



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service  
Centers for Disease Control

93, 2 0502  
Memorandum  
PO: AAP 179  
ISN =

Date February 3, 1983

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Subject Foreign Trip Report, (AID/RSSA): Bangkok, Thailand, October 5-20, 1982  
Training Course in the Epidemiologic Approach to Contraceptive Safety Studies

To William H. Foege, M.D.  
Director, Centers for Disease Control  
Through: Dennis D. Tolsma  
Acting Director, CHPE DDT

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I. SUMMARY

From October 11 through October 16, we conducted a workshop in Bangkok, Thailand on the Epidemiologic Approach to Contraceptive Safety Studies. Preparation and training for the workshop was a joint effort by CDC and the Population Council, Southeast Asia Office. There were 15 course participants from five countries: three from Bangladesh, three from Indonesia, four from the Philippines, two from Thailand, and three from Nepal. In addition, there were three observers from Chulalongkorn University, Bangkok, Thailand.

The following objectives were met by the completion of the course: (1) The participants demonstrated a measured increase in knowledge of epidemiologic principles by the end of the workshop; and (2) five research proposals for contraceptive safety research studies were presented. Our long-term objective of the workshop, the implementation of a research project in any participating country, has not yet been achieved. This is the third of four workshops planned for the Southeast Asia region. The last workshop has been planned for March 1983.

II. DATES AND PLACES

Bangkok, Thailand - October 5-20, 1982.

### III. PURPOSE

The development and implementation of training workshops in the Epidemiologic Approach to Contraceptive Safety Studies has been a collaborative effort by CDC, the Population Council, and the Ford Foundation. The purpose of these workshops is to improve the knowledge of health professionals in the areas of epidemiology and contraceptive safety research, as well as to provide skills which they can use in designing and implementing contraceptive safety studies. This workshop was the third of four which are planned to be held in Southeast Asia. (See trip reports of January 6, 1981, and April 19, 1982, by Rubin and Zahniser.)

### IV. CHIEF CONTACTS

#### Population Council

Barnett Baron, Ph.D., Senior Representative, South and East Asia  
Andrew Fisher, Ph.D., Regional Advisor, Family Planning Research  
Jean Baker, M.P.H., Research Assistant  
John Stoeckel, Ph.D., Demographer

#### World Health Organization

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

#### United States Agency for International Development (USAID)

David Oot, M.P.H., Population Officer

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

Tony Bennett, M.S., Visiting Staff, Columbia University, Center for  
Population and Family Health  
Suthon Panyadilok, Director of Research and Evaluation Unit

#### Thailand Fertility Research Association

Mrs. Mukda Bennett

#### Chulalongkorn University Medical School

Dr. Monthira Tankeyoon, Department of Pharmacology, Institute of Health  
Research  
Dr. Thassanee Nuchprayoon, Department of Preventive and Social Medicine,  
Faculty of Medicine  
Chitlada Vittayaboon, Department of Preventive and Social Medicine,  
Faculty of Medicine

Sumana Chompootawee, M.D., M.P.H., Clinical Researcher, Institute of Health Research

Dr. Pramuan Virutamasen, Director, Human Reproduction Unit, Department of Obstetrics and Gynecology, Faculty of Medicine

Western Consortium for the Health Professions, Inc.

Robert A. Miller, Dr.P.H., Director of International Programs

Rutgers Medical School

Nicholas Wright, M.D., Department of Environmental and Community Medicine

Mahidol University

Dr. Anongnat Leimsombat, Faculty of Public Health

Maternal and Child Health Centre, Chiang Mai

Dr. Suwath Singhakovin

United Nations Fund for Population Activities

Jay Parsons, Ph.D

Malaria Control Program, Malaysia

McWilson Warren, Dr.P.H., Director of Secretariat

V. ACCOMPLISHMENTS

We revised the course manual used in the February 1982 Bangkok Contraceptive Safety Workshop. Based on the comments obtained from the course evaluation, as well as our personal experience following use of the manual, we made the following changes:

- (1) Explicitly stated the workshop objectives in the manual.
- (2) Developed new examples and revised previous examples for the following sections:

Problem Statement

Problem Definition

Objectives

Descriptive Epidemiology

Analytic Epidemiology

- (3) Included two new sections: "Outline of a Research Proposal" and "Writing Research Reports."
- (4) Included a selection of contraceptive safety study abstracts compiled by the Population Council.

