B.S., Dr.PH, President  
Dr. Richard Mahoney, Senior representative for Southeast Asia

##### International Project of the Association for Voluntary Sterilization (IFAVS)

Stephen Smith, Director, Southeast Asia

##### Department of Obstetrics and Gynecology, Ramathibodi Hospital, Bangkok, Thailand

Dr. Kamheang Chaturachinda, Professor of Obstetrics and Gynecology

#### V. ACCOMPLISHMENTS

In July and August 1981 we drafted an outline of the proposed course and researched the literature for examples of CSR that had been conducted previously in the Southeast Asia region. We then developed a course manual outlining (1) the essential principles of epidemiologic investigation and (2) principles of objective setting and problem solving. Invitations for nomination of participants were sent by the Population Council, Southeast Asia to:

- 1) The Director General, National Institute of Population Research and Training, Dacca, Bangladesh

- 2) Dr. Sarnanto, National Family Planning coordinating Board, Jakarta, Indonesia
- 3) Dr. Prasert Suvannus, Director, Family Health Division, Ministry of Public Health, Bangkok, Thailand
- 4) Dr. Datin Nor Laily Aziz, Director General, National Family Planning Board, Kuala Lumpur, Malaysia

The selection criteria for these participants included:

- 1) ability to communicate in English, verbally and in writing;
- 2) holding a family planning program relevant position;
- 3) interest in conducting epidemiological research; and
- 4) having institutional support for implementing developed studies.

Preference was given to candidates with:

- 1) MPH degree,
- 2) Familiarity with basic statistics,
- 3) Demonstrated research experience.

From September 12 through September 20, 1981, we further developed our teaching materials in Bangkok, Thailand. This included the following:

- 1) reorganization of the agenda for the training course;
- 2) incorporation of input from representatives of the Population Council with extensive regional experience;
- 3) preparation of lecture materials;
- 4) development of audiovisual aids;
- 5) selection of appropriate epidemiologic studies to use as examples including:
  - a) studies from Southeast Asia,
  - b) studies from developed countries
  - c) hypothetical examples;
- 6) development of a pre-test and post-test examination;
- 7) development of a post-course evaluation instrument.

The course was conducted from Monday, September 21 through Saturday, September 26. We used a combination of didactic sessions and group participation sessions. The trainers included: Christine Zahniser, George Rubin, David Brandling-Bennett, and Andy Fisher. Dr. Atiqur Rahman Khan and Tony Bennett acted as resource personnel contributing to discussions with their knowledge of current research in the region.

A list of the names and affiliations of the course participants is attached in Appendix A. Resource personnel are listed in Appendix B. An outline of the course schedule is attached as Appendix C. The manual used in conjunction with the other course material is available on request.

We gave didactic sessions in the morning attempting to provide a simplified approach to epidemiologic methods stressing the important differences between descriptive and analytic studies. Participation on group projects was encouraged in the afternoons.

Course participants were bright, enthusiastic, and eager to participate in group discussions. All participants demonstrated understanding of elementary epidemiologic principles.

The pretest was administered on Day 1, prior to presentation of didactic material. Participant scores ranged from 71 percent to 90 percent. The mean score was 80 percent. The pretest is attached as Appendix D. The results indicated that we had underestimated the epidemiologic expertise of the participants.

At the end of the training course this same test was administered as a posttest. Scores ranged from 71 percent to 100 percent. The mean score was 90 percent.

During the course seven protocols were developed by the participants of the four countries represented. These include:

1) Bangladesh

- a) Surveillance of deaths due to sterilization procedures in Bangladesh
- b) The association of oral contraceptive use and thromboembolic phenomena

2) Thailand

- a) Surveillance of hospital induced abortion in Thailand
- b) A study of the association of hypertension and oral contraceptive use

3) Malaysia

- a) Surveillance of complications associated with use of intrauterine contraceptive devices among Malaysian women attending government family planning clinics

4) Indonesia

- a) Surveillance of complications occurring in new IUD users in Indonesia, 1982-1983.

- b) The use of copper T and Lippes Loop IUCDs in Denpasar General Hospital, Bali, 1982-1984.

The research proposals developed during the training course are attached as Appendix E.

We administered a course evaluation questionnaire at the end of the training course. Comments obtained included the following:

- (1) Did the course meet your expectations?

Yes - 86% (12)

No - 14% (2)

- (2) Was the course content realistic and practical, in terms of the work you do?

Yes - 79% (11)

No - 21% (3)

- (3) Were the handouts and other teaching aids helpful and adequate?

Yes - 79% (11)

No - 21% (3)

- (4) At any time did you feel that the course materials were confusing?

Yes - 15% (2)

No - 85% (11)

- (5) Did you get satisfactory chances to contribute your ideas?

Yes - 100% (14)

- (6) Did you get satisfactory answers to your questions?

Yes - 93% (13)

No - 7% (1)

Comments were also made regarding future courses. These include:

- 1) Extend course to two weeks.
- 2) Allow more time for the development of study proposals and class presentations.
- 3) Spend more time on discussion of proper selection of cases and controls for case control studies.
- 4) Decrease the didactic sessions on principles of epidemiology.
- 5) Send course materials to participants prior to workshop.
- 6) Include session on survey sampling methods.
- 7) Spend more time on data analysis.

A summary of all course evaluation comments can be found in Appendix F.

5

By October 20, 1981, inquiries had been made by the Family Health Division, Ministry of Health, Bangkok, Thailand to U.S. institutions regarding the possibility of raising funds for the surveillance of legal induced abortions performed in government hospitals in Thailand.

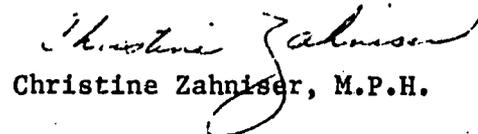
In conclusion, a successful training course in the use of epidemiologic methods in CSR was held in Bangkok, Thailand from September 21-26, 1981. Two of the three course objectives were met by the end of the course.

V. Recommendations

1. Encouragement to ministries of health and/or private institutions to carry out the proposed research projects, when deemed appropriate, should be given by the Population Council, Southeast Asia Office.
2. Progress of the implementation of research proposals in the respective countries should be monitored by the Population Council, Southeast Asia Office.
3. Technical assistance should be arranged for those research groups requiring it by the Population Council, Southeast Asia Office.
4. Consider lengthening the course to 2 weeks to increase time for group discussion and preparation of proposals.
5. Spend more course time on group participation in developing research protocols and less on didactic sessions.
6. Further develop example studies from the Southeast Asia Region.
7. Expand discussion of selection of cases and controls for case control studies.
8. Expand discussion on methods of data analysis.
9. The pre- and post-test instrument should be revised to better measure the level of more than elementary understanding of epidemiologic principles.
10. Send course materials to participants before the course to allow more specific preparation.
11. Prepare for the next course to be held in Bangkok in February 1982.



