



Memorandum

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Subject Foreign Trip Report (AID/RSSA): Logistics Assistance, Zimbabwe, September 4-October 3, 1986.

To James O. Mason, M.D., Dr.P.H.
Director, CDC
Through: Assistant Director for Science, CHPE 

SUMMARY

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SUMMARY

During a training course in supply management held in Zimbabwe in January 1986, several problems in supply distribution and reporting of service statistics were identified among Zimbabwe MOH units providing family planning services. At that time, the Zimbabwe National Family Planning Council (ZNFPC) requested followup assistance to further analyze those problems and make recommendations to resolve them. Provision of this assistance was timed to permit participation in a hormonal contraceptive workshop sponsored by UNFPA. This consultant was one of three persons who gave presentations on management of drug supply.

With the assistance of staff from the ZNFPC and the MOH central stores, field visits were made to health facilities in five provinces to evaluate the supply and reporting system. Supply, distribution, and reporting procedures for contraceptives were discussed with clinic staff, and some information was also obtained for other pharmaceuticals and reports used in the clinics. Staff were asked what information is reported, where and how it is sent, and how often. Family planning ledgers and registration forms were reviewed. Contraceptive stock levels were checked, with information collected on source of supply, means of transport, stock outages, and types of contraceptives used.

For both reporting and requisitioning, a number of different procedures are used. Reports are sometimes sent through the postal system, hand-delivered, or given to a visiting driver or nurse to take to the district hospital. Supplies

are sent to clinics by ambulance driver, outreach nurse, commercial transport, or by personal pickup. The procedures for obtaining supplies generally appear to work, while those for reporting do not, at least for family planning reports.

The principal recommendation from this consultancy is that the ZNFPC staff work to improve reporting completeness and timeliness. Since the supply system works reasonably well, changes in procedures simply for the sake of encouraging uniformity should be avoided.

I. DATES, PLACES, AND PURPOSE OF TRAVEL

Harare, Zimbabwe, September 4-October 3, 1986, at the request of USAID/Harare and the Zimbabwe National Family Planning Council (ZNFPC), to give a presentation on management of drug supply to participants at a conference on hormonal contraceptives, and to provide technical assistance in evaluating the supply and reporting system used by ZNFPC. This travel was in accordance with the Resource Support Services Agreement between the Office of Population, AID, and CDC/CHPE/DRH.

II. PRINCIPAL CONTACTS

A. USAID

1. Lucretia Taylor, Program Officer

B. Zimbabwe National Family Planning Council

1. Dr. N.O. Mugwagwa, Executive Director
2. Dr. Esther Boohene, Program Coordinator
3. John Gwatidzo, Storekeeper
4. Ben Dhlohdlo, Statistician
5. J. Mulambo, Nursing Officer
6. M. Mazingaizo, Nursing Officer
7. E. Chandahwa, Nursing Officer
8. Jodi Dune, Secretary
9. Anne Main, Secretary

C. Ministry of Health

1. Mr. Ruzive, Central Medical Stores
2. Mr. Kasege, Central Medical Stores
3. Dr. Minya, PMD, Mahonaland Central (Bindura)
4. Dr. Kadenge, PMD, Mahonaland East (Harare)
5. Dr. Sikipa, PMD, Mashonaland West (Chinhoyi)
6. Dr. Chaibva, PMD, Masvingo (Masvingo)

D. Mashonaland Central Health Facilities

1. Dr. Minya, Bindura District Hospital
2. V. Binha, Trojan Nickel Mine Clinic
3. A. Kagodora, Chipadze Rural Council Clinic
4. E. Kuodza, Tsumgubvi Rural Council Clinic
5. G. Maodzwa, Rosa MOH Clinic
6. K. Hurtgreen, Howard Missionary Hospital
7. R. Ketí, Concession District Hospital

E. Mashonaland East Health Facilities

1. Dr. Sena, Marondera District Hospital
2. E. Kachidza, Ruwa Rural Council Clinic
3. M. Boucher, Dombo Tombo Municipal Clinic
4. J. Matsaira, Makanyazingwa MOH Clinic
5. H. Patsanza, Kanaka District Hospital
6. E. Mhlanga, Chiota Rural Hospital
7. C. Chigotora, Mudzimorema Clinic
8. J. Dawson, Arbor Acres Commercial Clinic
9. M. Maruva, Epworth Mission Clinic

