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MEMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL

DATE: August 3, 1979

TO: William H. Foege, M.D.
Director, Center for Disease Control (CDC)
Through: Philip S. Brachman, M.D.
Director, Bureau of Epidemiology (BE)

FROM: Leo Morris, Ph.D., Chief, Program Evaluation Branch
Family Planning Evaluation Division, BE

SUBJECT: Foreign Trip Report (AID/RSSA)--Brazil: January 12-February 3 and June 29-July 21, 1979

SUMMARY
I. PLACES, DATES, AND PURPOSE OF TRAVEL
II. PRINCIPAL CONTACTS
III. SAO PAULO CONTRACEPTIVE PREVALENCE SURVEY REPORT
IV. PIAUI CONTRACEPTIVE PREVALENCE BASELINE SURVEY
V. BEMFAM CBD PROGRAMS IN NORTHEAST BRAZIL
VI. FOLLOW-UP ACTIVITIES

SUMMARY

During January and July 1979, Dr. Leo Morris, Chief, Program Evaluation Branch, Family Planning Evaluation Division, CDC, traveled to Brazil at the request of AID/POP/Washington to 1) provide technical assistance to the Catholic University of Campinas, Sao Paulo, in completing a Portuguese language report for the 1978 Sao Paulo Contraceptive Prevalence Survey, 2) review BEMFAM community-based distribution program activities in Pernambuco State, 3) plan and implement the baseline contraceptive prevalence survey in Piaui State, and 4) brief the USAID Health Nutrition and Population Officer on the progress of these activities. In January, the Portuguese language report was written with colleagues from the Catholic University of Campinas and was released on January 31, 1979, as part of a special presentation to state and local health officials, census officials, and invited guests from other Catholic universities and from family planning programs in Brazil. Copies of the report were sent to USAID/Brazil and AID/POP/Washington, and a presentation was made at AID/Washington on March 1, 1979. The final English version of the report and a working paper on demographic measurement were submitted to AID in June.

A statewide community-based distribution program was scheduled to begin January 1979 in the State of Piaui, and advance planning provided the opportunity to conduct a baseline survey to collect data against which program impact could be measured 2 or 3 years later. Not only is there a complete absence of information on contraceptive use in Piaui, vital statistics are incomplete and irregular. The start of the CBD program was

delayed until April, and the baseline survey scheduled for July-August 1979. To compensate for the 3-month delay between the initiation of the program and the survey, the questionnaire was designed so that contraceptive prevalence could be determined as of March 1979 and July 1979. Specifications of the survey include an independent 2-stage probability sample of 1,500 households in each of 2 strata: the municipio of Teresina and the rest of the state (Interior). The survey was initiated during the first week of July as scheduled and during the first week of field work, 675 households were visited, 600 in the municipio of Teresina and 75 in the Interior. The revisit rate in Teresina was 24%, and in the Interior it was 7%. A preliminary tabulation of contraceptive use was made for the first 455 complete households in the urban area of Teresina, and 40% of married women (including consensual union) were currently using contraception in July as follows: surgical contraception 23%, pill 11%, rhythm 4%, and other methods 2%.

Reports on the Piaui CBD program initiated in April 1979 were available for April and May 1979. During the first month (April), there were 2,546 new clients followed by an increase of 4,260 in May for a 2-month total of 6,806. The preliminary goal for the first year of the program is 35,000 new clients. Following completion of field work in Piaui in August, coding will take place at the Central Office of BEMFAM in Rio de Janeiro. I will return in late September for the coding phase of the survey and in addition, preliminary plans will be made for the 1980 Evaluation Survey to be conducted in the other 4 states of the Northeast with existing CBD programs.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

Rio de Janeiro, Recife, Teresina, Brasilia, and Sao Paulo, Brazil, January 12-February 3, 1979, and Rio de Janeiro, Teresina, Brasilia, and Sao Paulo, Brazil, June 29-July 21, 1979, at the request of AID/POP/DS/FPSD and AID/POP/DS/LA and with the concurrence of USAID/Brazil, to 1) provide technical assistance to the Catholic University of Campinas in completing a Portuguese language report for the 1978 Sao Paulo Contraceptive Prevalence Survey, 2) review BEMFAM community-based distribution program activities in Pernambuco State, 3) plan (January) and implement (July) the baseline contraceptive prevalence survey in Piaui State, and 4) brief the USAID Health, Nutrition and Population Officer on the progress of these activities. My travel was performed in accordance with the Resource Support Services Agreement (RSSA) between the Office of Population/AID/Washington, and CDC/BE/FPED and was combined with travel to Panama in both January and June, which will be the subject of a separate report.