Invitations for nomination of participants were sent by the Population Council, Southeast Asia, to Ministries of Health. The selection criteria for the participants was the same as specified for the previous workshops (see trip report, January 6, 1982). In all cases, persons nominated by their government were accepted.

From October 7-10, 1982, we further developed the training materials in Bangkok, Thailand, and made logistical arrangements. Included were:

- (1) Revision of the agenda for the workshop;
- (2) Setting up the course facility;
- (3) Discussion of the status of research proposals developed in the previous workshops;
- (4) Discussion of our present mechanism for followup of course participants.

The workshop was conducted from Monday, October 11, through Saturday, October 16. A combination of didactic and small group participatory sessions were used for teaching purposes. The resource personnel included: George Rubin, Christine Zahniser, Carlos Huevo, and Andy Fisher.

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

Participants from each country worked together to develop a group research proposal for a contraceptive safety project that would be appropriate to study in their country. Five research proposals were developed and are available on request. These included:

- (1) Bangladesh

A cohort study to compare complications associated with the Copper-T IUD inserted by trained paramedics versus physicians in urban clinics in Dacca.

- (2) Philippines

A case control study of the association of pelvic inflammatory disease, contraceptive methods, and nonuse of contraception.

(3) Thailand

A cohort study comparing the effectiveness and morbidity risk of the Multiload 250 IUD and Lippes Loop IUD.

(4) Indonesia

A cohort study of the association of abnormal liver function tests and oral contraceptive use.

(5) Nepal.

A descriptive study of IUD users in the country, identifying characteristics of the acceptors, types of complications, and reasons for discontinuation.

Participants presented their proposals to a panel on Saturday morning, October 16, 1982. This provided an opportunity to receive comments on the relevance of the proposed study, the feasibility of conducting the research, and the research methodology.

Course participants were eager to learn of epidemiologic methods, and group discussions flowed well. Most of the participants were able to communicate well in English. Only three persons at this workshop (20 percent) had an M.P.H.; this is fewer than was found in either of the two previous workshops. Thus, again we were faced with course participants having marked differences in their understanding of basic epidemiologic principles.

The pretest was administered on day 1, prior to presentation of didactic material. Participants' scores ranged from 10 percent to 97 percent. The mean score was 46 percent (median 50 percent). At the end of the workshop, the same test was administered as a post test. Scores ranged from 13 percent to 100 percent. The mean score was 70 percent (median 83 percent). The three observers were also asked to complete the pretest and post test. The mean pretest score was 58 percent (range from 30 percent to 87 percent); the mean post test score was 93 percent (range 90-97 percent). The distribution of scores is attached as Appendix C. The pretest/post test is available on request.

We administered a course evaluation questionnaire at the end of the workshop. A summary of all course evaluation comments are included in Appendix D.

On October 14, 1982, Dr. Rubin met with Dr. Barnett Baron to discuss past, present, and future status of the contraception safety workshops. Recommendations emanating from the meeting are noted in Section VII.

VI. FOLLOWUP VISITS OF PREVIOUS COURSE PARTICIPANTS

A. Chiang Mai, Thailand, October 18, 1982

Dr. Suwath Singakovin attended the Epidemiology Workshop in February 1982 and is working as a clinician at the Maternal and Child Health Centre in Chiang Mai. He stated that research is a personal interest of his, although he has never conducted any studies in the past. Presently Dr. Suwath is involved in an IUD study developed and funded by the International Fertility Research Program (IFRP). Dr. Suwath has been selected as the clinician to insert the 220 study IUD's (Multiload 250 and Copper T 380), and is responsible for obtaining the followup information on complications, acceptability and continuation rates. This study is similar to the one proposed by Dr. Suwath's group in February--they had wanted to compare Multiload 250 with Lippes Loop IUD's.

