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MEMORANDUM

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TO : William H. Foege, M.D.
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Through: Philip S. Brachman, M.D.
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DATE: November 13, 1980

FROM : Leo Morris, Ph.D., Chief, Program Evaluation Branch
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SUBJECT: Foreign Trip Report (AID RSSA): International Union for the Scientific Study of Population (IUSSP) Seminar on "The use of surveys for the analysis of family planning programs." Bogota, Colombia, October 27-31, 1980

SUMMARY

I. PLACES, DATES AND PURPOSE OF TRAVEL

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III. SEMINAR PROGRAM AND ISSUES

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SUMMARY

Leo Morris, Chief of the Program Evaluation Branch, Family Planning Evaluation Division, CDC, participated in the International Union for the Scientific Study of Population (IUSSP) seminar on "The Use of Surveys for the Analysis of Family Planning Programs," held in Bogota, Columbia, October 27-31, 1980. CDC was one of 15 international institutions/ agencies invited to participate in this high level scientific seminar. The contents of this seminar included the following 8 topics:

(1) the use of prevalence data

(2) the relation of survey results to service statistics.

(3) measuring program input

(4) measuring and utilization of the demand for family planning through surveys

(5) the effect of family planning on mortality and morbidity

(6) issues in the measurement of potential fertility of contraceptive acceptors

(7) new techniques for the analysis of continuation and use effectiveness

(8) comparative studies of the determinants of contraceptive use and non-use

The World Fertility Survey Program and the Contraceptive Prevalence Survey have been 2 major survey methodologies used to provide data for the analysis of fertility determinants and/or family planning program evaluation. The strengths and weaknesses of these 2 methodologies are compared in this report. Other major issues discussed at this seminar for which FPED/CDC was able to provide data were the correct numerator and denominator to be used in the calculation of a contraceptive prevalence rate, the reliability of service statistics in the public sector, and measurement and utilization of the demand for family planning through surveys.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

Bogota, Colombia, October 27-31, 1980, to meet with AID Regional Population Officer to discuss previous CDC evaluations of the Ministry of Health surveillance system for their surgical contraception program (see CDC/AID RSSA Report dated June 24, 1980) and to participate in the IUSSP seminar on "The use of surveys for the analysis of family planning programs," held at the Corporacion Centro Regional de Poblacion (CCRP).

II. PRINCIPAL CONTACTS

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C. IUSSP Seminar Participants

1. See Attachment 1--List of Seminar Participants

III. SEMINAR PROGRAM AND ISSUES

A. Program

The substantive contents of this seminar included the following 8 topics:

1. The use of prevalence data.

2. The relation of survey results to service statistics.

   a) Quality and comparability of family planning data from surveys and service statistics.

   b) Country studies.

3. Measuring program inputs.

4. Measurement and utilization of the demand for family planning through surveys.

5. The effect of family planning on mortality and morbidity.

6. Issues in the measurement of potential fertility of contraceptive acceptors.

7. New techniques for the analysis of continuation and use-effectiveness.

8. Comparative studies of the determinants of contraceptive use and non-use.

I presented a paper, co-authored with John Anderson, under topic 2a. entitled, "The use of contraceptive prevalence survey data to validate family planning program service statistics." In addition, I was Chairperson for Topic 2b, including the papers dealing with Mexico, Haiti, and Colombia. Presentation of survey data collected by FPED/CDC made important contributions during the discussion of topics 1, 3, 4, and 8.

Including FPED/CDC, there were 15 institutions/agencies invited to this high level scientific seminar:

U.S. GOVERNMENT	Universities	Other Agencies/Institutions
AID Office of Population	Columbia	International Statistical Institute (World Fertility Surv)
Bureau of the Census	John Hopkins	Latin American Demographic Center (CELADE)
Center for Disease Control	London Schl. of Tropical Medic.	Population Council
	Michigan	Rockefeller Foundation
	North Carolina (POPLABS)	United Nations (Population Division)
	Princeton	Westinghouse Health Systems

In addition, there were representatives from Mexico, Cuba, Colombia, Ecuador, Chile, India, and Malaysia.

The IUSSP Committee for the Analysis of Family Planning Programs is probably the most respected working group that deals with evaluation techniques and methodologies needed to analyze the impact of family planning programs. This respect is due to the multi-national character

of the organization, their objectivity, and proven scientific excellence. There may be a bias toward IUSSP members being "academic," but this Committee took, without question, extra steps to invite scientists that are engaged in program and field aspects of evaluation.

B. Issues

There have been 2 major survey techniques to provide data for the analysis of fertility determinants and/or family planning program evaluation. The World Fertility Survey (WFS) is an international research program whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behavior in as many countries as possible with emphasis on developing countries. The WFS is being undertaken with the collaboration of the United Nations, by the International Statistical Institute in cooperation with the IUSSP. Between 1974 and 1979, 41 developing countries were participating in the WFS program.

