



DEPARTMENT OF HEALTH & HUMAN SERVICES

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Public Health Service  
Centers for Disease Control

## Memorandum

Date

June 6, 1983

From

Christine Zahniser, R.N., M.P.H., Nurse Educator, Division of Reproductive Health (DRH) and Peter Layde, M.D., Deputy Chief, Epidemiologic Studies Branch, DRH, Center for Health Promotion and Education

Subject

Foreign Trip Report (AID/RSSA): Bangkok, Thailand, March 22-April 4, 1983; Epidemiology Training Course.

To

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

- I. SUMMARY
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### I. SUMMARY

From March 28 through April 2, we conducted an Asia Regional Workshop in Bangkok, Thailand on the Epidemiologic Approach to Contraceptive Safety Studies. Coordination of the workshop was a collaborative effort by CDC and the Population Council, Southeast Asia Office. There were 13 course participants from 6 countries: 2 from Bangladesh, 2 from Indonesia, 2 from the Philippines, 5 from Thailand, 1 from Malaysia, and 1 from the People's Republic of China. This was the last of four workshops planned for the Southeast Asia region.

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.
2. Six research proposals for contraceptive safety research studies were presented.

II. DATES, PLACES, AND PURPOSE OF TRAVEL

Bangkok, Thailand - March 22-April 4, 1983.

The development and implementation of training workshops, to be conducted in the Southeast Asia region on 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 was the last of four workshops planned for Southeast Asia. (See CDC trip reports of January 6, 1981, April 19, 1982, and February 3, 1983, by Zahniser and Rubin.)

III. 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

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

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

Chulalongkorn University Medical School

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

Dr. Chansuda Wongsrichanalai, Epidemiologist, Department of Obstetrics  
and Gynecology, Faculty of Medicine.

Armed Forces Research Institute for Medical Sciences (AFRIMS)

David Taylor, M.D., Research Medical Officer

#### IV. WORKSHOP PARTICIPANTS, CONTENT, AND SCHEDULE

From March 28 through April 2, we conducted an Asia Regional Workshop in Bangkok, Thailand on the Epidemiologic Approach to Contraceptive Safety Studies. Coordination of the workshop was a collaborative effort by CDC and the Population Council, Southeast Asia Office. There were 13 course participants from 6 countries: 2 from Bangladesh, 2 from Indonesia, 2 from the Philippines, 5 from Thailand, 1 from Malaysia, and 1 from the People's Republic of China. This was the last of four workshops planned for the Southeast Asia region.

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

On March 24-27, 1983, we made logistical and other preparatory arrangements for the workshop. Included were:

1. Revision of the agenda for the workshop.
2. Setting up the course facility.
3. Review of list and biodata on course participants.

The workshop was conducted from Monday, March 28 through Saturday, April 2. A combination of didactic and small group participatory sessions were used for teaching purposes. The resource personnel included: Peter Layde, Christine Zahniser, and David Brandling-Bennett.

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 course material is available on request.

Course participants were eager to learn about epidemiologic methods, and group discussions flowed well. Participants were able to communicate well in English. Two persons (15 percent) at this workshop had an M.P.H.; five (38 percent) reported previous research experience.

The pretest was administered on day 1, prior to presentation of didactic material. Participants' scores ranged from 31 percent to 93 percent. The mean score was 65 percent (median 62 percent). At the end of the workshop, the same test was administered as a post-test. Scores ranged from 52 percent to 97 percent. The mean score was 81 percent (median 86 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.

## V. RESEARCH PROPOSALS

Participants from each country worked to develop a group research proposal for a contraceptive safety project that would be appropriate to study in their country. Some participants with special interests worked alone to develop a specific proposal. Six research proposals were developed and are available on request. These included:

### 1. Bangladesh

A retrospective cohort study to compare complications associated with two injectable contraceptives--depo medroxyprogesterone and northisterone enanthate.

### 2. Philippines

a. A retrospective cohort study to compare the short-term complications of tubal sterilization (TSP) performed by mobile field teams with those of TSP performed in hospitals.

b. A prospective cohort study to study the safety of long-term (>5 years) IUD use with short-term (1-2 years) IUD use.

### 3. Thailand/China

A case-control study to assess the association of hormonal contraception and congenital abnormalities.