In response to a number of questions about the training course, Dr. Suwath felt it was extremely useful and informative, especially the experience of developing a proposal, and reported it has helped him to review literature more effectively. As a recommendation, he felt that the course should be lengthened.

In summary, although the specific project that Dr. Suwath developed in the course has not been implemented, he is working on a research project as a field investigator/data collector.

B. Ministry of Health, Thailand, October 19, 1982

Mr. Suthon Panyadilok attended the workshop in September 1981. He is Director of the Research and Evaluation Unit, Family Health Division and is involved in a number of research activities, as well as responsible for the compilation and reporting of service statistics for the family planning program. His projects are mostly Operations Research (OR) oriented, rather than having a focus on contraceptive safety, and include the following: (1) continuation rates of OC users, (2) an Information, Education, Communication (IEC) project looking at the acceptability of vasectomy, and (3) a national survey of availability and accessibility of family health services. In addition to these projects, he has recently been designated as the person responsible for the MOH logistics program. Mr. Suthon felt that the course was useful, but more appropriate for persons involved in contraceptive safety areas of research. When discussing the possibility of a national workshop, he felt we would have a significant language problem unless it was taught in Thai.

In summary, Mr. Suthon is not involved in the implementation of the contraceptive safety projects, except for the IFRP IUD Study. He is, however, responsible for a number of OR projects. In addition, he is involved in the development of study proposals, and works closely with Tony Bennett (assigned to MOH from Columbia University) on these projects. Although the project that was developed during his workshop has not been implemented--A Surveillance of Legal Induced Abortion in Thailand--it has been approved for funding by the Population Crisis Committee pending legalization of abortion by the Thai legislature.

C. Mahidol University, October 20, 1982

Dr. Anongnat Leimsombat (September 1981 Epidemiology Workshop), Assistant Professor of Maternal and Child Health, is presently conducting a study of community health services and practices of children and pregnant women in an urban slum area of Bangkok. Dr. Anongnat is responsible for the maternal section of this project, which has been undertaken by the MCH Department.

Although the proposal for this project was developed by the chairman of the MCH Department, Dr. Anongnat has developed the data collection instruments, helped to select the survey area, and is supervising the implementation of this project. She will also be involved in the analysis and report-writing phases. Dr. Anongnat has also worked on a Study of Adolescent Fertility to obtain information on adolescents, knowledge, attitudes, and practices of adolescents in the area of family planning and reproductive health.

The recommendations and evaluation of the Epidemiology Workshop include:

1. It was good as a refresher course (Dr. Anongnat has an M.P.H. from University of North Carolina).
2. The supervised practice exercises were especially useful.
3. We should distribute additional handouts, such as a copy of Contraceptive Technology to each participant.
4. We should lengthen the workshop.

In summary, although neither proposal developed by the Thai group was implemented (Abortion Study and Study of Hypertension and OCS), Dr. Anongnat is participating in research activities developed by the School of Public Health. In addition, since completing the workshop she has been given a responsible role in the development and implementation of the MCH study of community health services and practices.

D. Update on Other Thai Workshop Participants

Ms. Yupa Thararoop, Research and Evaluation Unit, Family Health Division, Ministry of Health.

--presently on career development, attending a 7-month program at Exeter, England.

Dr. Mongkol Na Songkhla, Provincial Health Officer, Chiang Mai.

--presently on career development, working on an M.P.H. in Holland.

Dr. Wanida Sinchai, Maternal and Child Health Centre, Khon Kaen continues to work as a clinician in the Khon Kaen MCH Centre; she is a data collector in the IFRP Multiload-Copper T IUD study.