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Resource Personnel  
Contraceptive Epidemiology  
and  
Problem - Solving Workshop  
Bangkok, Thailand  
September 21-26, 1981

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Contraceptive Epidemiology  
and  
Problem Solving  
Workshop

Course Schedule

Sunday, September 20, 1981

Arrival in Bangkok - Impala Hotel

Monday, September 21, 1981

08:30 - 08:45	Departure from Impala Hotel to Asian Training Centre
09:00 - 12:00	Introduction Course Objectives Administrative Orientation Country presentations: Discussions of problems related to contraceptive safety (approximately 10 minutes per country) (Coffee break around 10:00) Country presentations (cont'd) Evaluation Questionnaire
12:00 - 01:00	Lunch
01:00 - 03:00	Principles of Epidemiology Introduction Definitions
03:00 - 03:15	Break
03:15 - 04:30	READ pp 1-6, 10-14 in Red manual Chapters 2 and 3 in Morton Do problems on pp 23, 29 (Morton)
04:30	Social Hour

Tuesday, September 22, 1981

08:30 - 10:00	Overview of Types of Epidemiologic Studies
10:00 - 10:15	Coffee break
10:15 - 11:30	Descriptive Studies
11:30 - 12:00	Comparison of Retrospective and Prospective Studies
12:00 - 01:00	Lunch
01:00 - 03:00	Problem Identification and Definition
03:00 - 03:15	Break
03:15 - 04:30	Objective Setting
04:30 - 05:00	Problem Solving

Homework

Read pp 64-77 Red manual  
Do problem p 83 (Red manual)

Wednesday, September 23, 1981

08:30 - 09:00	Review of Homework assignment
09:00 - 10:00	Surveillance
10:00 - 10:15	Coffee break
10:15 - 12:00	Analytic Epidemiology/Prospective Studies
12:00 - 01:00	Lunch
01:00 - 03:45	Group development of feasible Surveillance Study
03:45 - 05:00	Group presentation of projects

Homework

Read pp 27-33 Red manual  
Case-Control Examples

Thursday, September 24, 1981

08:30 - 12:00	Analytic Epidemiology: Retrospective Studies (Coffee break at 10:00)
12:00 - 01:00	Lunch
01:00 - 03:45	Group development of feasible Analytic Study
03:45 - 05:00	Group presentation of project
Evening	Dinner

Friday, September 25, 1981

08:30 - 11:00	Research Proposal Writing (Coffee break at 10:00)
11:00 - 12:00	Evaluation Questionnaire
12:00 - 01:00	Lunch
01:00 - 04:00	Group preparation of research proposal for potential implementation

Saturday, September 26, 1981

09:00 - 11:30	Group presentation of developed study proposals
11:30 - 12:00	Course Evaluation
12:00 - 01:00	Lunch

## EPIDEMIOLOGY WORKSHOP

## EVALUATION

Select the Single Best Answer

1. What is epidemiology ?

- (1) The study of epidemic outbreaks of infectious disease.
- (2) The study of health problems in groups of people.
- (3) The study of health problems in sick people.
- (4) The study of health problems in individual patients.

2. Analytic epidemiology differs from descriptive epidemiology because:

- (1) Analytic studies involve the use of computers in analyzing data.
- (2) Analytic studies have a comparison group which allows associations between cause and effect to be studied.
- (3) Analytic studies permit the evaluation of the effect of epidemiology.
- (4) Analytic studies permit the monitoring of disease in communities.

3. Calculate the fertility rate and the maternal mortality rate in the example below:

Province A had 300 births to women aged 15-44 years in 1980, and 3 of these women died during childbirth. There are 3,000 women in the province aged 15-44 years.

(a) The fertility rate (per 1,000 women 15-44 years) in Province A is:

- (1) 10
- (2) 100
- (3) 200
- (4) 300

(b) The maternal mortality rate (per 100 births) is:

- (1) 1
- (2) 5
- (3) 10
- (4) 15

(c) The maternal mortality rate per 100,000 births is:

- (1) 10
- (2) 100
- (3) 1,000
- (4) 10,000

4. What is a cohort ?

- (1) A group of people selected for a special purpose or study.
- (2) A diseased person having specific characteristics.
- (3) A form of epidemiologic analysis.
- (4) A nondiseased person.
- (5) A health program.

5. Descriptive epidemiologic studies should describe the occurrence of a health problem in terms of:

- (1) Person
- (2) Place
- (3) Person and Place
- (4) Place and Time
- (5) Person, Place and Time

6. Which of the following study designs are Descriptive and which are Analytic ?

(a) Retrospective (case-control) study.

- (1) Descriptive
- (2) Analytic
- (3) Unknown

(b) Surveillance

- (1) Descriptive
- (2) Analytic
- (3) Unknown

15

(c) Prospective (cohort) Study

- (1) Descriptive
- (2) Analytic
- (3) Unknown

7. Surveillance studies may:

- (1) Prove cause and effect relationships.
- (2) Generate hypotheses to be tested by analytic studies.
- (3) Provide estimates of relative risks.
- (4) Don't know

8. A study that moves from a risk factor (cause) to a health problem (effect) is a:

- (1) Prospective (cohort) Study
- (2) Retrospective (case-control) Study
- (3) Don't know

9. A study that moves from a health problem (effect) to a risk factor (cause) is a:

- (1) Prospective (cohort) Study
- (2) Retrospective (case-control) Study
- (3) Don't know

10. The relative risk of developing PID for women with an IUD compared to women without an IUD is 6. Another way of saying this is:

- (1) 6 women wearing IUDs developed PID
- (2) Women with an IUD have a 6 times greater risk of developing PID than women without an IUD.
- (3) Non IUD use is 6 times more likely to cause PID than IUD use.
- (4) IUD use is not associated with PID.