### 4. Indonesia

A retrospective cohort study comparing the safety of oral contraceptives (OC's) prescribed by physicians with the safety of OC's provided by field workers in a community-based program.

### 5. Malaysia

An experimental study of complications of TSP using the Hulka clip, compared with TSP using the Fallope ring.

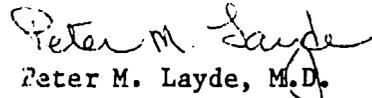
Participants presented their proposals to a panel on Saturday morning, April 2, 1983. This provided an opportunity to receive comments on the relevance of the proposed study, the feasibility of conducting the research, and the research methodology.

## VI. RECOMMENDATIONS

1. DRH/CDC should conduct a needs assessment to identify national priorities for contraceptive safety and other reproductive health research, prior to conducting additional workshops in the Southeast Asia region.

2. DRH should consider conducting national versus regional workshops to increase the homogeneity of course participants. More participants may have common interest areas, and it would allow greater opportunities for collaboration among participants on research projects.
3. An active followup mechanism to assess the utility of the workshops needs to be an essential component of this activity. A national or regional collaborative organization would be most appropriate to assume this responsibility. DRH should continue to provide epidemiologic consultation on protocols developed during the workshops.
4. Participants from this workshop should be contacted by DRH/CDC within 6 months to determine the status of their proposals.
5. A researcher from the region should be included as a resource person for future workshops.
6. Future workshops should be lengthened from 5-1/2 days to 10 days, and more basic statistics should be integrated into the workshop.

  
Christine Zahniser, R.N., M.P.H.

  
Peter M. Layde, M.D.

APPENDIX A

Contraceptive Safety Workshop

March 28 - April 2, 1983

Participants and Resource Personnel

Participants

Bangladesh

Dr. Sadia Chowdhury  
Deputy Director, Medical Services  
Concerned Women for Family Planning Project  
108 Kakrail Road  
Dhaka 2, Bangladesh

Mrs. Suraiya Ahmad  
Deputy Director, Clinical Services  
Concerned Women for Family Planning Project  
108 Kakrail Road  
Dhaka 2, Bangladesh

Indonesia

Dr. Azrul Azwar  
School of Medicine  
University of Indonesia  
Department of Public Health  
Jalan Pegangsaan Timur 16, Jakarta Pusat  
Jakarta, Indonesia

Dr. Judilherry Justam  
Kepala Bagian Penelitian Klinik  
P. T. Rhone Poulenc Indonesia Pharma  
Jl. Walter Monginsidi 11-13  
Jakarta Selatan, Indonesia

Malaysia

Dr. Asari Abdul Rahman  
Lecturer, Department Obstetrics and Gynecology  
Faculty of Medicine  
University of Malaya  
Kuala Lumpur, Malaysia

Peoples' Republic  
of China

Dr. Qiao Geng-Mei  
Department of Gynecology and Obstetrics  
The Third Teaching Hospital  
Beijing Medical College  
Beijing, China

Philippines

Dr. Irma Apelo  
Maternal and Child Health Division  
Quezon City Health Department  
Quezon City Hall  
Quezon City, Philippines

Dr. Gerardito E. Cruz  
Medical Officer  
Family Planning Organization of the Philippines  
P.O. Box 1279  
Manila, Philippines

Thailand

Dr. Ruchira Bannapradist  
Maternal and Child Health Center  
Region 7, Amphur Meung  
Rajburi, Thailand

Dr. Sirikul Isaranurug  
Family Health Division  
Ministry of Public Health  
Devaves Palace, Samsen Road  
Bangkok, Thailand

Dr. Pairuch Juncharoensukying  
Medical Services Division  
Population and Community Development Association  
8 Soi 12 Sukhumvit  
Bangkok 10110, Thailand

Dr. Sungwal Ruggao  
Department of Obstetrics and Gynecology  
Faculty of Medicine  
Chiang Mai University  
Chiang Mai, Thailand

Ms. Sukanda Suvanichchati  
Family Planning Research Unit  
Department of Obstetrics and Gynecology  
Siriraj Hospital  
Bangkok 10700, Thailand

Resource Personnel

Dr. Peter Layde  
Medical Epidemiologist  
Epidemiologic Studies Branch  
Family Planning Evaluation Division  
Centers for Disease Control  
Atlanta, Georgia 30333  
U.S.A.

