



Memorandum

Date March 22, 1983

From Richard S. Monteith, M.P.H., Program Analyst, and Maurice Glatzer, Public Health Advisor, Program Evaluation Branch, Division of Reproductive Health (DRH), Center for Health Promotion and Education (CHPE)

Subject Foreign Trip Report: Barbados, February 21-March 6, 1983, and Dominica, March 7-10, 1983; Contraceptive Supply Management and Training Workshop (Barbados) and the Development of an Integrated Supply System (Dominica).

To

William H. Foege, M.D.
Director, Centers for Disease ControlThrough: Dennis D. Tolsma
Acting Director, CHPE *Tolsma*

SUMMARY

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SUMMARY

This consultation concerned the continuing development of the Eastern Caribbean Population and Development Project, which was implemented by the USAID Regional Development Office/Caribbean (RDO/C) in July 1982. One of the goals of the project is to increase the availability of contraceptives in the region. We were invited by the RDO/C and the Project Manager to develop a contraceptive supply system for the Project. During a 3-day contraceptive supply management and training workshop, we proposed a system and discussed it in detail with representatives from seven participating countries and Project office staff. While in Barbados, we also updated the initial contraceptive supply requirements for the Ministry of Health (MOH) clinic-based programs that the Project will support. A cable for AID/POP/FPSD outlining these requirements was drafted for RDO/C's consideration.

In Dominica, we assisted the MOH in the development of a logistics system, which would bring together the management of drugs, contraceptives, and medical equipment under a single system. Prior to our departure, our recommendations for an integrated supply system were presented to and accepted by the MOH Director of Health Services.

A followup consultation should be scheduled in June or July to evaluate the implementation of the regional contraceptive supply and reporting system we proposed.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

Barbados and Dominica, West Indies, at the request of the USAID Regional Development Office/Caribbean (RDO/C) and the Project Office of the Population and Development Project, to provide follow-up assistance in contraceptive supply management. The purpose of the Barbados portion of the trip was to develop a contraceptive supply system to be utilized by the Project Office and participating countries and to train representatives from these countries during a 3-day workshop in the use of that system. The purpose of the Dominican visit was to assist the MOH in the planning and implementation of a single logistics system for family planning and drug supplies. This travel was in accordance with the Resource Support Services Agreement (RSSA) between the Office of Population, AID and DRH/CHPE/CDC.

II. PRINCIPAL CONTACTS

- A. USAID Regional Development Office/Caribbean (RDO/C)
 - 1. Mr. Mark J. Laskin, Chief, Office of Health, Nutrition, and Population (HNP)
 - 2. Mr. Allan Randlov, HNP

- B. International Planned Parenthood Federation Project Office in Barbados
 - 1. Ms. Angela Cropper, Project Manager
 - 2. Ms. Jean Scott, Administrative Assistant
 - 3. Ms. Christine O'Brien, Secretary
 - 4. Mrs. Pauline Russell-Brown, Field Administrator, Operational Research Project, Tulane University

- C. Barbados (Course Participants)
 - 1. Antigua--Miss Ineta Wallace, Superintendent of Public Health Nurses, MOH
 - 2. Barbados--Mr. Wilson Wade, Administrative Officer, MOH
 - 3. Dominica--Ms. Sherita Gregoire, Supply Management Officer, MOH
 - 4. Montserrat--Mr. John West, Medical Stores Officer, MOH
 - 5. St. Kitts--Mrs. D. Phipps, Supervisor of Public Health Nurses, MOH
 - 6. St. Lucia--Mr. Gregory Cadet, Medical Stores Officer, MOH
 - 7. St. Vincent--Mr. John Saunders, Family Planning Administrator, MOH

- D. Dominica
 - 1. Dr. D. O. M. McIntyre, Director, Medical Services, MOH
 - 2. Mrs. J. Astaphan, Health Planning, MOH
 - 3. Ms. Sherita Gregoire, Supply Management Officer, MOH
 - 4. Mrs. Cynthia Johns, Coordinator, National Family Planning Program, MOH
 - 5. Mr. John Davis, Storekeeper, Central Stores, MOH
 - 6. Mr. Jean-Pierre Sallet, Pharmacist and Central Stores, MOH
 - 7. Ms. A. Esprit, Nurse, Mahaut Health Clinic

III. BACKGROUND

Since our last consultation in September 1982 (See CDC Foreign Trip Report: Barbados, dated October 6, 1982), RDO/C has hired staff for the Project. Ms. Angela Cropper is the Project Manager, Ms. Jean Scott is the Administrative Assistant, and Ms. Christina O'Brien is the Project secretary.