11. The incidence of PID in a group of women wearing an IUD for 1 year is 6 per 1,000. The incidence of PID in women using oral contraceptives for 1 year is 1 per 1,000. Compute the relative risk of PID for women using an IUD compared to women using oral contraceptives.
  - (1) 0.6
  - (2) 1
  - (3) 6
  - (4) 0.2
  
12. A prospective (cohort) study is done to examine the association between DMPA use and abnormal menstrual bleeding.
  - (a) The exposed group consists of:
    - (1) Women using DMPA
    - (2) Women with abnormal bleeding
    - (3) Either (1) or (2)
    - (4) Don't know
  
  - (b) The non-exposed group consists of:
    - (1) Women not using DMPA
    - (2) Women without abnormal bleeding
    - (3) Either (1) or (2)
    - (4) Don't know
  
13. If your "Cases" of a certain disease are persons diagnosed in the community (i.e., in the hospitals and in all other health facilities, including private physician's offices), What would be the best "Control" group?
  - (1) A sample of patients in the hospitals who do not have the disease being studied.
  - (2) A sample of the community population with a similar disease.
  - (3) A sample of the community population without the disease.
  - (4) A sample of persons without the disease in a nearby community.
  - (5) Don't know

14. In a retrospective (case-control) study, which of the following is LEAST likely to lead to "bias" ?
- (1) Cases are selected from hospital A and controls from hospital B.
  - (2) Exposure data are collected from cases by interview and from controls by medical record review.
  - (3) Cases and controls are selected from the same health facility.
15. Which statement below most clearly identifies a problem ?
- (1) Unmarried females aged 10-14 years should not become pregnant; however, last year 5 unmarried girls (aged 10-14 years) delivered babies at Hospital E.
  - (2) There were 10 ectopic pregnancies diagnosed in Hospital B last year.
  - (3) Two women have died following a sterilization.
16. Objectives help keep people focused on the desired achievement of a project. Which statement below most clearly identifies the intended outcome of a prenatal care program ?
- (1) By January 1982 at least 80 percent of pregnant women in the community will receive prenatal care during the first trimester of pregnancy.
  - (2) Pregnant women will receive prenatal care.
  - (3) Prenatal care improves neonatal outcome.
  - (4) Increased prenatal care will be delivered.
17. Identify a possible cause of the problems noted below.

Doctors do not always wear gloves when performing vasectomies, although they have had training in sterile technique.

The problem here is due to:

- (1) Lack of training
- (2) Lack of motivation
- (3) A factor beyond the control of the doctor (obstacle)

Please specify: \_\_\_\_\_

18

18. Although many governments are interested in issues of contraceptive safety, and money may be available from international agencies for funding research projects, contraceptive safety research is not done in many countries.

The problem here is due to:

- (1) Lack of training
- (2) Lack of motivation
- (3) Other

Please specify: \_\_\_\_\_

19. Have you ever designed a research proposal to study a contraceptive safety problem ?

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Sterilization Surveillance

## 1. Abstract:

**Title:** Surveillance of Deaths  
from sterilization in Bangladesh

**Objective:** To monitor the mortality risk of  
sterilization & identify the clinical and  
other causes.

**Sponsoring Agency:** Population Control and Family  
Planning Division

**Executing Agency:** Bangladesh Fertility Research Program/  
NIPORT

**Principal Investigator:** M. Akmal Husain

**Study Duration:** September, 1981 to June, 1985

**Study Area:** All 500 Sterilization Centres in Bangladesh

**Budget:**

## 2. Research Problem:

Sterilization is one of the most effective and accepted methods of fertility regulation in Bangladesh. This is the second most popular method, only surpassed by oral pills. Techniques for male and female sterilizations are quite standardized and there is a good number of

well-trained surgeons in the country, and yet, deaths from sterilization seem to have exceeded the expected or acceptable level since 1978. There have been 67 deaths from sterilization during the period from 1978 to September, 1981. An average of 20 deaths per 100,000 cases were reported till mid-1978. Although the incidence has dropped to 12 per 100,000 cases by September, 1981, the number still remains a matter of concern to program managers and policy planners. The clinical conditions, the program obstacles and the socio-economic status, the demographic characteristics of the cases are not clearly known.

Given standardized sterilization procedures as an effective and reasonably safe method of fertility regulation, incidence of deaths related to the procedures is in excess over the expected or acceptable level.

### 3. Research Objectives:

- (1) To set up a surveillance program on a continuing basis to identify cases of death from sterilization and characterize them for identification of clinical conditions, program obstacles, and socio-demographic variables related to those deaths.
- (2) To suggest specific control and preventive measures to improve the quality of sterilization services and reduce the number of deaths from sterilization to an acceptable level.

21

4. Importance of Proposed Research

Deaths from sterilization at the present rate are of serious concern to the program managers and policy planners because the number is quite high as compared to 4 per 100,000 cases in the USA. This has programatic implications both in terms of quality of sterilization services delivered and of acceptance of the method for fertility regulation. A surveillance on a continuing basis has therefore become imparative to indicate clinical, socio-economic and demographic characteristics of death cases in order to determine the long-term trends, geographical distributions, seasonal pattern with special reference to causal relationships, if any, of procedures, facilities and persons.

22

Project Proposals by

Dr. Chua Chee Ann  
Dr. Pritam Singh Gill

Research Proposal

I.U.C.D. surveillance among Malaysian women attending Government Family Planning Clinics in West Malaysia.

I. Abstract of proposal

In order to determine the effectiveness and safety of I.U.C.D.'s, the National Family Planning Board, Malaysia will conduct a prospective descriptive study among Malaysian married women of mixed ethnic groups, aged 15-45 years of unknown socio-economic status, for a period of 2 years, beginning from Jan. 1982 to Dec. 1983 attending Govt. Family Planning clinics. The purpose of this study is, because there is an increasing trend in the use of IUCD's in Malaysia (IUCD acceptors registered for 1967, 1975 and 1980 were 161, 888 and 2592 respectively), and very few studies have been done for the Malaysian women using IUCD's.

II. Statement of Research problem situation

I.U.C.D. acceptance has been on the increase in W. Malaysia since the Family Planning program was implemented in the country. New IUCD acceptors registered in years 1967, 1975 and 1980 were 161, 888 and 2592 respectively. However studies\* carried out are few and limited and IUCD safety and effectiveness, including unwanted pregnancies, expulsions and complications patterns need to be studied among Malaysian women.

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\* IUCD retention rates carried between CU7 and Lippes Loop at University Hospital, Kuala Lumpur showed higher retention rates in the latter.

### III. Statement of Research objectives

The I.U.C.D. safety and effectiveness including unwanted pregnancies, expulsions and complications study will be conducted at a National level by the National Family Planning Board, Malaysia.

