

DRAFT

Memorandum

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From Chief, Demographic Analysis Section

Subject Proposed Major Projects During Work-Study Assignment,
World Fertility Survey, London

To The Record

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The purpose of this memo is to describe my current plans regarding a number of proposed research projects for my work-study assignment. Three major topics are discussed.

1. Comparison of WFS/CPS results for populations with both surveys.

A number of countries have now had both a World Fertility Survey and a Contraceptive Prevalence Survey. A comparison of results can indicate trends in various measurements, can help establish continuity between the two types of survey, and, providing the results appear consistent, can lend credibility to the much smaller scale CPSs. Comparisons made in the recent issue of Population Reports (1) suggest that the comparisons will be favorable and show trends in the expected direction--upward for contraceptive use and downward for fertility.

To date, the following countries have had both types of surveys: Panama, Paraguay, Colombia, Mexico, Costa Rica, Thailand, Korea, and Bangladesh. The Family Planning Evaluation Division, CDC, has provided technical assistance for Panama and Paraguay, and Westinghouse Health Systems the other countries. In addition, a CPS has been performed in Jamaica, and some data from this survey might be available for comparison, and CDC has been involved in 6 State surveys in Brazil as well as surveys in Guatemala and El Salvador, which have had no WFS.

The WFS/CPS comparisons will be limited to a few major areas of interest: contraceptive use, fertility estimates, and duration of breastfeeding, for major geographical strata. Much of the data required for these comparisons has appeared in published reports for the surveys. Those that are not can be obtained through specially requested or performed tabulations. In addition to published country reports, WFS has issued comparative reports on all three of these topics (2).

Contraceptive Use

The rate of contraceptive use will be measured by the proportion of married or in union women 15-44 using effective means of contraception. CPS estimates have been published in the JHU Population Reports issue on CPS.

Fertility

CPSs include much less detailed information on Fertility. Thus, fertility estimates cannot be as vigorously evaluated as with WFSs. Estimates of standard fertility rates from individual country reports can be compared with published estimates from WFS surveys. Where large discrepancies exist, CPS data can be further analyzed for possible reference period error.

Breastfeeding

Surveys can be compared on duration of breastfeeding, using a common definition. Current status data can be used, with results smoothed using the model breastfeeding schedule method (3). This can yield estimates of median or mean duration, and proportions breastfeeding at specific durations since birth.

A number of CPSs did not collect breastfeeding data (e.g., Paraguay, Costa Rica Round I, Colombia Round I), and for those that did, estimates do not always appear in published reports. Special tabulations may need to be requested from Westinghouse. This should not be difficult, since rather simple tabulations are required--the proportion breastfeeding at interview by duration since last live birth. If published WFS figures are based on some other definition (such as breastfeeding in the last closed interval) special tabulations may be required to get comparable estimates of duration.

<u>Topic</u>	<u>Source of Data</u>	
	<u>CPS</u>	<u>WFS</u>
Contraceptive Use	Population Reports, Individual Survey Reports, Special Tabulation	Country Reports and Comparative Studies
Fertility Rates	Individual Survey Reports	Country Reports and Comparative Studies
Breastfeeding Duration	Individual Survey Reports, Special Tabulation	Country Reports, Comparative Studies, Special Tabulations if necessary.

2. Comparative Breastfeeding Study

While this topic overlaps with the breastfeeding section of the CPS/WFS comparisons, the focus is broader, including both other data sets and a wider variety of issues.

A number of CDC Nutrition Surveys have breastfeeding information and were conducted in populations which have had WFS surveys: Egypt, Yemen Arab Republic, and Haiti. These surveys are not nationally representative, but meaningful comparisons can be made, for example by restricting attention to rural areas. In addition to trend data, the CPS, Nutrition Survey, and WFS data would document cross-national differences in breastfeeding duration.

A number of other topics can be addressed, including the relation of contraceptive use to breastfeeding, and the relationship of breastfeeding and postpartum amenorrhea, an item which is available only in the four state CPSs in Northeastern Brazil, conducted in 1980.

3. Development of Fertility Measurement and Analysis with CPS data.

Since this topic requires in-depth analysis attention will be confined to the four state surveys in Northeastern Brazil, conducted in 1980 (Bahia, Pernambuco, Paraiba, and Rio Grande do Norte States). These surveys have identical questionnaires and may be pooled with proper weighting to provide region-wide estimates with around 8,000 cases.

P/F Ratio Methods

Analysis of WFS data has advanced methods of comparing current and cumulative fertility to include not only analysis by age of mother, but by marriage duration and duration since first birth (4). Since CPSs have much less fertility information to work with, it is important to adapt these methods to CPS data, to be able to more fully evaluate the adequacy of CPS fertility estimates.

WFS analysis has used age-specific fertility for the last 5 years so that no interpolation is required when cumulating fertility rates. CPSs, on the other hand, can only estimate fertility for the year previous to interview. To cumulate fertility 2 strategies are possible. Single year age-specific fertility rates can be used. These are unstable, but fluctuations in P/F ratios can be smoothed by moving averages. This strategy has been employed by Howard Goldberg at FPED for marriage duration.

The second strategy is to use 5-year age-specific fertility rates and use interpolation factors when cumulating. For fertility by age these factors exist as part of the Brass method. A method of interpolating by marriage duration has been developed (5), but not as far as I know by duration of motherhood. Interpolated 5-year P/F ratios, if developed, could be compared with the single year values developed by Goldberg to determine the best strategy for evaluating CPS fertility data.

Analysis of Open Birth Interval

One method that has been used with CPS data is to examine the distribution of women by duration since last live birth or open birth interval (6). Examining this distribution should reveal any large distortion due to misreporting date of last live birth. It would be advantageous to develop this method more formally, if possible, for use with CPS data, since CPS surveys have few alternatives for evaluating reference period error. The method has the further advantage of making use of all cases available, unlike P/F ratio methods which are based on 5-year age or duration groups, which is significant for CPS surveys which generally have smaller sample sizes than WFS surveys.

Revision of the Questionnaire

In evaluating CPS fertility estimates, other methods can be discussed. Two new questions have been added to the 1981 CPS in Southern Brazil--when pregnant women expected to deliver and for women with children under 5, the age in months of their youngest child. These data may not be available during the 1-year assignment. However, based on available CPS and WFS findings, the questions asked in CPS surveys can be evaluated to see what, for purposes of fertility estimation, the best questions to ask are, within the constraints of the CPS format.

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