To date, Project staff has been involved primarily in developing and negotiating subgrants with the participating countries. Once these subgrants are approved and signed, the Ministries of Health will be eligible to receive contraceptive commodity support from AID. We were informed by Project staff that most of the subgrants will be approved and signed by May of this year; presently Barbados is the only country with an approved subgrant. It should be noted that the MOH's in Antigua, St. Lucia, and Montserrat, currently do not have family planning programs. Obviously, the development of such programs in these countries will require time and thus, their contraceptive requirements for CY 1983 will reflect their startup dates.

It is not clear if the United Nations Fund for Population Activities (UNFPA), through the Pan American Health Organization (PAHO), will continue contraceptive commodity support to the seven countries that will participate in the AID project. According to the Chief Medical Officer of the Dominican Ministry of Health, the MOH was informed by the regional PAHO office that, beginning this year, PAHO will only be supplying the injectable, Noristerat, to the MOH. If this pattern is followed in all participating countries, it is incumbent on the Project Office in Barbados to make it known to the other countries.

One of the purposes of this consultation was to develop and propose a contraceptive supply and reporting system for the Project. The system would be utilized by the Project Office in Barbados as well as by the participating Ministries of Health.

The information obtained by the system will be used for forecasting, issuing supplies, and reporting. The results of the consultation are discussed below.

IV. BARBADOS PROJECT OFFICE

A. Scope of Work

During our stay in Barbados, our activities centered on the development of a contraceptive supply and reporting system for the Project, the presentation of the system in a 3-day contraceptive management workshop, updating the initial contraceptive supply requirements for the MOH clinic-based component of the Project (the Project will also implement and support community-based and commercial retail sales programs in selected countries), and reviewing supply management procedures with Project staff.

B. Contraceptive Supply Management Workshop

During our first week in Barbados, we developed, in collaboration with project staff, a contraceptive supply and reporting system for the Project. This system was subsequently presented to MOH representatives from seven participating countries in a workshop which was conducted from February 28-March 2, 1983.

The system consists of three forms: an inventory control card (ICC), a daily log to record contraceptives dispensed to users, and a requisition/issue voucher (RIV). Examples of these forms and instructions for their use are presented in Appendix 1 of this report.

The key form in the system is the RIV. The RIV has two purposes, depending on who originates it. At the clinic level the form serves as a supply status report to the central level. Based on information appearing on the RIV, central level will issue supplies to a given clinic in quantities that will bring existing balances on hand in the clinic up to a 4-month supply. This is an allocation or "push" system of resupply. Initially, clinics will be required to report monthly. Thus, the system can further be characterized as a fixed interval/variable order size system.

At the central level, the RIV will be utilized to report to the Project Office in Barbados the supply status of central stores and the aggregate supply status of the clinics it supports. In addition, central level will requisition contraceptive supplies from the Project Office on the RIV that corresponds to the supply status report of central stores. Thus, from central level to project level the supply system will be a requisition or "pull" system. Initially, central will report on a monthly basis but requisition on a quarterly basis. Project level will issue supplies to central in quantities that will bring existing stock levels at central level up to a 12 month's supply.

In addition to monitoring the supply status of the Project at all levels, the system permits an evaluation of program coverage using logistics data, i.e., contraceptives dispensed to users, which is converted to Couple-Years of Protection (CYP). We recommended that the Project report CYP as a surrogate measure of active users instead of developing a user reporting system which can be cumbersome to manage and often over- or underestimate number of active users.

The supply system and the methodology to calculate CYP was presented to representatives from each of the seven participating countries during the workshop. The simple formats designed for data collection and reporting were discussed in detail. The participants were informed that the formats may be modified as necessary to meet the needs of their respective Ministries of Health, keeping in mind the data requirements of the Project and AID. Briefly, those requirements include the following information by method, by brand, on a monthly basis: Beginning Balance, Receipts, Issues/Dispensed, and Ending Balance. It was our impression that none of the countries will experience difficulty in reporting these data.

The purpose of discussing CYP and having the participants complete a CYP exercise was to present a simple alternative to reporting users with the hope that if this methodology was adopted, the proposed supply reporting system would be implemented without the complaint that additional work was being thrust on the clinic nurses. Adoption of CYP in some of the countries may require individual consultations to further demonstrate the advantages of the methodology and to train personnel in its use. In any event, followup visits to the participating countries will be required to evaluate progress in the implementation of the project supply system.

