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CATHOLIC RELIEF SERVICES

Report Period: November 29, 1978 - June 30, 1979
Sixth and Final Report (Concluding)

Report Due: June 30, 1979 (Termination of project)

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Project Location: Al-Olofi Hospital, Hodeidah, Y.A.R.

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SEMI-ANNUAL REPORT
Final OPG Report
Al-Olofi Hospital Training

Yemen Arab Republic

Grant No. AID/NE-G-1237

Report Period: November 29, 1979 - June 30, 1979
Report Due: Termination of Project, June 30, 1979
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I. INTRODUCTION

This sixth report is the concluding and final report for OPG AID/NE-G-1237. This Al-Olofi Hospital Training Project has provided the financial support to CRS for staffing selected expatriate nurses and other health professionals to Al-Olofi Hospital. The chief purpose of this expatriate staffing was to provide training to the Yemeni staff.

This report, as all previous reports, will speak to our limited success in implementing any formal training courses, but will also identify the many ways the CRS expatriate staff and CRS administrative presence provide support to informal, in-service types of training and facilitate implementation of policies/procedures that assist with improved standards of patient care. The ultimate goal of training is to improve the quality of patient care to as many patients as possible.

This report will document all efforts to improve patient care and will also identify all the major problems (negative factors) that interfere with safe patient care at Al-Olofi Hospital.

It is hoped that this report, besides meeting the requirements of the OPG Grant, will meet the needs of the YARG MOH officials; The General Director of Health-Hodeidah Governorate, and the Al-Olofi Hospital Administrator, for future planning and development regarding improvements at Al-Olofi Hospital.

An attempt is also made in this report to describe the present status of Al-Olofi as a Major Referral Center for the proposed Tihama Primary Care System. The ability of Al-Olofi to cooperate in a referral/follow-up system with the health centers, sub-centers, and primary care units in the Tihama is a measure of its highest function, i.e., to respond to curative referrals and cooperate in community identified prevention programs. The strengths and weaknesses of Al-Olofi as a

community hospital will be identified. This information will be used by the CRS Health Planner/Developer of the Tihama Primary Care Project to give design to the Al-Olofi Out-Patient Strategy.

Lastly, this report provides supporting information to indicate that key Yemeni staff professionals are more deeply aware of quality standards of patient care and do attempt to implement these standards when the staffing patterns and the support systems of Al-Olofi permit. This project has assisted in developing standards at Al-Olofi. Crucial staffing shortages and major deficiencies in hospital support systems prevent complete observance of standards; there is open and official acknowledgement of deficiencies and strong motivation on the part of Governorate and Hospital Administration to remedy the deficiencies.

II. IMPLEMENTATION

Expatriate Staff:

During this project period 19 CRS volunteer personnel have cooperated in the teaching/training activities of Al-Olofi Hospital.

Two major factors have interfered with CRS efforts to increase the expatriate staff at Al-Olofi:

1. the political unrest which was reported widely in international news has interfered with the response of new candidates; and
2. the presence of MOH contract nurses and their husbands in the CRS quarters has interfered with the volunteer motivation of some of the nurses; three nurses originally on contract with CRS transferred their contracts to the MOH.

The staff picture describing position and stating new, renewal or termination of contract is as follows:

<u>Name</u>	<u>Position</u>	<u>Contract</u>
Ms. Margaret Fitzgerald	Nursing Director	New 2/15/79
Sr. Joanela Bextermiller	Kitchen Supervisor	
James Gray Hodge	Dir. of Nursing	Term. 2/11/79
Anne Mattathil	Head Nurse/M. Surg.	MOH Contract 2/79
Josephine Rasiah	Burn Spec.	MOH 3/79
Alice Thattarunkunnel	Head Nurse/F. Med.	

<u>Name</u>	<u>Position</u>	<u>Contract</u>
Rose Openmackal	Staff Nurse-Peds.	MOH 2/1/79
Shirley Chu	Head Nurse-Surg.	Term. 4/1/79
T. Valuchirayl	Head Nurse/M. Med.	Term. 1/79*
L. Rasiah	Staff Nurse/E.R.	
E. R. Christopher	Staff Nurse/Ob/Gyn	
A. Santiapillai	Nurse Supr./Bl. Bank	
C. V. Sosa	Op. Room Nurse	
Sr. Theresza Zuzek, M.D.	Anestheologist	
Anna Mudayanickal (Mathews)	New Head Nurse/Peds.	
Grace George	Male Surg.	New 1/79
Mary John	Head Nurse/Peds.	New 1/79
Susanna Joseph	Staff Nurse/Peds.	New 1/79
Jaques Tesserand	Physician/TB Center	
Sr. Louise Marie Benecke	Project Coordinator Administrative Cons.	

Four Peace Corps nurses are working at Al-Olofi but during this period (due to problems of the Model Ward System) negotiated with Hospital Administration to function in select roles, not as staff nurses.

Actually, the CRS staff are the only health personnel that make every attempt to integrate their response with the Yemeni system.

The Russian and Chinese maintain their staffs as before but they remain autonomous in their activities.

The Hospital Administration recognizes the value of an integrated approach by expatriate health teams; CRS will facilitate this approach by continually assisting in the development of policies and procedures that promote expatriate sharing in all the necessary standard setting activities of the hospital.

Housing and Living Stipends:

Multiple meetings and formal communications have spoken to the serious housing problem that intensifies at the CRS Nursing Quarters. Presently, seven MOH contract nurses live in the quarters assigned to the CRS volunteers. These nurses

* Ms. Valuchirayl had to leave the country due to family needs.

have signed contracts providing 2,000-2,500 salaries but yet are still provided free housing. The CRS volunteers feel deeply offended and find it difficult to maintain their dedication when their own stipends barely cover their cost of living.