The target population will be married Malaysian women of mixed ethnic groups and unknown socio-economic background aged 15-45 years accepting an I.U.C.D. as a method from Government Family Planning clinics. To get good representations of the urban and rural population, three regions, Penang (north), Ipoh (central) and Johore Bahru (south) have been selected.

The "cases" is estimated to be about 500 based on the annual I.U.C.D. acceptors. These women will be followed up for 1 year from the date of acceptance of IUCD.

### IV. Importance of Proposed Research

This research is important for assessing the morbidity risk in women using IUCD.

1. As IUCD has ideal characteristic of a single application for a long period, a simple supply system and relatively low cost, an ideal method for our Rural population, the study may have programme implications to its benefit, and the cost/benefit of the method may mean saving money for the country in Pill cost, condom, etc. in the long run.

2/1

This can be reflected by a simple example contraceptions for a women A for 2 years.

- i Condoms M\$ 1.20 for 3 average use 10/month  
2 years will cost \$24.00 (US\$10.50)
- ii Pills M\$ 3.00 per cycle x 24 months = \$72.00 (US\$31.30)
- iii I.U.C.D. Lippes Loop - \$5.00 - can be used for 5 years  
(US\$ 2.10)

2. Furthermore, our National Family Planning programme is oral pill orientated. (1967 = 95% on pill 1980 = 70% on pill)  
Resent research suggests that a woman should not continue with oral contraceptives after age 35 years due to health implications. If IUCD is established as safe and good alternative method for our Malaysian women, then this method can be offered to them without fear on the part of the women.

From the programme angle this would mean a major method switch over and its service delivery implications.

25

Prospective Analytical Study on the used  
of IUCD in Denpasar General  
Hospital, Bali (1982-1984)

I. Abstract

The study will be conducted by Department of Obstetric & Gynecology of Denpasar General Hospital, Bali in collaboration with the Indonesian National Family Planning Board.

Subject of the study will be 1000 IUCD new acceptors, women aged 15-45 years admitted the Denpasar General Hospital, Bali. These new acceptors will be allocated randomly into two groups, 500 using Lippes Loop and 500 using Copper-T, required in first four months (April 1982-July 1982). Follow-up examination will be carry out for two years. The practioner will not involve in the follow up exam (double blind).

The purpose of this study is to compare the failure rate and major complaint between the two types of IUCD.

II. Objective

In order to examine the difference on failure rate and major complaint between Lippes Loop and Copper T, the Denpasar General Hospital in collaboration will the Indonesian National Family Planning Coordinating Board will conduct a Prospective Analytical Study by prospectively following 1000 new IUCD acceptors consist of 500 Lippes Loop users and 500 Copper T users for 2 years period of time starting in April 1982.

### III. Justification

In July 1981 current users of IUCD in Indonesia are not less than 2.1 million. Indonesian National Family Planning Program provides mainly Lippes Loop IUCD, mean while there is a rising demand of using Copper T IUCD.

However we do not have sufficient information about failure rate and major complaints of those kinds of the IUCD among Indonesian users and we should.

Knowing such information the policy maker will be able to conduct a cost benefit analysis of this kind of IUCD. Thus the focus of IUCD services could be best on more scientific basis.

We expect that the finding of the study will support the Nationally Family Planning Program especially in the IUCD services.

Since Bali is the leading province in Indonesia in proportion of IUCD users (80%), with the new acceptors are not less than 300 per month, the study will be carry out in Bali.

The Study of Hypertension and Oral Contraceptive Use

Abstract

The Faculty of Public Health, Mahidol University will conduct a cross-sectional prospective study of women who are exposed and not exposed to oral contraceptive (OC) use in Rajvithee Hospital of the Ministry of Public Health (MOPH) during one year from January 1982. The purpose of study will be to estimate the risk of having hypertension among the two groups of exposed and non-exposed women.

Objective

In order to determine the risk of hypertension from oral contraceptive method, the department of Maternal and Child Health, Faculty of Public Health, Mahidol University will conduct an oral contraceptive safety study by cross-sectional prospective study in Rajvithee Hospital, MOPH of 1,000 oc users compared to 1000 IUD users over a one year period of time.

Justification

Many studies in developed countries have pointed to the association of oc use and hypertension. Because of the widespread and long-term use of oc's among Thai women it is important to know whether this association exists in the Thai population, because no study has been done before on this subject.

28

If it is found that oc use (by age, duration, brand) has a significantly higher risk of developing hypertension then the MOPH can issue recommendation to refer high risk groups to more appropriate methods or brands.

If these results are found these recommendations will improve the health status of possibly thousands of Thai women who are referred away from a health risk situation.

Assumption

In order to complete the study in the time and budget specified it necessary that the prevalence of hypertension in both groups is sufficient to allow us to determine a relative risk of  $\leq 0.5$  or  $\geq 1.5$  (if one exists) with a confidence interval of 95%.

29

Surveillance of Hospital Induced Abortion in Thailand

Abstract

The Ministry of Public Health (MOPH) will conduct a surveillance program to monitor the number and characteristics of cases of induced abortion throughout its' nationwide network of hospitals for a three-year period starting at the time of enactment of a new abortion law in late 1981. These data will help health planners, demographic analysts and policy planners in determining the impact of major population policy decisions.

Objective

In order to monitor the trends in induced abortion the MOPH will count the number and characteristics of all induced abortion clients appearing at all MOPH hospitals after the abortion law is liberalized at the end of 1981 for a three-year period.

Justification

Thailand has no system to record the number and characteristics of induced abortion cases and it needs to know this information for health planning demographic target setting and study the impact of policy. If induced abortion rises to unacceptable levels, then intensive family planning motivation and services outreach is needed to reduce this method of fertility control.

20

Surveillance on Contraceptive Safety of the  
new IUD users in Indonesia, 1982-1983

Abstract

The Indonesian National Family Planning Coordinating Board in collaboration with some Research Institutions will conduct a surveillance on contraceptive safety of the new IUD users in 30 F.P. Hospitals in Indonesia. It will be carried out during the period of the Government of Indonesian Fiscal Year 1982-1983.

The purpose of the surveillance is to know the distribution and the type or nature of the complaints among the IUD users.

Problem

The policy-makers should know the distribution and the type or nature of the complaints, however, they do not know.

Objective

In order to be informed on the distribution and type or nature of the complaints among the IUD users, the INFPCB will conduct a study by prospectively following for one year all new IUD acceptors in 30 out of 200 FP Hospitals who are admitted over a one year period of time.

Justification

Being well informed on the distribution and the type or nature of the complaints among the IUD users, INFPCB will be able to direct a program in such a way to strengthen the F.P. program achievement.