F. Mashonaland West Health Facilities

1. E. Musakwa, Chinhoyi District Hospital
2. B. Charingira, Mangula Copper Mine Hospital
3. R. Badington, Umboe Rural Council Clinic
4. Sister Mary, St. Rupert's Missionary hospital
5. Sister Denga, Hombwe Health Center
6. T. Shongedza, Zumbara Health Center

G. Midlands Health Facilities

1. A. Chiwanza, Chivhu District Hospital

H. Masvingo Health Facilities

1. Sister Mapedzamombe, Mucheke Municipal Clinic
2. S. Chirongoma, Gait's Mine Clinic
3. E. Magunjie, Nemanwa MOH Clinic
4. Dr. Masanganise, Morgenster Hospital

III. BACKGROUND

During a training course in supply management held in Harare in January 1986, participants indicated that several problems existed in the routing of contraceptive supplies. Officials at the Zimbabwe National Family Planning Council (ZNFPC) headquarters mentioned that reporting problems existed as well, with nonreporting seen as a widespread problem in some facilities operated by the Ministry of Health (MOH). There were also different perceptions of what was supposed to happen as compared to what was actually happening in terms of resupply and reporting. The ZNFPC requested additional technical assistance to further analyze problems associated with drug supply and reporting. This assistance was provided during this consultancy, the timing of which was coordinated with a presentation given at a workshop on hormonal contraception sponsored by the United Nations Fund for Population Activities (UNFPA).

From September 8-12, 1986, a workshop on hormonal contraceptives was held in Zimbabwe. The workshop was organized by the the Department of Obstetrics and Gynecology, Faculty of Medicine, University of Zimbabwe, with assistance from the United Nations Fund for Population Activities. Most of the participants and faculty were from Eastern and Southern Africa; overall, 19 different countries were represented. This consultant was one of three persons giving presentations on management of drug supply. A copy of the program is on file at CDC and is also available from the UNFPA office in Harare.

IV. FIELD VISITS

Field visits were made to health facilities in five provinces:

Mashonaland East
Mashonaland Central
Mashonaland West
Masvingo
Midlands

The Mashonaland Provinces were chosen because reporting problems exist in these areas, caused in part by a recent administrative reorganization of the provinces. The visit to Masvingo provided a comparison, since it is a province with long-established locations for supply and reporting. The district hospital in Chivhu (Midlands Province) was also visited. More than half the facilities were located in rural areas on unpaved roads and were visited on the assumption that facilities in these areas have more difficulties with communication, supply, and reporting than do facilities on paved roads.

The types and numbers of facilities visited are as follows:

	<u>Type of Facility</u>	<u>Clinic Services Provided</u>
Office of the Provincial Medical Director	4	0
Office of the ZNFPC Provincial Nurse	3	0
Missionary Facilities	4	3
Commercial (private) Facilities	4	4
MOH District Hospitals	6	6
Other Facilities (includes rural council, district council, and municipal council outlets)	13	13
TOTAL	34	26

CBU distributors were also seen, including about 25 in Masvingo who were in the ZNFPC provincial office for training, salary payment, and resupply.

V. REPORTING OF SERVICE STATISTICS

Reports of family planning activities are supposed to be submitted monthly on a pre-addressed, postage-paid postcard to the ZNFPC. This card contains a section with information on new users and client visits and a section on contraceptive supplies dispensed by type, but not brand, of product. A space is also available for the number of sterilizations performed. Of the 26 facilities visited which should be submitting reports, 23 indicated they were doing so. (This figure excludes the offices of provincial medical directors (PMD), provincial ZNFPC provincial offices, and one missionary clinic which does not provide family planning services.)

The figures included on the postcard report form are derived from family planning activity ledgers maintained at the clinic level. The ledgers contain the name of the patient, contraceptive method, quantity of contraceptives

supplied, and visit status (new or revisit). All ledgers seen appeared to be adequate as source documents for filing reports. The most comprehensive records were seen in the Dombo Tombo municipal clinic, Marondera District. Four ledgers dating to 1975 were available, listing new and revisit patients and including a column for "visitors"--clients who had come for resupply but who ordinarily receive supplies from another clinic or from a CBD distributor.

Clinic staff also submit monthly reports to the PMD ("monthly returns"). These reports list all clinic activities, including family planning. The reports are consolidated at the district level and are then sent to the provincial level. One rural council clinic indicated that a report similar to the PMD report was sent monthly to rural council headquarters.