E. Chulalongkorn University, October 19, 1982

Among our arrival in Bangkok, Dr. Barnett Baron, Population Council, suggested that we meet with Dr. Nikorn Dusitin at Chulalongkorn University to follow up a suggestion that CDC and Chulalongkorn collaborate on the teaching of reproductive epidemiology workshops. Dr. Nikorn was out of the country during our stay in Thailand. Therefore, Ms Zahniser met with his colleague, Dr. Pramuan Virutamasen, Director of the Human Reproduction Unit. Chula University has been conducting a 10-day epidemiology course including research theory, use of the scientific process in conducting research, and development of a research protocol, for the past 6 years. Course participants are from a variety of disciplines, including pharmacology, dentistry, medicine, obstetrics and gynecology, etc. Recently a similar course was conducted by the University for MOH/family planning personnel in Bangkok. This course was funded by the Thai Fertility Research Association and focused on reproductive health epidemiology and the development of a research proposal for reproductive health/contraceptive safety issues.

As a long-term goal for these courses, Dr. Pramuan would like to see implementation (in rural health centers) of studies developed, and have the university provide technical consultation. Ideally, MOH and University personnel would work together on the development and implementation of the project, as well as the analysis of data and the report writing.

When discussing the ways in which we can collaborate in epidemiology training in Thailand, it appeared that Chula University is interested in obtaining relevant training materials. Lectures are conducted in Thai; however, written materials are frequently in English.

We have had four observers at our workshops (February and October 1982) from Chula University; three of them are intimately involved with the teaching of this epidemiology course. Thus, we feel that we have shared our current materials with extremely appropriate individuals. In the future, this may be an excellent institution to review and pilot test our revised Reproductive Health Epidemiology Manual.

Lastly, Dr. Pramuan stated that he is interested in conducting a workshop for "advanced" epidemiology students. The objective of this workshop would be to stimulate participants to conduct better epidemiological research. The content of such a workshop would include an in-depth discussion of various types of study designs, determination of sample size, a consideration of bias, etc. Outside funding would be required to conduct this workshop.

We believe that this would be an excellent opportunity for CDC to cooperate with Chula University. It might also be an opportunity to bring back the exceptional students from previous workshops to participate in a higher level epidemiology workshop. The Population Council has stated that the funding of this type of workshop would not be a priority for them. WHO, IFRP, or USAID might fund this endeavor.

#### VII. RECOMMENDATIONS

- 1) DRH/CDC should assist the development of epidemiologic expertise in the South and East Asia region by participating in future workshops on the use of epidemiologic methods in contraceptive safety research.
- 2) DRH/CDC should offer technical assistance to those countries in the South and East Asia region that request such assistance in carrying out contraceptive safety research.
- 3) All previous workshop participants should be followed up to determine their current activities and constraints which may be preventing these investigators from being involved in contraceptive safety research.
- 4) The current status of research proposals developed during the first three workshops should be established.
- 5) The countries of all previous workshop participants should be visited to determine additional research needs and interests, training required, appropriate personnel, funding requirements, and institutional support available for future contraceptive safety studies in the specific countries.

- 6) A report should be prepared containing two major components:
  - a. Retrospective: an evaluation of the workshops held to date.
  - b. Prospective: a statement of the research needs and interest, training required, funding required, and institutional support available to further increase the number of contraception safety studies performed in South and East Asian countries.
- 7) We should consider scheduling future workshops of this type for 10 days rather than for 5-1/2 days.

*Christine Zahniser*

Christine Zahniser, M.P.H.

*George L. Rubin*

George L. Rubin, M.B., F.R.A.C.P.

*Carlos Huevo*

Carlos Huevo, M.D.