Project staff should keep in mind that each country should have the system in place and have staff trained before they receive contraceptive supplies from the Project. We recommend that the Project Office insure that the system is thoroughly documented in a manner that describes the system in detail and outlines the responsibilities of the personnel who will operate it.

C. Contraceptive Requirements

At the request of RDO/C and the Project manager, we estimated the initial supply requirements for the Project. It should be noted that our estimates apply only to the MOH clinic-based programs supported by the Project. Supply requirements for the Commercial Retail Sales (CRS) program will be estimated by the Futures' Group, the AID grantee for this program. During our previous consultation with the Project in September 1982, we estimated the supply requirements for the community-based distribution (CBD) component of the Project (See CDC Foreign Trip Report, Barbados, dated October 6, 1982). We recommend that the CBD supply requirements be revised as information on the design and scope of the CBD programs becomes more available.

Our estimates were primarily based on supply data that the participants were asked to bring to the workshop. They were requested to provide us with data on contraceptives dispensed to users, by method and brand, during the last 6 months of 1982, and current balances on hand. Unfortunately, the quality and completeness of the data varied from country to country. In fact, no data was available for the countries of St. Lucia and Montserrat. In the case of St. Lucia, we extrapolated its requirements based on data we had obtained on previous consultations in the region. We did not attempt to estimate Montserrat's requirements; when they are finally calculated, they will represent only a small percentage of the total requirements which could easily be met from the operating inventory we are proposing for the Project warehouse.

In general, the initial shipment of contraceptive supplies we are recommending is equivalent to approximately to 1-year's supply at both the Project and central levels and a 4-month's supply at the clinic level. Because of their reported unpopularity in the region and the desire to save money, lesser quantities of vaginal methods, e.g., foam, jelly, cream and diaphragms, were proposed. Based on our analysis of Lippes Loop IUD's on hand in the region, we recommended that none be procured at this time. We further recommended that the regional supply imbalance of these IUD's be corrected through transshipment from oversupplied countries to undersupplied countries.

We drafted a cable containing the initial requirements for RDO/C's consideration. The cable was subsequently sent to AID/W with our estimates included. The funded PIO/C that RDO/C originally submitted to AID/POP/FPSD in December 1982 will have to be amended. The cable includes the following data:

TABLE 1

Additions* Requested to PIO/C
Bridgetown, Barbados

<u>Contraceptive</u>	<u>Amount</u>
Noriday 1 + 50	22,800 cycles
Condoms (Plain)	180,000 pieces
Emko Foam	540 tubes (with applicators)
Ortho-Gynol Jelly	360 tubes (with applicators)
Conceptrol Cream	480 tubes (with applicators)

*The cable included a request to reduce the Lo-Femanol order from 99,600 cycles to 44,400 cycles. However, the request was too late to change the shipment of Lo-Femanol.

D. Supply Management Considerations

A wide range of supply management-related topics were discussed with Project staff in preparation for the receipt of the initial shipment of contraceptives and its subsequent transshipment to the participating countries. Some of the topics which require further consideration are summarized below.

1. Much to our surprise, the Project is allocating less storage space for the MOH clinic-based program commodities than we understood was going to be available last September. A small room in the Old Distins Polyclinic that we thought was designated for storing MOH commodities has been assigned to store and repackage CRS commodities. We have strong reservations that this space will be adequate for the CRS activity.

The storage space currently allocated to the MOH program is not large enough to warehouse all of the commodities we recommended be included in the initial shipment. Fortunately, these commodities are currently scheduled to arrive in Barbados in separate shipments. Nevertheless, Project staff should find alternative storage space and make arrangements to transship commodities as quickly as possible to avoid overflow conditions.

2. Because the contraceptives will arrive in Barbados in separate shipments, we are concerned that one or more contraceptives may not be available when required. Thus, the implementation of the family planning program of the Antigua MOH may have to be postponed for lack of supplies. It should be remembered that UNFPA/PAHO may be withdrawing contraceptive commodity support to the region. If so, this

may place the recipients at risk of stockouts before they can be supplied with AID commodities. Upon our return to Atlanta, we called Mr. Vernon Peterson, AID/POP/FPSP, to ask if there was any flexibility in the shipping dates. He informed us that the current dates are the earliest he could arrange.