The investigator believes that the study findings will be a very useful in solving the population problem in Indonesia.

Study Methodology

1. Study population

All new IUD acceptors in 30 F.P. Hospitals during the GOI-FY of 1982 to 1983.

2. Setting or Area of Study

The 30 FP Hospitals distributed all over Indonesia (I.E. 10 in Java, 6 in Sumatera, 4 in Bali, 4 in Kalimantan, 5 in Sulawesi, Maluku and Irtan Jaya.

3. Study design - Type of study

Descriptively

4. Sampling procedure to be used

In choosing the hospitals it will be used simple random sampling method. The total new IUD acceptors will be taken for this study.

5. Data collection procedures

The data will be collected at admission and during the follow-up, then will be forwarded quarterly to the Central level.

6. Quality Control checks

Supervisions are carried out by the Central level personnel.

7. Data tabulation plans

The demographic data will be consolidated into frequency distribution tables.

Data in regard of major complaints will be tabulated in a live table.

8. Data analysis plans

The analysis plan will be carried out under the person-month basis.

9. Time schedule of study

Admission new IUD acceptors : April 1982 to March 1983

Follow-up study: April 1983 to March 1984

Data analysis: April-June 1984

Report/publication: July-August 1984

Preparation: January-March 1982.

### Assumptions of proposed research

The study will be adjusted depending upon the availability of the personnel, funding, etc.

### Resources required

- Personnel: 2 persons (1 for recording and 1 for reporting) in each F.P. Hospital

Supervisor: 1 person for 6 Hospitals

Principal investigator: 1 person

Co-investigator: 1 person

Secretariat: 1 person

Coders: 30 person-days

- Equipment
- Accommodation
- Computer processing of Data

### Reporting

Disseminated to INFPCB, implementing units, the 30 Hospitals.

15

LIFE TABLE:

For ABD Pain/Abnormal Bleeding/Exc. lemcorhea/Pregnancy/PID/Trans location/Perforation/  
Expulsion/Dyspareknia/Infection.

Each type of Practitioner

Month of Last Observation	W/O Complaint at Beginning of Month	Complaining during month	Lost to Foll.up	Last seen W/O Complaint during month	Effective & Exposed to Risk of Complaint	Of Those Well At Beginning of Month		Proportion W/O Complaint To end of Month
						Prop. Compl. during month	Prop. W/O Complaint during month	
0 - 1								
1 - 2								
2 - 3								
3 - 4								
4 - 5								
5 - 6								
6 - 7								
7 - 8								
8 - 9								
9 - 10								
10 - 11								
11 - 12								

Age Interval	Answer	Percentage
15 -		
20 -		
25 -		
30 -		
35 -		
40 - 45		

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Parity Interval	Answer	Percentage
0 - 2		
3 - 5		
6		

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Education Level	Answer	Percentage
illiterate		
up to El. School		
up to senior High Sch.		
Up to Post Grad.		

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Husb's Occupation	Answer	Percentage
Gov' Officer		
Farmer		
Labourer		
Merchant		
Unknown		

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Previous Method in Last 3 months	Answer	Percentage
None		
OC		
IUD		
Other		

Husband Complaint

Type of IUD		<u>Yes</u>	<u>No</u>
	Lippes Cu-T Other		

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### Surveillance of Hospital Induced Abortion in Thailand

- 1) The Thai MOPH has no system to record the number and characteristics of cases of induced abortion and, after abortion is legalized later this year, a system is needed to record the numbers and characteristics of women who receive induced abortion service throughout MOPH hospitals.
  - 2) The study population is all induced abortion clients, nationwide, from government hospitals (approximately 400) for three years starting from the date of enactment the new abortion law. Data will be requested monthly and tabulated quarterly.
  - 3) The Unit of observation will be all MOPH hospitals. Cases of induced abortion will be classified as to whether the abortion is regular induced, therapeutic or the treatment of an incomplete abortion done elsewhere. Additional characteristics of clients will include gestational age, parity, age of client, number of previous abortions, education, and reason for the abortion.
  - 4) The strategy of the surveillance is, by definition, passive.
  - 5) The instrument of data collection will be a specially designed patient record form.
  - 6) The data analysis will consist of frequency distributions for the abortion clients by the independent variables and a selection of cross-tabulations of the variables.
  - 7) The focus of the analysis will be to observe the trends over time of the number of clients of induced abortion and the change, if any, of the characteristics of women receiving abortion.
  - 8) (Not applicable at this stage.)
  - 9) Quarterly surveillance reports will be sent to all participating institutions, all Provincial Chief Medical Officers and to policy makers. The surveillance report will include a written summary of the highlights as well as relevant tables.
  - 10) Possible future investigation will depend on the study results. For example, an examination of the factors which contributed to unexpected patterns of cases of 1st and 2nd trimester abortion and/or factors related to cases reporting contraceptive use or method failure as a reason for the abortion, etc.
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## Study of Hypertension with oral contraceptive use (Thailand)

1. (Problem) There are no data in Thailand on the association of H.T. with OC use and duration of use.
2. (Study Pop, Place Time) Non-pregnant married women aged 15-49 who are family planning clients at a large hospital during 1982.
3. (Exposure) Current OC users who has used the pill for at least 1 month and have at least ~~1~~ child.  
(Non exposure) IUD users who did not have the history of refuse in OC because of H.T. and has not and OC or DMPA in <sup>the</sup> ~~this~~ past 12 months.
4. (Method of selection) FP clients will be assigned to exposed and non-exposed groups as they appear at the family planning clinic.
5. Non OC users might be consistantly older than OC users.  
(Need to control for age in analysis)
6. (Data) BP, Age, duration of pill use, pill brand, parity, cigarette smoking, SES, History of HT in family. (Definition of HT and the procedure of how to measure the blood pressure will be difined).
7. Do OC users have a higher risk of HT than Non-OC users and if so, is duration of OC use a factor?
8. (Study size) at least 1,000 women in each group.
9. (Collection) - Blood presure measure  
- ~~Special record form~~ ) on the cross-sectional basis

10. (Analysis) Analyze as a prospective study

$$\frac{\text{HToc}}{\text{Exposed}} : \frac{\text{HT non-oc}}{\text{Non-exposed}} = \text{Actual RR}$$

The study will only conclude that there is a significantly higher RR if HT with pill use if the RR is greater than 1.0. If RR = 1.0 cannot conclude equal risk. If  $RR < 1.0$  can make tentative conclusion that OC use may be protective for H.T.