APPENDIX A

Contraceptive Safety Workshop

October 11-16, 1982

Participants and Resource Personnel

Participants

Bangladesh

Dr. Mrs. Sabera Rahman  
Director Mohammadpur Fertility Research &  
Training Center  
Mohammadpur  
Bangladesh

Dr. Mrs. Mina Choudhury  
Director, Dacca Metropolitan Family  
Planning Satellite Clinic  
Dacca, Bangladesh

Dr. Mrs. Fedousi Begum  
Deputy Director  
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Dacca 7, Bangladesh

Indonesia

Dr. Widayat Sastrowardoyo  
Faculty of Medicine  
Airlangga University  
Department of Pharmacology  
47 Dharmahusada  
Surabaya, Indonesia

Mr. Oentoeng Soeradi  
Medical Faculty  
University of Indonesia  
Department of Biological Sciences  
Salemba 6, Jakarta  
Indonesia

Dr. Bimo  
Yayasan Indonesia Sejahtera  
Jalan Kramat VI  
No. 11 Jakarta Pusat  
Jakarta, Indonesia

Dr. Achmad Hidayat  
Brawijaya University  
Faculty of Medicine  
Jalan M.T. Haryono - No. 171  
Malang, Indonesia

Nepal

Dr. Kalyan Raj Pande  
Deputy Project Chief  
Nepal FP/MCH Project  
Ministry of Health  
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Kathmandu, Nepal

Mr. Tek Bahadur Dangi  
Family Planning Officer  
Research and Evaluation Division  
Ministry of Health  
P.O. Box 820  
Kathmandu, Nepal

Mr. Tara Nath Phulara  
Family Planning Officer  
Service Division  
Ministry of Health  
P.O. Box 820  
Kathmandu, Nepal

Philippines

Dr. Emily J. Bernardo  
Senior Physician  
Comprehensive Family Planning Center  
Jose Fabella Memorial Hospital  
Lope de Vega St., Sta Cruz  
Manila, Philippines

Ms. Ofelia D. Pardo  
Instructor  
Institute of Public Health  
University of the Philippines  
625 Pedro Gil, Ermita  
Manila, Philippines

Dr. Jovencia B. Dumindin  
Medical Specialist I  
National Family Planning Office  
Ministry of Health  
San Lazaro Compound  
Rizal Avenue, Sta. Cruz  
Manila, Philippines

Dr. Julieta de la Cruz  
Coordinator for Clinic Services  
Population and Family Planning Center  
U.P. - PGH, Taft Avenue  
Metromanila, Philippines

Thailand

Mrs. Pannee Waramitra  
Ministry of Public Health  
Family Health Division  
Devaveş Palace  
Bangkok 2, Thailand

Dr. Gunchit Kunawut  
Rural Health Division  
Lahansai District Hospital  
Lahansai, Buriram  
Thailand

Dr. Pipat Lawangkura  
Rajvithi Hospital  
Obstetrics and Gynecology  
2 Rajvithi Road  
Bangkok, Thailand

Resource Personnel

1. Dr. George Rubin  
Medical Epidemiologist  
Epidemiologic Studies Branch  
Family Planning Evaluation Division  
Centers for Disease Control  
Atlanta, GA 30333  
U.S.A.
2. Ms. Christine Zahniser  
Training Coordinator  
Family Planning Evaluation Division  
Centers for Disease Control  
Atlanta, GA 30333  
U.S.A.
3. Dr. David Brandling-Bennett  
Field Epidemiology Training Programme  
World Health Organization  
Ministry of Public Health  
Bangkok, Thailand

4. Dr. Andrew Fisher  
Regional Advisor  
Family Planning Research  
The Population Council  
P.O. Box 11-1213  
Bangkok 11, Thailand

APPENDIX B

Workshop Schedule

The Epidemiologic Approach to Contraceptive Safety Studies

October 11-16, 1982

Monday, October 11

Morning Session 8:15 AM

- Introductions
- Workshop objectives
- Overview of contraceptive safety
- Discussion
- Pretest