It appears to us that the Project has two options to avoid stockouts in the participating countries while awaiting the arrival of AID commodities. One is to transship selected commodities from one country to another. The second is to delay the implementation of programs in MOH's that currently do not have family planning programs.

3. In our review of the supply data provided us by the workshop participants, we noted several supply imbalances in the region. These commodities were supplied by UNFPA/PAHO. For example, the Dominican MOH currently has a 10-year supply of Eugynon on hand, while the St. Vincent MOH has a 21-year's supply of Emko foam and a 19-year supply of Lippes Loops. We alerted Project staff to these imbalances and recommended that they consider transshipment as an alternative to product deterioration. In reaching that decision, the cost of transshipment should be compared with the cost of new procurement.
4. During this visit to the region, we heard complaints that some programs do not have the means to sterilize IUD's. This may explain, in part, why some stock imbalances of IUD's exist. We called Dr. Andrew Wiley, AID/POP/TI, to ask what AID recommends be used to sterilize IUD's and were informed that Sporicidin is used and is procured by AID. Missions can obtain Sporicidin by submitting a funded PIO/C to AID/W. Dr. Wiley said he would send copies of cables to RDO/C, which describe Sporicidin and its use and what amounts to order.
5. Finally, according to Mr. Peterson, Lippes Loop IUD's have a 5-year average shelf life. Because of the apparent oversupply of this commodity, we recommended to RDO/C that none be ordered at this time. However, an inventory of Lippes Loops, by date of manufacture or by expiration date, may indicate that new Loops will be required. We recommend that such an inventory be taken. Some Loops may be found that have exceeded their shelf life. However, brittleness will determine if they are serviceable or not. If the Loops in question are still pliable, they are probably still usable.

V. DOMINICA INTEGRATED SUPPLY SYSTEM

The 4 days in Dominica were spent reviewing the current contraceptive supply management and drug supply and storage systems. We were requested to make recommendations as to the method of integrating the family planning and drug systems into a central supply operation.

We found that contraceptive supplies are managed under a separate system from drugs and other medical supplies. This involves a separate system of inventory control storage and distribution, headed by Ms. Sherita Gregoire. In addition, she is responsible for a limited inventory of medical equipment and housekeeping supplies.

The number of items in the family planning program inventory are limited and will become more so as UNFPA/PAHO withdraws contraceptive commodity support to the MOH.

Space requirements to warehouse contraceptives at Central Stores will be small. Oral contraceptives and condoms distributed by the MOH family planning program in 1982 would have been equivalent to 25 boxes of orals and 9 boxes of condoms, using AID's packing requirements. Orals and condoms are the principal contraceptives of the program and require the most storage space; use of other methods is very limited.

Integration of contraceptives into the Central Stores system will provide a service at the district level by requiring only one stop for resupply rather than two. In addition, overhead costs would be reduced if all supplies were warehoused and issued from one facility.

Further savings might be realized by reducing the number of nonfamily planning items in the Central Stores inventory and reducing the frequency of resupply.

Discussion with Ms. Cynthia Johns, Family Planning Program Coordinator, Mrs. Astaphan, MOH Health Planner, Mr. John Davis, MOH Storekeeper, and Dr. D. O. N. McIntyre, MOH Director of Health Services, provided us with the background necessary to make some recommendations concerning a centralized system.

For example, we discovered that at the same time we are recommending that contraceptive stock levels be raised at the District/Clinic, Mr. Davis is in the process of reducing the level of drug supply.

Recommendations presented below were submitted to Dr. McIntyre and reviewed with him prior to our departure. He indicated to us, and to Ms. Gregoire, that they would be implemented.

1. Place the management of contraceptives under Central Stores.
2. Concurrently, responsibility for medical equipment should be transferred to Central Stores.

As in the case of contraceptives, the inventory of medical equipment is also limited. This inventory will be reduced further as these items are moved to the districts in the near future, as indicated by Ms. Gregoire. All new orders for durable medical equipment should not be held for storage at Central Stores but immediately issued to the districts.

3. Remove housekeeping supplies from the list of items provided to Districts/Clinics by Central Stores. Place this responsibility at the District level.

Items such as soaps, cleaners, aerosols, and some office supplies can be purchased locally without need for central procurement and inventory control. Although bulk purchase at the Central level may provide some savings, the cost of centralized procurement, inventory control, and distribution could offset those savings.