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1 year IUCD Surveillance among Malaysian

Women attending Govt. F.P. Clinics

in West Malaysia

Introduction:

There has been an increasing trend in use of IUCD's in Malaysia as evidenced by the recent statistics published by the NFPB (when the programme started in 1967 there were 161 cases as compared to 1975= 888 cases and 2592 cases in 1980). However, few studies have been done for the Malaysian population as regards the effectiveness and safety of the IUCD's.

To obtain this information we intend to perform a descriptive study of the IUCD contraceptive outcome, including unwanted pregnancies, expulsions and complications occurring in women followed up to 1 year after acceptance of IUCD.

Objectives:

To perform a descriptive study of the IUCD contraceptive outcome, including unwanted pregnancies, expulsions & complications occurring in women followed up to 1 year after acceptance of IUCD.

Specific Objectives:

To study the safety and effectiveness of IUCD's among Malaysian married women of mixed ethnic groups aged 15-49 years from January 1982 to December 1983.

Methodology:

This will be a descriptive study and we intend to carry it out in Ipoh (central) Penang (North) and Johore Bahru (South) region along the

west coast of pennisular Malaysia. The study will be done from January 1982 to December 1983.

The target population will be married Malaysian women aged between 15-49 years attending Govt. F.P. clinics of mixed ethnic groups and unknown socio-economic background. These women will be followed up for 1 year from the date of acceptance of IUCD's. Based on previous acceptance trends in these 3 centres we hope to recruit at least 500 cases for the study.

Data collections:

The Demographic and contraceptive informations on all new F.P. acceptors after January 1982 will be actively collected and beside the basic information of client (name age, parity, income, years of education, duration of marrige, etc.) information will also be sought on what method they were prior to acceptance of IUCD, and reason of acceptant of IUCD. Clients participating in the study will be also subjected to full physical and pelvic examniation including a pap smear and its Hb% determination. Reasons for IUCD removal within 1 year will be noted.

Data analysis:

These women will be followed up after 3, 3, 6 and 1 year and a note of all complaints will be made at each <sup>5</sup>/<sub>2</sub>, <sup>12</sup>/<sub>12</sub>, <sup>12</sup>/<sub>12</sub> follow up along with Hb% estimation. Final data will be coded and the computer unit of \*NFPB at H.Q. will assist in processing and intpreting it.

Strategies: will be determined according to the findings of the study. Also further research may be necessary. This will only be khown at at the end of the study.

\* NFPB = National Family Planning Board, Malaysia

42

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Feed backs to all agencies interested in FP

- University Hospitals
- Medical

43

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## SURVEILLANCE DESIGN

### Introduction:

Sterilization is one of the most effective methods of fertility regulation in Bangladesh. Its acceptance rate is quite high. The recent CPS indicated that this is the second most popular method, only surpassed by oral pills. Techniques for both male and female sterilizations are quite standardized in Bangladesh and there is a good number of well-trained surgeons in the country. The procedures are performed at about 500 centres (District, Subdivisional, thana hospitals and clinics on all working days and at union mini-static centres once a week). However, deaths presumably from sterilizations seem to have exceeded the expected or acceptable level since 1978. There have been 67 deaths from sterilization during the period from 1978 to September, 1981. An average of 20 deaths per 100,000 cases were reported till mid-1978. Although the incidence has declined to 12 per 100,000 cases by September, 1981, the number still remains a matter of great concern to the programme managers and policy planners in the country. The number of sterilization deaths is of great concern because the fatality rate is quite high as compared to 4 per 100,000 cases in the USA and because such high incidence may adversely affect the acceptance rate. A surveillance on a continuing basis has therefore become imperative to indicate clinical, socio-economic and demographic characteristics of the death cases for appropriate control and preventive measures to be taken by programme managers and policy planners.

1. Problem Statement:

Given standardized sterilization procedures as an effective method for fertility regulation, deaths related to the procedures, 12 per 100,000 cases, in Bangladesh are in excess over the expected or acceptable level, 0-4 per 100,000 cases in the USA.

(\* Ref. )

2. Study Population:

Denominator: All males and females having accepted sterilization procedures from September, 1981, on a continuing basis at 500 centres all over Bangladesh.

3. Data to be collected:

Data related to sterilization deaths within 42 days of the procedures done -

- (a) clinical conditions such as autoclaving, anaesthetic dosage, surgical apparel etc, preoperative clinical tests, Follow-up visits by paramedics.
- (b) socio-economic conditions such as level of education, land-holding (as an indicator of income).
- (c) demographic characteristics such as age, sex, parity, previous contraceptive practice, say for last 3-6 months.

4. Study Strategy:

- Receive death reports from clinics  
(present system of financial compensation expected to ensure nearly complete reporting).
- Send medically competent member of the regional Surveillance Team for investigation into clinical conditions leading to death.
- Team member with help from local H&F.P. field workers (FWV/FPA/FWA) checks on validity and reliability of reported socio-demographic characteristics of the subjects through interview of community leaders, relatives of the deceased. Also checks on other sterilization-related deaths, if any.

45

## Retrospective Case-Control Study

on

### Association of use of OC and Thrombo-embolic Phenomenon

1. Research Question: Does OC use increase or decrease the risk of Thrombo-embolic phenomenon?
2. Study population: All women 55 years with TE phenomenon admitted in eight Medical College hospitals and institute of Cardio-vascular diseases (ICVD), from September 1981 to August 1982,
3. Cases: Women 55 years with Coronary thrombosis, Cerebral thrombosis, Deep Vein Thrombosis, and Pulmonary thrombosis, 200 such cases to be selected.
4. Control:
  - a) Women without Thrombo Embolic phenomenon admitted in 8 Medical College hospitals and ICVD (one for each case)
  - b) Women from neighbourhood (one/two for each case)
5. Matching: For -  
Age  $\pm$  years  
Parity  $\pm$  1  
Education  $\pm$  1 year

#### CONSIDERATION:

6. Arise from same population
7. Comparable
8. Exposure:
  - Whether used pills ever
  - How long used
  - When used last

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9. Methods of Data Collection: For hospital patients

- hospital records to be supplemented by field interview

For Neighbourhood Controls

- by interview

10. Information:

- Exposure
  - Ever used pills
  - How long used
  - When used last
- Medical
- Demographic
  - Income
  - Food habit
  - Smoking
  - Age
  - Parity
  - other relevant

11. Collection of Data (Methods of)

Comparable for Case/Control - Set questionnaire

- Pretest etc.