LUNCH 12 - 1

Afternoon Session 1 PM

- Problem statement, description
- Research justification
- Writing objectives
- Practice exercises - small groups
- Overview of epidemiology
- Definitions

SOCIAL HOUR 5 PM

Tuesday, October 12

Morning Session 8:15 AM

- Descriptive studies
- Practice exercises - small groups
- Cohort studies

LUNCH 12 - 1

Afternoon Session 1 PM

- Practice exercises - small groups
- Case - control studies

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Wednesday, October 13

Morning Session 8:15 AM

- Practice exercises - small groups
- Case - control vs Cohort studies
- Further issues in analytic epidemiology: causality; bias

LUNCH 12 - 1

Afternoon Session 1 PM

- Commence preparation of study proposals - small groups
- Reading assignment - cohort study

DINNER 7 PM

Thursday, October 14

Morning Session 8:15 AM

- Discussion of reading assignment
- Writing research proposals
- Continue preparation of study proposals - small groups

LUNCH 12 - 1

Afternoon Session 1 PM

- Further issues in analytic epidemiology: cohort studies
- Continue preparation of study proposals - small groups
- Discussion of group progress on proposals
- Reading assignment - case - control studies

Friday, October 15

Morning Session 8:15 AM

- Discussion of reading assignment
- Continue preparation of study proposals - small groups

LUNCH 12 - 1

Afternoon Session 1 PM

- Further issues in analytic epidemiology: case - control studies
- Continue preparation of study proposals - small groups
- Discussion of group progress on proposals

Saturday, October 16

Morning Session 8:15 AM

- Post-test
- Course evaluation
- Final revision of study proposals
- Presentation of final proposals to panel
- Presentation of course certificates

LUNCH

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APPENDIX C

Pretest Scores for Workshop Participants  
October 11-16, 1982

<u>Number of Incorrent Answers</u>	<u>Number of Persons</u>	<u>Score</u>
1	1	97%
8	1	73%
10	1	67%
11	1	63%
12	1	60%
13	1	57%
14	1	53%
15	1	50%
18	1	40%
21	1	30%
22	1	27%
23	1	23%
24	2	20%
27	<u>1</u>	<u>10%</u>
	15	Mean Score = 46% (Median = 50%)

Observer Pretest Scores

4	1	88%
13	1	57%
21	<u>1</u>	<u>30%</u>
	3	Mean Score = 58%

Post-Test Scores for Workshop Participants

0	1	100%
2	2	93%
3	1	90%
4	3	87%
5	1	83%
9	1	70%
12	2	60%
15	1	50%
17	1	43%
19	1	37%
26	<u>1</u>	<u>13%</u>
	15	Mean Score = 70%
		(Median = 83%)

Observer Post-Test Scores

1	1	97%
2	1	93%
3	<u>1</u>	<u>90%</u>
	3	Mean Score = 93%

APPENDIX D

SUMMARY

Course Evaluation Comments

October 11-16, 1982

Epidemiology and Contraceptive Safety Workshop

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

Yes - 16

- a. Yes, in terms of the knowledge and practice I wanted to get and No in terms of the topic of the study that I wanted to be developed, because we had to meet the country team's objective.
- b. It met my expectations to study basic epidemiology.
- c. A little did not meet my expectations because I wish I could study about sample size.

- 2) Were the objectives clear to you from the beginning of the workshop? If not, please make suggestions for improvements.

Yes - 15

- a. It was not clear because it is the first time I attended the workshop.
- b. No, because there was not enough explanation before the workshop; through the workshop it all became clear to me.

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

Yes - 16

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

- a. Both in terms of my teaching and research activities.
- b. It practically covers every aspect of my work.
- c. I have not much experience with clinical studies, more on field trials, public health aspects; this workshop has improved much on my knowledge of contraceptive safety through epidemiologic strategies.
- d. Being involved in research and evaluation of family planning programs, this course gave me some practical inputs, but the subject of epidemiology was quite new for me.
- e. Exercise problems - very satisfactory.
- f. This course is very practical because I am involved in the community-based contraceptive delivery system of Nepal.
- g. My present work is with the fertility research program, so it was a very informative and constructive one for me.
- h. In writing a study proposal on contraceptive safety, as I am directly involved in the family planning program.