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We briefly discussed the Contraceptive Supply Management and Training Workshop, which was attended by Sherita Gregoire, with Dr. McIntyre. We recommended that Dominica make maximum use of the system proposed at the workshop. We informed him that the simple formats for data collection and reporting were discussed in detail at the workshop. These formats may be modified as necessary to meet the needs of the MCH, keeping in mind the data required. However, the proposed forms were designed with the intent to simplify data collection and reporting.

A report was prepared and presented to Ms. Gregoire and Dr. McIntyre prior to our departure.


Richard S. Montelith, M.P.H.
by 


Maurice Glatzer

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APPENDIX 1

FORMS AND INSTRUCTIONS

DAILY LOG

(Identifying information: Clinic Name, Location, Reporting Period, etc.)

Date	Patient Number	QUANTITIES DISPENSED					
		Pill A	Pill B	Condom A	Condom B	IUD A	etc.

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DAILY LOG

PURPOSE: The purpose of this form is to maintain a record of contraceptive supplies by method and brand dispensed to users.

INSTRUCTIONS:

1. The Daily Log is used at contraceptive distribution points. Entries are made only for client contacts which result in the distribution of contraceptive supplies. The log will be totaled monthly.
2. The Date column will be completed once for each working day.
3. The Patient Number is recorded consecutively from the first working day of each month.
4. In the section titled Quantities Dispensed, a column must be designated for each contraceptive method by brand, e.g. Noriday 1+50, Ovral, colored condoms, plain condoms, etc., dispensed by the programme.
5. In order to ensure uniformity of reporting, the following units are established:

Oral Contraceptive - in cycles
Condoms - in pieces
IUD's - in pieces
Injections - in doses
Foaming Tablets - in tablets
Foam/Cream/Jelly - in tubes
Diaphragms - in units
6. The information collected on the Daily Log will be utilized in the completion of the Requisition-Issue Voucher/Report. The Daily Log will be retained as a permanent record.

INVENTORY CONTROL CARD (ICC)

PURPOSE: The purpose of the Inventory Control Card (ICC) is to have an up-to-date record of all supply transactions recorded in one place.

INSTRUCTIONS:

1. ICC's will be maintained where ever Contraceptive supplies are stored. A card will be established for each item of supply in inventory, e.g. Noriday 1+50, Ovral, colored condoms, plain condoms, etc.
2. The Voucher Number is the number from that Requisition Issue Voucher (RIV) which corresponds to a particular stock transaction.
3. The From/To column identifies by name the entity with which a stock transaction takes place. A separate line entry will be made for each transaction, e.g. request for supplies and the receipt of those supplies.
4. The Balance On Hand column should be completed at the time of each transaction.
5. All figures recorded on the ICC's will be in standard units of measures, e.g. cycles, pieces of condoms, etc.
6. The Remarks column will be used to explain unusual circumstances.
7. The results of periodic physical inventories will be recorded on the ICC's. The inventory will also include an internal record check.
8. The ICC's will be maintained as permanent records.

DRAFT

REQUISITION AND ISSUE VOUCHER/REPORT

DATE: _____

VOUCHER NO: _____

REPORTING PERIOD: _____

SHIP TO: _____

Item	R E P O R T				R E Q U I S I T I O N / I S S U E V O U C H E R		Remarks
	Beginning Balance	Received	Issued/ Dispensed	Ending Balance	Quantity Requested	Quantity Shipped	

Requested By: _____ Date: _____

Approved By: _____ Date: _____

Issued By: _____ Date: _____

Received By: _____ Date: _____

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6. When the central level submits its quarterly requisition, the Quantity Requested column on the Central Stores report will be completed utilizing the following formula:

$$\text{Quantity Requested} = \frac{\text{Average quantity dispensed by clinics during last 4 months}}{\text{months}} \times \text{Maximum supply (in months) at Central Stores}$$

- Balance on hand in Central Stores at end of reporting period

+ Lead Time (in months)

7. FORM DISTRIBUTION

The RIV is prepared in the original and 4 copies by the originator who will retain one copy as a record of the transaction. The original and 3 copies will be forwarded to the supply point. The original will be retained by the approving authority. Three copies will be sent to stores. One of these copies will be retained at the stores and the other 2 will be utilized as packing receipts. Once the originator receives the shipment, he/she will sign one copy and return it to the shipper. The remaining copy is retained by the originator as a record of receipt.