Contraceptive prevalence surveys (CPS) are household probability samples of women of childbearing age in a national or state population. The stages involved in conducting a CPS are similar to those of other household surveys. A sample of households is selected using an existing sampling frame, typically a census listing or a national labor force survey. Approximately equal numbers of households are selected in 2 or 3 strata, usually the capital city and the remainder of the population or the capital city, other urban areas, and rural areas. A sample of around 1,500 households in each stratum has generally been selected which will contain about 1,000 households with at least 1 woman of childbearing age; 1 respondent is selected from each of these households. Thus, if the survey has 2 strata, there are 3,000 households; if there are 3 strata, there are 4,500 households. With 4,500 households (and approximately 3,000 women with completed interviews), the standard error for the variable "current use of contraception" is about 1.1%, including the design effect. In each stratum, the same variable has a standard error of about 1.9%. Teams of female interviewers and supervisors are recruited and trained. The training period is usually 1 week. Interviewing takes 2 to 3 months. When field work is complete, questionnaires are coded, the data are punched on computer tape, editing and correcting of data takes place, and finally the analysis and writing of the report. Because the questionnaires are short and relatively uncomplicated, the editing and analysis stage takes much less time than with larger surveys. Preliminary results are usually available within 6 months of the completion of field work--the final report within 1 year. Costs for field work for surveys conducted since 1977 in Guatemala, El Salvador, Panama, Paraguay, and the States of Sao Paulo and Piaui in Brazil have ranged from $40,000 to $90,000.

Fertility surveys, such as those sponsored by the World Fertility Survey (WFS), have much longer questionnaires than CPS's. Fertility surveys tend to be designed for a broader, more "scientific" study of fertility

determinants than CPS's which have a more narrowly defined program orientation.

In CPS's, for example, women have been asked about the total number of live births they have had, the number of living children, and the date of their last live birth. (Recent surveys have added a question on date of first birth.) The total number of abortions and stillbirths are obtained as well as current pregnancy status.

A standard WFS questionnaire, on the other hand, records each pregnancy in the respondent's history by date of occurrence and outcome. Thus, a WFS questionnaire may be 50 pages long compared to 10-15 pages for a CPS questionnaire. A WFS data file may contain over 1,000 characters of information compared to 200-300 for a CPS.

This difference in the amount of information involved is what allows the CPS to be more timely than larger scale surveys. Less time is required at each stage of the survey--field work, coding, punching, and especially in editing and correcting data. Further savings of time are gained through use of a standard questionnaire format, which allows computer programs used in editing and analysis to be used on each survey with a minimum of modification. The analysis possible with a CPS, of course, cannot be as detailed as those with longer questionnaires, but the information collected can be produced soon after field work when it can have the greatest effect on program evaluation and planning.

Between 1977 and 1979, 12 contraceptive prevalence surveys were conducted (6 with technical assistance from CDC and 6 with technical assistance from Westinghouse Health Systems). An additional 10 surveys were conducted or scheduled to be conducted in 1980 (4 with technical assistance from CDC and 6 with technical assistance from Westinghouse).

In contrast to last year's IUSSP meeting on "Demographic Impact of Sterilization," attended by the Deputy Director of FPED, where the contraceptive prevalence survey was treated as a "second-class citizen" to the WFS, the CPS was treated equally with the WFS at this meeting. In fact, there appears to be a realization that, with the exception of greater precision because of larger sample sizes, the study of determinants of fertility using WFS data does not yield results that are very different than results based on CPS data, and that CPS data is much more relevant to the analysis of family planning programs. For example, data on source of contraception, non-users of contraception, and availability of services are much more complete in CPS. In addition, the CPS includes information on the following topics that are not collected in the WFS: reason for non-use of contraception; for non-users who desire to use contraception, their method of preference; sterilization demand; interest in community-based distribution programs; abortion hospitalization; and the patterns of utilization of MCH care. Also, the CPS determines the proportion of women who do not currently want a pregnancy in addition to the proportion who do not want any more children. This information, along with data on sexual activity and fecundity status, allows a more refined estimate of need for family planning services. The WFS only has

a question on limiting fertility so that estimation of need of services from WFS data can only look at those women who did not want any more children.

The first topic of the seminar--the use of prevalence data--utilized data from both types of surveys and, independent of the type of survey, much discussion centered around the methods that should be included in the numerator as well as the correct denominator for the prevalence rate. Representatives from CDC, the Population Council, Westinghouse, AID, Columbia University, and Johns Hopkins University favored the use of all currently married women 15-44 years of age as the denominator for international comparisons. In any given survey, the researchers could then look more specifically at other estimates of unmet need or "exposed" women (currently married women who were not currently pregnant or subfecund). Only representatives from the U. N. Population Division favored "exposed" women as used in World Fertility Surveys as the denominator for international comparisons. No consensus was reached on the numerator. Most discussion centered around the reporting of abstinence as a contraceptive method. Abstinence as a contraceptive method was not always clearcut as in some surveys women meant abstinence during certain days of the month, which is confused with rhythm, and in other cases abstinence indicated separation from husband rather than a contraceptive method.

We indicated that our numerator did not include abstinence, douche, or herbs.