- i. We are in the process of planning to give training courses on research on contraception and expand research and evaluative components of our program.
- j. In terms of new participants, it should have some more didactic sessions.
- k. The course gives me all practical outlines in writing protocol in order to get funds from the funding agencies and plan the research project, including data analysis and interpretation.
- l. My work is about epidemiologic research so it covers the process to do the research.

5) Were the handouts and other teaching aids helpful and adequate? If not, please make suggestions for improving the handouts and other teaching aids:

Yes - 14

- a. Very helpful and adequate.
- b. Handouts on research cases of contraceptive safety--the presence of some medical conditions, i.e., anemia, tuberculosis, sexually transmitted diseases, etc.
- c. Handouts were helpful but too many to go through in the limited time; other aids, particularly books and booklets are of great help.
- d. Handouts and other teaching aids were very helpful and adequate.

6) For which subjects (if any) did you feel that the course materials were confusing?

None - 9

- a. Bias - 3
- b. Calculations
- c. Statistics section - 2
- d. The way confidence interval was presented may not have been very clear.

7) Did you get satisfactory chances to contribute your ideas? If not, please make suggestions for improvements:

Yes - 15      No - 1

- a. In some ways--public health aspect.
- b. No, but it was due to speaking of my ideas.

8) Did you get satisfactory answers to your questions?

Yes - 16

- a. Most of the time.

9) Did you feel that the trainers respected your feelings and point of view?  
If not, please make suggestions for improvements:

Yes - 16

- a. Trainers are all accommodating and we were all free without restraint to voice out our feelings and queries, points of view, etc.; no tense atmosphere with any trainers--excellent atmosphere!
- b. It would be better if the trainers could give more attention to the level of understanding of each idea for every participant.

10) What aspect of the trainers' presentations were particularly well done?

- a. The formulation of problem statement, objectives and the description/difference between the types of analytical studies.
- b. All aspects - 5
- c. Trainers are knowledgeable in their field of expertise although at times they openly show some opinion deviations which are very helpful to us--it shows there are still lots of things to learn and be clarified.
- d. The subject matter was well explained with illustrations and they tried to make clear the topic to most of the participants as much as possible.
- e. To give a very clear understanding of the subjects discussed.
- f. Especially the basic concepts.
- g. Description of the types of studies.

11) What suggestions for improvement in the presentations would you make?

- a. Because of the language barriers, trainers should talk more slowly and concisely.
- b. I hope I can use same strategy back home.
- c. Presentation of subject matter was excellent; would be better to make the presentation more illustrative.
- d. To pay more attention to the learning process.

12) Did you like the way the course was run?

Yes - 13

- a. Excellent
- b. It was excellent, but time was very short to grasp all things discussed in the workshop.
- c. The program is very short in relation to the material of the course.
- d. I would like more lectures.

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

- a. The way the didactic sessions are supplemented by exercises and practice applications.
- b. Didactic phase
- c. Every aspect - 6
- d. Personal care to everybody
- e. Exercises
- f. Writing of a study proposal
- g. Description and differentiation of the different analytic studies and computation of risks.
- h. Exercises and examples

14) What suggestions for improvement would you make?

None - 10

- a. One week is too short; a little longer would have been more suitable for me.
- b. Give more time for more exercise, e.g., more time for reading assignments; give more time for discussion of bias correction, analysis of data, etc.
- c. Some study examples on contraceptive safety in the presence of some medical conditions (not a contraindication to use of contraception) be included.
- d. Since participants will be from various educational and work backgrounds, it would be better not to put in so many things in such a limited time; it would be better if the duration of the workshop was about 2 weeks.
- e. Extend the duration of the program at least 5 more days.
- f. More time for workshop, or selecting participants with a background in epidemiology.
- f. Before coming to Bangkok please give us information in detail.