Recall information --bias

12. Study size:

- Cases - 200 (5%-OC)  
(20) RR-4

. Controls - 1 case - hospital control (Thrombo embolic phenomenon)

- ↓ - Neighbourhood - Control
- (2)

## Surveillance Design

### Problem:

In July 1981 there were 2.1 million IUD (current users) in Indonesia. The Government of Indonesia decided to encourage the use of IUD's for National Family Planning Programme Studies to date suggest frequent complaints among IUD users. However, we don't know the distribution and the type or nature of the complaints that we should know. To study these problems we propose to conduct a descriptive study of new IUD acceptors in 1982-1983.

### POPULATION, PLACE, TIME

All new IUD acceptors in 200 Family Planning Hospitals throughout Indonesia in government fiscal year 1982-1983:

Cut off date: 6 months after the last new acceptor has been inserted.

### DATA TO BE COLLECTED:

#### 1. AT ADMISSION:

- 1.1 Demographic characteristics: age, parity, education, husband's occupation; type of performer/practitioner
- 1.2 Types of IUD
- 1.3 History of past contraceptive use

#### 2. AT FOLLOW-UP: Should be done 2 weeks after insertion, 1.5 month, 3 months, every 6 months or whenever they have any complaints

Major Complaints: (Confirmed by medical personnel)

- 2.1 Abdominal pain/cramp
- 2.2 Abnormal bleeding } Menorrhagia
- 2.3 Excessive leucorhea } Metrorrhagia
- 2.4 P.I.D.

48

- 2.5 Translocation
- 2.6 Perforation
- 2.7 Expulsion
- 2.8 Dyspareunia
- 2.9 Infection due to insertion
- 2.10 Pregnancy
- 2.11 Husband's complaint

Criteria will be defined later on

#### STRATEGY

- \* Passive, supplemented by active supervision to each Family Planning Hospital intensively

#### DATA COLLECTION

- \* Develop standard form and distribute to the Family Planning Hospital
- \* Train the recording/reporting personnel
- \* Choose and train supervisors
- \* Receive and check the report quarterly
- \* For the lost to follow-up will be visited by Family Planning Field worker.

#### DATA ANALYSIS

- \* Prepare dummy tables, graphs and charts according to the data collected
- \* Consolidate the data into dummy tables
- \* Using person-month denominator (life table)

#### INTERPRETATION

- \* Will be held in the Central Office

**FEED BACK:**

**sent to**

1. 200 Family Planning Hospital
2. Health Department/NFPCB  
(central and provincial)

A COMPARATIVE  
STUDY ON CU-T & LIPPES IUD  
EXPERIENCE STUDY DESIGN

BACKGROUND

Up to now the Indonesian FP Programme provides mainly Lippes-loop for IUD acceptors. Meanwhile, there is a rising demand on the use of CU-T among ELCO's.

In response of this, the policy-maker does need accurate information on the safety of these IUDs in Indonesian Community.

QUESTION

Does CU-T acceptors tend to have lower risk of failure and complications than Lippes loop acceptors.

POPULATION

New IUD acceptors attending the Denpasar Central Hospital, starting April 1982. Post-partum acceptor will admitted 6 weeks after delivery.

SIZE

1,000 new acceptors will randomly assigned into 2 groups.

TIME

April'82 - July'82:

The recruitment of new acceptors

August'82 - July'83:

Continued Follow-up

CRITERIA OF INCLUSION

- Married women, aged 15-44 years
- Having at least a child
- Don't want to be pregnant in the 1st years
- Are suffered from contraindication for IUD insertion
- Agree to participate

CRITERIA OF EXCLUSION

- Spontaneous expulsion during the 1st 7-days
- Being pregnant in the 1st month of insertion

EXPOSED GROUP

New CU-T acceptors

NON-EXPOSED GROUP

New Lippes loop acceptors

METHOD OF ALLOCATION

- Using block randomization
- Double blind method
- Practitioner will not involve in the follow-up examination
- IUD's string will be made similarly in colour, package

OUT COME

- Pregnancy
- Abnormal bleeding } Menorrhagia  
                              } Metrorrhagia
- Lower abdominal pain
- Excessive fluor albus (discharge)
- Expulsion after 7 days

52

DATA TO BE COLLECTED

At admission

- demographic characteristic  
(l.e. age, parity, education etc)
- previous contraceptive use
- medical history
- physical exam

At follow-up

(2 weeks, 6 weeks, every 3 months or whenever they have any complaints-  
last to follow-up will be visited paramedics)

- complaints
- physical exam. in regard to the outcome

SOURCE OF INFORMATION

- Admission and follow-up record

DATA ANALYSIS

- Two by two tables


- Life table

Training Evaluation Form  
Bangkok, Thailand  
September 21-26, 1981  
Epidemiology and Contraceptive  
Safety Workshop  
SUMMARY OF EVALUATION RESPONSES

1) Did the course meet your expectations? If no, what was different than you expected?

Yes - 12      No - 2

- a. Expected sessions on statistics
- b. Expected more detailed discussions on individual project proposals with view to knowing whether it merited funding from WHO

2) Were the objectives clear to you from the beginning of the workshop?

Yes - 11      No - 3

- a. Expectations too high or too far from basic approaches on research methodology; we were too action oriented
- b. Expected more emphasis on clarifying the "safety issues in contraceptive research"

3) Will this workshop help you do better family planning epidemiologic research?

Yes - 15      No - 0

4) How was the course content realistic and practical, in terms of the work you do?

Yes - 11      No - 1

- a. More detail on discussion in realistic situations e.g. selection of study group, analysis of results
- b. Better communication between program and university personnel
- c. For future planning of research related to betterment of service (family planning service oriented programs need backup of research findings for planning and management)
- d. Some examples in the course aren't relevant to our country's problems
- e. Clear information on steps to be carried out for developing a study design on contraceptive safety research
- f. Useful methodology for defining prospective and retrospective studies

5) Were the handouts and other teaching aids helpful and adequate?

Yes - 11      No - 3

- a. Helpful but inadequate; each participant should have copy of each book provided by CDC
- b. Helpful, but need more
- c. Some trainers didn't make handouts and the time is too short to copy the materials

6) At any time did you feel that the course materials were confusing?

No - 11      Yes - 2

- a. Confusion clarified by other course participants
- b. Sometimes; but I asked questions to speakers and have had information clarified
- c. Use IBM large type for transparencies

7) Did you get satisfactory chances to contribute your ideas?

Yes - 14      No - 0      Fairly - 1

- a. I have some difficulty communicating my ideas due to language

8) Did you get satisfactory answers to your questions?