Ms. Christine Zahniser  
Training Coordinator  
Family Planning Evaluation Division  
Centers for Disease Control  
Atlanta, Georgia 30333  
U.S.A.

Dr. David Brandling-Bennett  
Field Epidemiology Training Programme  
World Health Organization  
Ministry of Public Health  
Devaves Palace, Samsen Road'  
Bangkok, Thailand

APPENDIX B

Workshop Schedule

The Epidemiologic Approach to Contraceptive Safety Studies

March 28-April 2, 1983

Monday, March 28

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, March 29

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

Wednesday, March 30

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, March 31

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, April 1

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, April 2

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 and Post-test Scores for Workshop Participants  
March 28 - April 2, 1983

<u>Pretest</u>		<u>Post-Test</u>	
<u>Number of</u> <u>Persons</u>	<u>Score</u>	<u>Number of</u> <u>Persons</u>	<u>Score</u>
2	93%	4	97%
1	90%	1	93%
2	86%	1	90%
2	62%	1	86%
1	59%	1	83%
2	52%	1	72%
1	41%	1	69%
1	34%	1	66%
<u>1</u>	<u>31%</u>	<u>1</u>	<u>59%</u>
		<u>1</u>	<u>52%</u>
13	Mean Score = 65% (Median = 62%)	13	Mean Score = 81% (Median = 86%)

APPENDIX C (Cont'd)

Distribution of Missed Questions On  
Pretest and Post-test, by Question Number

<u>Question Number</u>	<u>Persons Giving Wrong Response On Pretest</u>	<u>Persons Giving Wrong Response On Post-test</u>
1	6	1
2	7	3
3	3	1
4a	4	1
b	5	1
c	9	3
5a	2	1
b	2	0
c	3	1
6	6	6
7	5	2
8	4	5
9a	0	2
b	1	2
10	6	8
11	4	1
12	3	0
13	9	4
14 (1)	5	6
(2)	6	4
(3)	5	1
(4)	5	1
(5)	8	2
(6)	5	7
(7)	7	3
(8)	3	2
(9)	2	0
(10)	4	1
(11)	4	2

## APPENDIX D

### SUMMARY:

Course Evaluation Comments  
March 28-April 2, 1983  
Epidemiology and Contraceptive  
Safety Workshop  
Bangkok, Thailand

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

Yes - 12                      No - I expected a longer time.

(a) At first, I think it will be very difficult to understand, but after attending the class, it is easier than I expected.

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

Yes - 13

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

Yes - 13

(a) But we probably need more time.

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

- a. The course content was about family planning, which was very useful for me to do the research from my daily work.
- b. Very much - 2.
- c. Yes - 2.
- d. About decreasing bias, elected research method (e.g., cohort or case-control), sample size, etc.
- e. It taught me the basic requisites of a good research study.
- f. This is the most effective method I've ever followed.
- g. I would be able to implement the proposal project in my work.
- h. It will help us, not only in doing epidemiologic research, but in evaluating our family planning program/projects.
- i. The course content was excellent, but some topics need more hours to understand them clearly.
- j. It helped me to understand epidemiologic research clearly.
- k. The course content is suitable for the work.

- 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 - 8

- a. Generally adequate, but I haven't much time to read the books yet.
- b. In fact, there are more than I could read..
- c. I would like to have more demonstration of techniques of calculation, even though it is not possible for me to understand at this time, it will be useful for me later.
- d. It would be better if the books you mentioned (as suggestions) could also be provided, as not all of these books can be found in the country.
- e. The handbook of epidemiology should be given to every participant.

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

None - 3

- a. Some of the epidemiological and statistics in terms of confidence limits, etc.
- b. Matters relating to statistics.
- c: About basic definitions, for example, what is and what should be, problem statement, justification, and objectives.
- d. Confidence limits, logarithms, chi square are beyond me even as I finish this course.
- e. There was no simple method used to determine a quantitative sample size.
- f. Course materials were mostly clear.
- g. The way of computing for the sample size.
- h. How to obtain the sample size; solution of bias.
- i. Bias and study design.

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

Yes - 12

Fair - 1

- 8) Did you get satisfactory answers to your questions?

Yes - 11

- a. Not always.
- b. To most of my questions

If no, why not: Suggestions for improvements:

- a. Longer time for every topic.

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

Yes - 13

- a. All the time - well done.
- b. Very definitely.
- c. All of you are very nice.