II. PRINCIPAL CONTACTS

A. U.S. Embassy, Brasilia (Tel: 223-0120, x 361)

1. Sam Taylor, Health, Nutrition and Population Advisor
2. Paulo Rolo, Office of the Scientific Attache

B. Sociedade Civil Bem-Estar Familiar no Brasil--BEMFAM (IPPF Affiliate)

1. National Office, Rio de Janeiro
   a. Dr. Walter Rodrigues, Executive Secretary
   b. Dr. Jose Maria Arruda, Technical Advisor to Executive Secretary
   c. Dr. Roberto Martins Alcantara, Technical Advisor to Executive Secretary
   d. Dra. Florida M. Acioli Rodrigues, Coordinator, Department of Evaluation and Statistics
   e. Sra. Carmen Gomes, Coordinator, Department of Planning
   f. Sr. Marcio Ruiz Schiavo, Coordinator, Department of Information
   g. Eliana Reis, Department of Evaluation and Statistics
2. State Program - Recife, Pernambuco
   a. Sra. Denize Barbosa, Northeast Regional Coordinator
   b. Sra. Maria Vilma de Oliveira, State Coordinator
   c. Maria Edileusa Calado, Chief, Evaluation Sector
   d. Vera Lucia Peixota de Macedo, Supervisor, Region II
   e. Angelita Elvira de Oliveira, Supervisor, Region III
   f. Maria de Socorro Sampaio, Supervisor, Region IX
   g. Maria Romana de Silva, Supervisor, Region XI
   h. Valderez Rangel de Souza, Supervisor, Region XIII
   i. Distribution Posts Visited - Distributor:
      1) Sao Lourenço da Mata - Dulcidleide Albuquerque
      2) Aliança - Maria de Conceição
      3) Condado - Rosa Lucia
      4) Goiana - Cleonice Barbosa
      5) Cruz de Rebouças, Distrito de Igarassu - Maria de Luz Alves
      6) Olinda
3. State Program - Teresina, Piaui (Rua Alvaro Mendes, 1424; tel: 222-3892)
   a. Profa. Teresa Maria da Silva Araujo, State Coordinator
   b. Sr. Manoel Araujo, Administrator

C. Piaui
1. State Agencies
   a. Dr. Jose Arimatea Dos Santos, Chefe de Clinica Ginicologia do Hospital Getulio Vargas
   b. Fernando Couto de Castelo Branco, Superintendente de Instituto de Planejamento e Administração Municipal (IPAM)
   c. Milton Gomes da Silva, Director, Depto de Estatistica e Informatica, Fundação Centro de Pesquisas Economicas e Sociais de Piaui (CEPRO), IPAM
   d. Oswaldo Carlos Neves, Economist, CEPRO
   e. Joanna Lucia Nogueira, Coordenadora de Nucleo de Publicações, CEPRO
2. Federal Agencies
   a. Dr. Adail Monteiro, Superintende Estadual de SUCAM, Ministry of Health
   b. Dr. Nelson Jorge de Melo, SUCAM
   c. Prof. Carlos Augusto Daniel, Pro-Reitor do Extensao, Universidade Federal do Piaui (UFPI)
   d. Profa. Maria Elena Barros Araujo Luiz, Depto de Enfermagem, UFPI
   e. Profa. Assistente Inez Sampaio Nery, Depto de Enfermagem, UFPI
3. Private Agencies
   a. Enf. Nari Moita, Vice-Diretora, Escola de Auxiliar de Enfermagem Maria Antoinette Blanchot

D. São Paulo
1. Secretaria do Governo Estadual
   a. Rubens Vaz da Costa, Secretaria de Economia e Planejamento
2. Pontificia Universidade Catolica de Campinas, Sao Paulo
   a. Prof. Dr. Joaquim de Paula Barreto Fonseca, Diretor da Faculdade de Ciencias Biomedicas
   b. Prof. Dr. Milton S. Nakamura, Titular do Depto de Obstetricia e Ginicologia
3. Sao Paulo Family Planning Center, Sao Paulo
   a. Lic. Maria Estela Franco Gonçalves, Project Coordinator
4. Centro Materno-Infantil de Campinas (CEMICAMP)
   a. Ellen Hardy, Sociologist
   b. Ronaldo Araki, Computer Programmer

E. Other
1. Dr. James Heiby, Research Division, Office of Population, AID/POP/DS/Washington
2. Dr. Martin Gorosh, Center for Population and Family Health, Columbia University, New York City
3. Steven D. Orr, Latin America Regional Director (Bogota), Family Planning International Assistance