The ZNFPC client registration and medical record form is used in most clinics. At the end of each month, the clinic ledgers are tallied and the postcards are filled in and submitted. Cards are sometimes sent through the postal system but are also delivered personally or forwarded via an ambulance driver or outreach nurse. A review of approximately 200 postcards on file at the ZNFPC central office indicated that about half the postcards moved through the postal system. The percentage varied from province to province.

At the request of this consultant, Mr. Dhlohdlo of the Evaluation and Research Unit (ERU), produced a printout of reports submitted by unit, by month, for 1986. This printout showed that many reports never reach the ERU and that in some instances, more than one report is received for a given month. The reasons for this are unclear, particularly since 23 of the 26 facilities providing clinic services claimed they had submitted reports and also had a supply of blank postcards available for use in the future. One possibility is that cards are misplaced when they are routed from peripheral units to the ZNFPC via the district or provincial office. The cards may be delivered by someone from the clinic or sent with someone else (ambulance driver, outreach nurse, etc.). It is also possible that clinics sometimes forget to send their reports. However, this cannot be verified, since duplicate copies are not retained at the clinic level.

Table 1 shows the number of new users and revisits from 1983-1985. The decline in the number of new users in 1985 is not likely due to a change in the definition of new users. Table 2 shows the number of new users by source of service for 1985. At the time of this consultancy, the 1985 ZNFPC Annual Report was not available.

VI. SUPPLY AND DISTRIBUTION OF CONTRACEPTIVES

Clinics receive their contraceptive supplies (and some of their other pharmaceutical supplies) in a number of ways. Many order directly from the ZNFPC central stores in Harare. In Masvingo Province, some order from the ZNFPC provincial office. Many smaller rural clinics order from their respective district hospitals, and one clinic relied on supplies from a neighboring missionary hospital. In Marondera, the PMD indicated that the Marondera District Hospital sends supplies to MOH clinics in the district, but that municipal, rural, and district councils, missionary hospitals, and commercial hospitals order their supplies from Harare.

The present MOH policy of putting greater responsibility for all activities on the provincial medical director may someday make it possible for all facilities to obtain supplies at the PMD level but at the present time, this is not possible in the three Mashonaland Provinces due to lack of storage space. In Masvingo Province, the PMD has a small supply room for contraceptives and other drugs, but these stocks do not serve all facilities in the province. It will probably be some time before clinics can obtain all supplies at the PMD level. Storage space is inadequate, and the long-established practice of district hospitals ordering directly from Harare will be slow to change.

Under the system presently in operation, contraceptive supplies reach clinics in several ways. Some are delivered by ambulance driver or outreach nurse based in district hospitals. Some are picked up personally from district hospitals or from ZNFPC central stores. Commercial transport is also used. As with reporting, there is a lack of uniformity in procedures, but there is a noticeable difference in the result. All clinics visited had contraceptive supplies on hand, and most had both low-dose and regular-dose oral contraceptives. In those instances where a particular formulation was not available, the problem was lack of knowledge of its availability, not outages at the intermediate or central level. There was no evidence of oversupply or damaged stock at any of the facilities visited.

Clinics provide Ovrette, Femenal, Lo-Femenal, and condoms, all products which are currently supplied by ZNFPC. Several clinics also had Micronovum and some Minovular. One clinic had a small quantity of Norminest, and one had some Nordette. Smaller clinics did not have any IUDs in stock, but they are available on referral to nearby hospitals where the equipment and trained staff needed for insertion are available. Sterilizations are reported to be little used. DepoProvera is no longer used in Zimbabwe, and many of the medical staff we spoke to expressed disappointment at its lack of availability.

Very few of the peripheral level facilities maintain an inventory ledger or stock cards for contraceptives. Most of the smaller facilities had less than 100 cycles of any particular oral contraceptive and only one or two boxes of condoms. Minimum balances and reorder points are not used. The practice of first-in, first-out (FIFO) is followed, but this is possibly only by default, since most facilities have only one expiration date for each brand on hand. The only exception was the supply room for the Kanaka District Hospital, where newer rather than older supplies of Micronovum and Femenal were being issued. Cartons were rearranged by expiration date, and hospital staff were reminded of the importance of FIFO.

As long as patients are being served, it is hard to be critical of supply and recordkeeping procedures which are not textbook-perfect. Changes in procedure for the family planning programs should be directed toward improving reporting rather than supply and distribution.