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

- a. All - 4.
- b. You all have patience; when going round from group to group to teach or guide us.
- c. Practical demonstration - 2.
- d. I think the trainers focus on the basic concepts and repeat again and again. This is good.
- e. I feel that the lectures were easily understood and are reinforced as I go over the manual.
- f. Problem statement and objective.
- g. Basic concepts of epidemiologic methodology.
- h. Problem statement, objective, cohort study and case-control study.
- i. I think most of them are well done.

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

None - 3.

- a. If the participants come from several countries, the best is introducing general condition about their country.
- b. To determine the design of study, it was still to be improved, e.g., the prerequisites to conduct a retrospective cohort study.
- c. As English is not our mother tongue, we expect slow and clear in the lectures.
- d. Everything is well done already.
- e. More examples of bias and study samples.
- f. More examples should be discussed.

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

Yes - 10

- a. And fairly effective.
- b. I liked it very much because it combined theory and practice.
- c. I like it very much.

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

All - 4

- a. The exercises and examples.
- b. Personal guidance to participants.
- c. Divided groups and discussion; teacher goes to the group to help; and pretest/post-test.
- d. I liked the lecture part.
- e. The method of teaching.
- f. Writing a proposal.
- g. Personal attention to all the participants.
- h. Group dynamics.
- i. I think all of them, except for the calculation of sample size for the study.

14) What suggestions for improvement would you make?

None - 3

- a. A little more on statistics, level of significance, and how to test it.
- b. Increase the content about basic statistics.
- c. Not all participants have an adequate knowledge of English, so it would be better if the handouts were also accompanied by transparencies during teaching.
- d. Transparencies and overhead projector should be provided for any trainee when he presents his work, not only for the final presentation, because I have difficulty in understanding different kind of pronunciation of trainees from different countries.
- e. Probably calculations/formulas not using advance technology like a programmable calculator, should be given also as this may not be available or cost a lot of money.
- f. I would like to see all types of project proposals with clear explanation of each topic.
- g. To point out the weak point of the past project proposals as an example.
- h. More examples of project proposals that had been done already should be discussed.

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

Yes - 11

- a. Good format.
- b. I liked it very much.

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

Yes - 8                      No - 4

- a. Probably can make it within 5 days.
- b. Too much was taught in too little time; it should be at least 10 days.
- c. I hope the length of the course increases to 10 days or so.
- d. For the beginners, it is too difficult to understand and remember important things.
- e. Probably more time is needed for us to digest and absorb more of the materials.

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

- a. Writing more research proposals.
- b. If I can get relevant publication in terms of papers regarding research proposal and writing up.
- c. Help get funding - 2
- d. Interview.
- e. If you require each of us to undertake a small research that will not need outside assistance but will be designed according to the principles you taught us.
- f. To have more practical exercises and more knowledge on medical statistics.
- g. Personal communication would be practical and easy, but to attend a course on further issues of epidemiology and biostatistics would be very nice.
- h. Contact/corresponding regularly and sending relevant materials, such as reading materials.
- i. Updates in previous or current studies; technical help in making or implementing research proposals.
- j. After completing proposal, I would like to send it to you for comments.
- k. Mailing - 2

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

- a. By including one instructor from the region.
- b. More work in groups and practical demonstrations.
- c. Introduce the importance of reproductive epidemiological research; basic statistics.
- d. No idea.
- e. It will be much better if also add basic information on medical statistics.

19) What material should be deleted?

None - 11

- a. Analytical statistics.

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20) What material should be most emphasized?

- a. Basic concepts and practical experience.
- b. Everything is good to know except that I just can't get my mind to understand analytical statistics. I leave that to the younger ones.
- c. Practical exercises.
- d. Statistical material.
- e. Further issues in cohort and case-control studies.
- f. Study design and justification.
- g. Study design, bias and study sample.
- h. Study samples.

21) Other comments:

- a. The workshop has brought various people from different countries and I have learned a lot of the experience and problems other countries have. We also know more about the culture and other information from various delegates about their country and I think this is valuable.
- b. I hope the teachers introduce their experience in their study.
- c. In order to exchange ideas, perhaps we can make 2 or more groups consisting of participants from several countries, even if the research proposals most likely cannot be implemented.
- d. The time schedule seems to be too tight. We do not have time to see the city.
- e. More people in private organized sector should be involved.