III. SAO PAULO CONTRACEPTIVE PREVALENCE SURVEY REPORT

Field work for the Sao Paulo Survey took place during the months of July through September 1978, following the initial on-site planning that took place in February and June 1978. For details on objectives and specifications of the survey, the sampling frame and budget, the reader is referred to my Brazil RSSA reports dated June 26, 1978, August 2, 1978, and October 26, 1978. During October 1978, technical assistance was provided to the Catholic University of Campinas (PUCC) in the coding phase of the survey, and data processing, including editing, took place during the months of November and December as scheduled. In January (1979), a Portuguese language report was written with colleagues from PUCC and IFRP and was released on January 31, 1979 as part of a special presentation to state and local health officials, Census Officials, and invited guests from other Catholic Universities and from family planning programs in Brazil.

Copies of the report were sent to USAID/Brazil and AID/POP/Washington, and a presentation was made at AID/Washington on March 1, 1979. The final English version of the report and a working paper on demographic measurement were submitted to AID in June. During my July trip to Brazil, discussions were held with Dr. Milton Nakamura, Survey Director, on publication plans in both Portuguese and English language journals.

IV. PIAUI CONTRACEPTIVE PREVALENCE BASELINE SURVEY

Initial contacts concerning the Piaui baseline survey were made with BEMFAM officials and advisors from Columbia University in July 1978 (see Brazil RSSA report dated August 2, 1978). A statewide community-based distribution program was scheduled to begin in January 1979 in that state, and advanced planning would provide the opportunity to conduct a baseline survey to collect data against which program impact could be measured 2 or 3 years later. Not only is there a complete absence of information on contraceptive use in Piaui, vital statistics are incomplete and irregular. Between 1971 and 1977, the crude birth rate (CBR) has been reported to vary between 32 per 1,000 and 50 per 1,000 as follows:

1971	-	32
1974	-	50
1975	-	38
1976	-	42
1977	-	38

In 1971, the CBR in Teresina (the state capital and major urban area of the state) was reported to be 45 per 1,000 compared with a statewide figure of 32 per 1,000, which indicates underreporting in rural areas and

existing reports by occurrence rather than residence. In addition, only 21% of the births (32% in Teresina) registered in 1971 took place that year; the great majoricy having taken place in previous years, although registered in 1971.

An analysis of the 1970 census estimated infant mortality in Northeast Brazil at a level of 147 per 1,000 live births compared with 108 and 90 for Brazil and Southeast Brazil, respectively. The total fertility rate was estimated to be 7.4 in Northeast Brazil compared with 5.8 and 4.7 in Brazil and Southeast Brazil, respectively (Julio M. Rodriguez: Brasil-Mortalidad y Fecundidad en las Regiones Nordeste y Sudeste, 1970. CELADE Publication Serie C, No. 1005, San Jose, Costa Rica, Agosto de 1977).

Although it would have been ideal to do the survey field work in January and February 1979, this was logistically impossible because the rainy season extends through March, and many roads are impassable at that time of year. July 2 was set as the beginning date of the survey as this was the dry season, and university students would be available to work as interviewers during their winter holidays. However, this apparent delay of 6 months between program initiation and the survey was shortened to 3 months as the CBD program was delayed and did not begin until April. To compen- sate for this delay, the questionnaire was designed so that contraceptive prevalence could be determined as of March 1979 and July 1979. Specifications of the survey include an independent 2-stage probability sample of 1,500 households in each 2 strata: the municipio of Teresina and the rest of the state (Interior). With 1,000 women between 15-44 years of age in each strata, the confidence interval (95%), including design effect, will be about $\pm 4.0\%$ for the variable: actual use of contraception. For the entire state, the confidence interval, including design effect, will be about $\pm 2.5\%$. With an independent sample design in each strata, Teresina will be oversampled and the Interior undersampled so that sampling probabilities will not be equal in the 2 strata. In order to make statewide estimates, weighting factors will be applied to account for unequal sampling probabilities.

In January, appropriate contacts were made with federal and state officials in Piaui concerning availability of interviewers, local salary and per diem schedules, availability of malaria maps and road conditions. Our 2 days in Piaui in January confirmed the logistic problems associated with the rainy season as we had 2 days of torrential rains. The Planning Institute (IPAM) would provide an updated detailed map of Teresina, and SUCAM would provide updated locality maps for rural areas that were being used

in the malaria program. Thus, following an initial selection of census sectors from the 1970 census, second-stage selection of sample points could take into account the updated maps available in Piaui and be adjusted accordingly. The first stage selection of census sectors took place at IBGE in Rio de Janeiro in February, and the corresponding census sector maps were provided to BEMFAM in March.