Reports from the Philippines and India indicated husbands reporting a higher use of contraception than their wives. However, in both these studies, male methods (condom, vasectomy, and withdrawal) were the most prevalent (≥65% of all use). It was not clear if the women were embarrassed to talk about the "male" methods or did not know that their husband had a vasectomy or perhaps their husbands were using condoms outside of marriage. There have not been similar reports from Latin America where the "male" methods generally account for less than 15% of all contraception.

A conclusion from Topic 2 on the relation of survey results to service statistics was that in many countries, especially in Latin America, the private sector was too important to rely only on service statistics from the organized program. Within the organized programs, sterilization was generally under-reported and non-permanent methods of contraception over-reported in service statistics data. During this session I was the Chairperson for presentations on Haiti and Colombia.

During Session 4, entitled "Measurement and utilization of the demand for family planning through surveys," the concept of demand for family planning, using WFS data, generally was limited to women not wanting any more children. However, since the WFS does not ask reason for non-use of contraception, it was assumed that all women not wanting more children and not using contraception were probably in need of contraception. In contrast to the WFS, we have data available on reasons for non-use of

contraception for women who do not use contraception and do not want any more children. I had Howard Goldberg, Demographer in PEB, work up data from the State of Piaui, Brazil and Panama for discussion purposes during this session. The table presented on the next page shows the percent distribution of reasons for not using contraception among women not wanting any more children according to desire to use contraception. Up to this point in time, conclusions from the WFS had only speculated why there may be so many women who do not want any more children but do not want contraception (including using the term "irrational" behavior), with no hard data on the reasons for non-use of contraception.

As seen in this table, the distribution of reasons differ for women who desire to use contraception versus those who do not want to use contraception. First of all, some measure of the ambivalence in women reporting desire to have more children is measured by the fact that 2% of women in Panama and 3% of women in Piaui, who do not want any more children, stated that the reason for non-use of contraception was the fact that they wanted more children. However, this type of inconsistency, whether in the woman's mind or an interviewer problem, was minimal. Certain patterns are clear. From 19% to 24% of women who did not want to use contraception were subfecund, and another 2% to 5% were sexually inactive. In contrast, of women not wanting any more children who wanted to use contraception (either now or following a current pregnancy), at least 45% were either currently pregnant or in the postpartum phase of their most recent pregnancy (54% and 45% in Panama and Piaui State, respectively). It is also apparent that women who do not want to use contraception were influenced by fear of side effects or their own actual side effects in the past, generally referring to oral contraceptives (23% and 32% in Panama and Piaui State, respectively). For women wanting to use contraception, accessibility problems or lack of knowledge about contraception took on greater importance with 17% to 20% of women reporting this as a barrier to using contraception. Due to the interest shown in this type of empirical information from CPS surveys for women who do not want more children, I will encourage the further analysis of data on this topic from other CPS data so that a comparative analysis can be made.

Copies of the papers presented at this seminar will be on file in the Reference Collection of FPED.

Leo Morris, Ph.D., M.P.H.

Percent Distributions of Stated Reasons for Not Using Contraception Among Women Wanting No More Children According to Desire to Use Contraception Panama and Piaui State, Brazil: 1979

Reasons for Non-Use of Contraception	Panama			Piaui State, Brazil		
	Desire to Use Contraception			Desire to Use Contraception		
	Total	Want to Use	Don't Want to Use	Total	Want to Use	Don't Want to Use
Reasons Related to Pregnancy, Fecundity, and Sexual Activity	54.4	58.3	45.7	49.3	50.5	47.7
Want more children	1.9	2.2	1.3	3.5	0.0	8.5
Currently pregnant	26.6	32.8	12.7	23.3	32.0	11.1
Postpartum, breastfeeding	17.0	21.1	7.6	8.5	12.7	2.6
Subfecundity/Infertile*	6.6	1.1	19.0	11.2	2.4	23.6
Not Sexually Active	2.3	1.1	5.1	2.8	3.4	1.9
Other Reasons	45.6	41.7	54.3	50.7	49.5	52.3
Side effects/health**	15.8	12.8	22.8	22.2	15.1	32.1
Accessibility problems***	4.2	5.0	2.5	10.5	16.4	2.2
Lack of knowledge	8.9	11.7	2.5	2.9	3.4	2.2
Husband forbids use	2.7	2.8	2.5	2.9	2.4	3.7
Religion	1.2	--	3.8	1.4	0.6	2.6
Other and not stated	12.7	9.4	20.3	10.8	11.7	9.7
All Reasons	100.0	100.0	100.0	100.0	100.0	100.0
	(n=259)	(n=180)	(n=79)	(n=555)	(n=323)	(n=232)

*Includes menopause.
**Includes fear of side effects, actual side effects, and any medical or health reasons
***Includes women not able to afford contraception and those not knowing where to obtain contraceptives.

NOTE: Subtotals may not add to 100.0 due to rounding.

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SEMINAR ON THE USE OF SURVEYS FOR THE
ANALYSIS OF FAMILY PLANNING PROGRAMMES,
October 28 to 31, 1980, Bogota, Colombia

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