Yes - 13      No - 1

If no, what questions were left unanswered?

- a. Sometimes the correct methodological solution does not satisfy our need or priority
- b. Clarification in matching, selection of study group
- c. Financing; feasibility of project

9) Did you feel that the trainers respected your feelings and point of view?

Yes - 14      No - 0

- 16) How can future workshops of this kind be improved? In your opinion, what new material should be added?
- a. Sampling methods
  - b. Presentation of the studies (now being proposed) which are carried out, i.e. what are the obstacles in implementation, etc.
  - c. Statistical methods (sample size)
  - d. Statistics (for sample size and data analysis)
  - e. More examples from good studies actually done
  - f. Group presentation in defined time limit
  - g. Have follow-up seminar or meeting and send brochures related to this kind of workshop
  - h. Trainers should have had some experience with doing and work done in developing countries
  - i. Countries must be provided with guidelines to prepare the project before arrival
  - j. Selection of candidates-M.D. with DPH/MPH
  - k. Information on how to calculate sample size or if sample size is prescribed, what is regional prevalence to determine relative risk of certain levels at a given level of confidence

17) What content should be deleted?

- a. None - 7
- b. Principles of epidemiology--if background of participants is MPH
- c. Problem Statement and Objectives can be presented quicker by sending out materials beforehand to participants.
- d. Extend time rather than delete material

18) What content should be most emphasized?

- a. All
- b. How to choose cases and controls
- c. Discussion
- d. Prospective Studies
- e. Surveillance
- f. Potential biases from each study design
- g. Methods of data collection, analysis; relating objectives to actual research done
- h. Report writing
- i. Weaknesses or pitfalls in study design that would lead to useless or highly unreliable findings

TRAINERS' PRESENTATIONS:

- 10) What aspect of the presentations were particularly well done?
- a. Methodology
  - b. Teaching process- which may not necessarily be true in another group; trainers should study background of participants beforehand
  - c. All aspects excellent
  - d. Method of the study
  - e. Definition and examples shown in the projector with lecture on that
  - f. Overall epidemiology of evaluation of safety of contraceptive methods was unique
  - g. Retrospective and prospective studies
  - h. Epidemiological aspect
  - i. Every aspect; incorporate good examples from studies already done
  - j. Research proposal writing by Andy Fisher
  - k. Examples
- 11) What suggestions for improvement would you make?
- a. Course should be 2 weeks duration and let participants finish proposal for both surveillance or whatever, then presentation; this may reduce repetition of same problems
  - b. More realistic situation for the discussion in actual proposal study
  - c. Length of time for presenting and discussing each proposal should be 3 hours.
  - d. To look around certain family planning activities in Thailand
  - e. Give more examples of each study relevant to problems in each country
  - f. Smaller group with individual discussion. Preparation of basic epidemiology/stats before arrival
  - g. Focusing on what topic is not clearly understood by majority of participants
  - h. More tests of group understanding as you present
  - i. Cite more examples; tape record the whole exercise & send tapes to participants
  - j. Make more applicable to the real problems in our country or area
  - k. Trainers should recognize data system constraints of participating countries
- 12) Did you like the way the course was run?
- Yes - 9      Fair - 1
- a. Discussion should focus more on selecting best case or control, how to minimize bias and obtain best results
  - b. A little rushing

13) What aspects of the workshop were particularly well done?

- a. Create ideas about contraceptive safety programs
- b. All aspects well done
- c. Preparation of handouts, objectives & material
- d. Presentation of study design and discussion
- e. Deliberations and discussions
- f. All
- g. Logistics, luncheons, selection of resource personnel
- h. No time - not even a moment! - to go outside the classroom
- i. Critique of study design

14) What suggestions for improvement would you make?

- a. Send agenda ahead; extend course to 2 weeks; spend more time on choosing cases and controls; presentation after finish each proposal
- b. Too much time on principles of epidemiology for MPH participants
- c. Extend time to 2 weeks in order to broaden aspects discussed and to allow participants adequate time to design proposal
- d. To loosen the course sessions - allow time for sightseeing
- e. None
- f. Actively do follow-up and correspondence
- g. Participants should be updated on research methodology techniques on a refresher basis and/via mailing list
- h. Same group should be followed up individually and called for further training on evaluation and minor project technicalities. A short course for right participants in epidemiology at CDC

15) What type of follow-up would help you to implement the skills you have learned when you get home?

- a. Send contraceptive safety related research
- b. Visit of some trainer; regroup in some time
- c. Consultative correspondence; evaluation meeting after 6- 12 months
- d. Regular communication will help implementation of skills & knowledge
- e. Feedback & occasional supply of literature
- f. Pop Council needs to supervise whether the studies get implemented or not
- g. Contact institutions which can provide consultations and funds
- h. By being supported by government institutions of family planning
- i. Reassess implementation after 6 months
- j. Reassemble, periodic correspondence
- k. Implementing the material in the study
- l. Actually doing a project; consultant to look into various details in real situation
- m. Epidemiological problems relating to family planning
- n. Occasional consultatory-regional visits by CDC (if projects are implemented)

- 16) How can future workshops of this kind be improved? In your opinion, what new material should be added?
- a. Sampling methods
  - b. Presentation of the studies (now being proposed) which are carried out, i.e. what are the obstacles in implementation, etc.
  - c. Statistical methods (sample size)
  - d. Statistics (for sample size and data analysis)
  - e. More examples from good studies actually done
  - f. Group presentation in defined time limit
  - g. Have follow-up seminar or meeting and send brochures related to this kind of workshop
  - h. Trainers should have had some experience with doing and work done in developing countries
  - i. Countries must be provided with guidelines to prepare the project before arrival
  - j. Selection of candidates--M.D. with DPH/MPH
  - k. Information on how to calculate sample size or if sample size is prescribed, what is regional prevalence to determine relative risk of certain levels at a given level of confidence
- 17) What content should be deleted?
- a. None - 7
  - b. Principles of epidemiology--if background of participants is MPH
  - c. Problem Statement and Objectives can be presented quicker by sending out materials beforehand to participants.
  - d. Extend time rather than delete material
- 18) What content should be most emphasized?
- a. All
  - b. How to choose cases and controls
  - c. Discussion
  - d. Prospective Studies
  - e. Surveillance
  - f. Potential biases from each study design
  - g. Methods of data collection, analysis; relating objectives to actual research done
  - h. Report writing
  - i. Weaknesses or pitfalls in study design that would lead to useless or highly unreliable findings