VII. ZNFPC EVALUATION AND RESEARCH UNIT RECORDS

The special printout (left with Dr. Boohene) produced by the ERU for this consultant lists 1986 postcard reports by month, clinic code and type of clinic, new patients, revisits, and type of contraception. It is a very useful document which can be used to identify clinics which are reporting and compare them with the list of those which should be reporting. The printout used by ZNFPC medical stores can also be useful to the ERU to document some, but not all, underreporting.

The two printouts are derived from different information sources. The special ERU report produced for this consultant was based on the postcard report form used by ZNFPC. The completeness of this report depends upon receipt of postcards. The printout used by ZNFPC central stores is based on a list of over 1,000 medical facilities supplied by the MOH. A comparison of the two printouts showed that some clinics, which order contraceptive supplies, are on the central stores list but are not among the clinics which report to the ERU. The reasons for nonreporting should be determined by ZNFPC provincial nurses.

VIII. RECOMMENDATIONS

1. Copies of the special ERU printout and the medical stores printout should be given to ZNFPC provincial nurses for their use in improving reporting procedures. These lists can be compared with lists of health facilities maintained at the PMD level, and additions, deletions, and corrections can be made as necessary. Because many changes will probably be made, the printout will need frequent updating.

One of the first facilities which should be visited is Morgenster Hospital, the district hospital for Masvingo District. The hospital receives contraceptive supplies directly from the ZNFPC provincial office, but reports of their activities do not reach the ERU. The ZNFPC central office should notify the ZNFPC provincial nurse of this finding, since the information was not available at the time the team visited Masvingo.

2. The ZNFPC provincial nurses should monitor changes in procedure for ordering contraceptive supplies. This is particularly true in the Mashonaland Central Province where several clinics have been told to order their supplies from the PMD office. There currently is no storeroom or pharmacy, and no supplies are available at this level.
3. ZNFPC should work closely with MOH staff in Mashonaland East when they make their proposed physical move from Harare to Marondera. The PMD stated that the provision of supplies from Marondera will cause transportation problems for four of the eight districts in the province. It may be possible for those districts, whose principal roads lead to Harare, to be resupplied directly from Harare. This may also be a practical solution for clinics located in the greater Harare area.
4. Given the finding that the supply and distribution system for contraceptives is functioning reasonably well, ZNFPC should only make changes when specific problems are detected. Ordering and distribution procedures may not be uniform, but they work. On the other hand, the reporting system is not working well, and it is in this area that efforts should be concentrated.
5. Changes in the reporting system should be undertaken gradually, clinic by clinic and district by district. This will require personal visits and training by ZNFPC staff, principally the ZNFPC provincial nursing officer. Finding out what is happening to postcard reports, which are not sent through the postal system, will initially be time-consuming but should be given a high priority.

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6. Regular, informal contact should be established between the provincial nurses and the PMD in each province to keep them informed about program operations and to obtain assistance in making changes. With over 1,000 medical facilities in the country, several hundred of which are providing family planning services, it is unlikely that a directive from ZNFPC or from the MOH will, by itself, solve reporting problems.

IX. FUTURE ACTIVITIES

1. ESAMI will provide technical assistance to the ZNFPC, including the coordination of future contraceptive logistics workshops. Zimbabwe has now had ZNFPC staff trained at workshops in Arusha, Tanzania, and in Harare, and most of the instruction for further in-country workshops will be the responsibility of the ZNFPC. ESAMI will take responsibility for determining the level of assistance needed and arranging schedules, and will contact CDC, if CDC assistance is needed.
2. Although Dr. Boohene indicated that she did not plan to conduct any further PFA studies in the near future, CDC should provide a consultant to install several modifications of PFA software which have been developed, since the original program was installed in April 1985. Dr. Boohene said that the eight studies which have been conducted have proven useful to staff in analyzing patient/staff contact time. The simulation program could prove equally useful to the ZNFPC to test different theoretical models.

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TABLE 1

Family Planning Users
All Service Providers
1983-1985

<u>Year</u>	<u>New Users</u>	<u>Revisits</u>
1983	168,608	1,203,883
1984	175,009	1,584,012
1985	172,425	2,195,626

TABLE 2

Family Planning Users
By Source of Service Providers
1985

<u>Source of Service</u>	<u>New Users</u>	<u>Revisits</u>
Community-Based Distribution Program	96,167	1,247,683
ZNFPC Clinics	14,384	213,338
Ministry of Health Clinics	61,874	734,605
Total	172,425	2,195,626