15) Did you like the format of the workshop? If no, specify what you did not like and make suggestions for improvements:

Yes - 15

- a. Well scheduled
- b. Yes, didactic first and then the practice

16) Was the length of the course appropriate? If no, specify why not and make suggestions for improvement:

Yes - 5

No - 11

- a. One week is too short; 10 days may be enough.
- b. Schedule is quite hectic; give more time for exercises and more time for discussions on correction of biases.
- c. No, length should be at least 2 weeks to cover more subjects like data analysis.

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- d. Just right to avoid mental saturation.
- e. No, many things were covered in a very short time, so it should be of two weeks.
- f. It would be nice if the length of time would be 10 days; five 1/2-day course seems to be too pushing.
- g. No, it should be at least 10 days.
- h. At least 2 weeks--not less than 10 days.
- i. Too compressed.
- j. It should be for at least 10 days.
- k. Yes; however, I think making it 10 days might give more time for discussions of problems and epidemiological concepts and studies.
- l. More time.

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

- a. Asking us what kind of research we are doing.
- b. Technical assistance in improving/developing the proposal; assistance with data analysis.
- c. Make a roster of participants throughout the years available to the regional office or coordinator in our respective countries; provide us with up-dated Population Council publications; probably regular communication to us.
- d. To conduct similar workshops and refresh them.
- e. Regular information regarding the new research subjects, and about the Epidemiologic Methods of Contraceptive Safety Studies (anywhere).
- f. There must be constant follow up or contact between program organizer and participants of this program.
- g. At present, the descriptive study will be helpful, but we can do other studies, too.
- h. To attend more workshops of this kind.
- i. Follow up of proposals so that funding can be obtained for implementation of the project; funding and technical support for research studies proposed in our institutions; providing us with useful materials which will increase our understanding of epidemiology.
- j. Contact at least by letter.
- k. To do more studies; to train others.
- l. Send us some more handouts.
- m. We can get in touch with you whenever your group comes to Thailand.

18) How can future workshops of this kind be improved? In your opinion, what new material should be added?

- a. Materials on contraceptive safety in the presence of some medical conditions (not an absolute contraindication of course, especially infections/communicable, nutritional diseases/deficiencies, and breastfeeding (especially for the developing countries); homogeneous distribution of materials on clinical and field trials on these above aspects recommended.
- b. It can improve through using new material.

- c. Prolong duration of workshop; materials are okay; we can probably be given one textbook each.
- d. Statistics
- e. Sufficient, but lengthen time.

19) What material should be deleted?

None - 3

- a. Home assignments should be minimized.
- b. All materials are very essential for this program.

20) What material should be most emphasized?

- a. Practical applications, critiquing
- b. Current international issues, e.g. injectables
- c. References and handouts.
- d. Epidemiological terms must be emphasized.
- e. What was emphasized in the workshop was okay.
- f. Examples

21) Other comments:

- a. The workshop was excellently conducted; very good trainers; however, it would be better if differences in ideas/opinions between the trainers on aspects being presented to participants were agreed upon; differences should be straightened out before class presentations.
- b. The trainers have been extra helpful in all aspects of the training.
- c. I admire the way the trainers act even in the events of dissenting opinions among themselves; I hope this kind of attitude can be absorbed by trainers in our country--I most admire trainers like these--it makes the atmosphere more friendly and easy.
- d. It was one of the most enjoyable workshops to brush up on skills and knowledge.
- e. This seminar is very useful for analyzing the ongoing contraceptive program and to improve the quality of the program.
- f. An elevator will be appreciated!
- g. More basic concepts; put more emphasis on the interpretation of the data; of course it will need more time.
- h. Very good.