The total number of weeks of field work, including a week of training, was estimated at 8 to 9 weeks utilizing 3 teams of interviewers, with training scheduled for the week of July 2-6 and field work scheduled from July 9 through August 31. Summary calculations for the length of time that the field work will require is shown below:

Stratum	Total Households (HH)	HH per Segment (Cluster Size)	Total Segments	Average No. of Segments/Day	Days	Team Days	Call-Back Days	Total Days
Teresina	1500	15	100	4	25	9	8	17
Interior	1500	25	Rural 43	43/1=43	52	17	4	21
	3000		Urban 17	17/2= 9				
								38
					days of training:			+5
								43

The questionnaire was similar to that used in Sao Paulo (for comparison purposes--Sao Paulo being the richest state and Piaui the poorest state in Brazil) with an additional module on the use of the maternal-child health services. The questionnaire was pretested in May and after minor modifications, was ready for use on July 2 when training began as scheduled.

During the first week of field work, 675 households were visited, 600 in the municipio of Teresina and 75 in the Interior. The revisit rate in Teresina was 24.2% and in the Interior was 6.7%. A preliminary tabulation of contraceptive use was made for the first 455 complete households in the municipio of Teresina which represents 30 percent of the 1,500 households on the sample. However, it must be noted that these first households

essentially represent the urban area of Teresina and not the entire municipio. With this cautionary note, the preliminary tabulation showed that 40 percent of married women (including consensual union) were currently using contraception in July as follows:

Surgical Contraception	23%
Pill	11%
Rhythm	4%
Other Methods	2%
	40%

As mentioned above, an additional question was added during interviewer training to determine contraceptive use as of March 1979, prior to the CBD program as well as during July-August 1979, so that the early impact of the program could also be measured.

V. BEMFAM CBD PROGRAMS IN NORTHEAST BRAZIL

During my January visit I had the opportunity to visit the CBD program in Pernambuco State enroute to the State of Piaui. In addition to a briefing by the state program staff, I was there during the monthly meeting of supervisors, and I was able to meet with 5 of the 11 regional supervisors independently for a detailed discussion of their activities. I also visited 6 distribution points outside of Recife. In brief, I was impressed with the organization and supervisory chain of command of the Pernambuco program. The main element of supervision, which is the missing link in most central American programs, appears to be in place and functioning. Perhaps the only problem was the increase in number of distribution points which was straining the supervisory capacity of the supervisor. However, to remedy this, new supervisors will be added with the creation of 1 or 2 additional regions out of existing regions. Another improvement would be the introduction of other methods, in addition to the pill, for those women with contraindications. Since January, BENFAM had taken action to introduce additional methods of contraception.

The CBD program in 5 states (Rio Grande do Norte, Paraiba, Pernambuco, Alagoas, and Panama) has now registered 499,489 new clients from 1974 through September 1978 as follows:

Year	No. of New Clients
1974	32,137
1975	66,087
1976	137,011
1977	142,819
1978 (through Sept.)	121,435

After reviewing the number of cycles distributed in the CBD program I have estimated that about 175,000 women were active as of September 1978, 35% of the cumulative number of new clients over the past 4 to 5 years. In Pernambuco, 74,000 women are estimated to be active, representing about 6% of women of fertile age.

In addition, 61,544 new clients were registered in 1978 in 77 BEMFAM clinics in 14 states. This represents a decline from the 71,122 and 80,677 new clients registered in 1977 and 1976, respectively.

Reports from the Piaui CBD program, initiated in April 1979, were available for April and May 1979. During the first month (April), there were 2,546 new clients followed by an increase to 4,260 in May for a 2-month total of 6,806. The preliminary goal for the first year of the program is 29,836 new clients.

VI. FOLLOW-UP ACTIVITIES

Following the completion of field work in Piaui in August, coding will take place at the Central Office of BEMFAM in Rio de Janeiro. During this visit a coding manual was written. I will return in late September to train the coders with emphasis on quality control to avoid, to the greatest extent possible, editing problems during the data processing stage. The schedule of activities through the report stage has been planned as follows:

July-August:	Field work
Sept.-Oct.:	Coding
Oct.-Nov.:	Keypunching
Nov.-Dec.:	Editing
Jan.(1980):	Data analysis
Feb.(1980):	Preliminary report
April (1980):	Final report

Also, during my September travel, preliminary plans will be made for the 1980 evaluation survey to be conducted in the other 4 states of the Northeast with existing CBD programs.

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