CRS Administration in Sana'a is negotiating an increased stipend because of the inflationary situation here in Yemen but it has not yet taken effect.

The slow response to needed urgent maintenance problems like the water tank and major electricity lines has also caused stress and strain to the CRS staff. When the apartments are without electricity several days in a row, the staff do not have sufficient rest because the heat is too great. The water cannot be pumped either so there is no water. Retention of staff does depend upon satisfactory living conditions for their basic needs.

Hospital Statistics:

The statistics available from Al-Olofi are as follows:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>
Admissions	643	478	513	553	557
Discharges	570	424	516	500	514
Deaths	60	42	39	42	36
Outpatient/E.R.	8,969	7,290	7,924	8,275	8,131
Surgery minor	42	56	72	78	47
Surgery major	80	45	112	29	76
Infant births/deaths*					
Maternal deaths*					

III. TRAINING

Nurse Staffing Patterns:

Due to qualified nurse shortage this continues to be the major factor that interferes with formal and informal training at Al-Olofi. The profile of nursing personnel at Al-Olofi at this time is as follows:

* Maternal/infant statistics are not yet available; women come and deliver and go right home and data is not kept accurately.

	<u>Yemeni</u>	<u>Expatriate</u>
Qualified (3 yr.) Nurses	13	7
Practical Nurses	15	2
Aides*	42	-

* Over 30 percent of these aides are illiterate and cannot assist in documentation of patient care but still they are used as the responsible "nurse" to cover a ward during a shift.

The Ministry of Health payroll shows approximately 70 other names but these function in varying levels of efficiency as cleaners.

Considering that Al-Olofi (361 bed hospital) needs a minimum of 120 qualified nurses to properly implement safe standards of care, and recognizing the fact that the Health Manpower Institute/WHO has been given the directives to train the graduate nurses for Hodeidah, it seems that any CRS effort in the future should work even more closely with the Hodeidah Branch to effect an increase of qualified nurses. Any other measures can only be temporary "stop gap" approaches and cannot effect major improvement of the Yemeni Health System.

Staffing Pattern Effect on Training:

Due to the shortage of nurses, more often than not CRS expatriate nurses must cover shifts by themselves and cannot work in a counterpart approach. The counterpart approach at least allows for a one-to-one training.

Our attempt to group expatriate nurses on units so that they can support each other in the implementation of standards, policies, and procedures becomes impossible with such urgent staffing needs also.

While it is still a plan of merit to retain a select number of the 42 nurses aides, this can only be done if they can be relieved of some of their staffing burdens.

Other Contributing Factors:

During this period the MOH in Sana'a did make a beginning attempt to improve the salaries of the nurses; there still are some major inequities, i.e., practical nurses being paid more than qualified nurses, some nurses receiving no increase because

of a problem with certificates from outside Yemen. This salary increase has assisted slightly with the serious morale problem among the nurses. Other multiple factors still exist as they have been identified in previous reports:

1. "Nurses" with little or no standardized, formal training.
2. "Nurses" who are illiterate.
3. No clear role functions--cleaners, nurses aide playing doctor.
4. Poor morale of local staff due to inequity of wages.
5. Lack of policies and procedures regarding work organization; failure of implementing and/or enforcing those which do exist.
6. Inoperable equipment, disappearance of equipment due to lack of accountability.
7. High absenteeism.
8. "Baksheish" system that controls system rather than professional ethics system.
9. Lack of patient environment supports such as clean linen, clean bathrooms, clean wards.

The Model Ward System:

The Model Ward System was implemented with great enthusiasm; it was staffed mainly by expatriate nurses of the Peace Corps and Yemeni nurses that could be spared from other wards.

Within a short time, the nurses met many resistances from the doctors in the implementation of certain safe patient care standards. The major areas that caused severe communication breakdown were as follows:

1. No written patient orders upon admission to the ward.
2. No pre-op and post-op orders and statement of the patient's condition.
3. Lack of clarity in the ordering of potent drugs.

4. Placing patients in model ward who could pay "extra" whether they were appropriate surgical adult patients or not.

5. Doctors not available during crisis situations of their patients.

Meetings with the surgical doctors and administration could not effect a resolution. Some of the doctors felt that the nurses should not object to their method of functioning and should not question. It was agreed that any discussion of problems or concerns should be done in private and not in front of patients.

When the problems continued even after discussion, the nurses with Nursing Service decided that they would have to leave the ward. The ward continues to function but the model ward nurses left and began to plan to open a model ward for the Medical Department. This never did materialize because the staffing problems became more urgent when several more Yemeni nurses left the hospital--several for marriage reasons, others because of maternity leave and illness.

At this time, the Model Ward System concepts are implemented wherever there is a readiness but the model ward as an entire system waits until staffing will permit its implementation again.

The Peace Corps expatriates working in the hospital, after this experience, have decided to function in select identified positions where they might be able to do some patient teaching, i.e., medical nurse teaching diabetic patients, pediatric nurse working with mothers/infants on pediatric ward, surgical nurse providing some skilled treatment care on the surgical ward.

The original intent and present purpose for CRS volunteers is also to provide special teaching and training, not merely to supply staff. CRS recognizes the need to be sensitive to the felt needs of the Yemeni administration even while attempting to provide the special role function. Since the felt need of the Yemeni administration is to provide staff, it is difficult for the administration to be concerned with the teaching/training aspects as isolated goals.

CRS nursing leadership at the hospital believes that basic nursing procedures and standards of nursing behavior can still be taught by the CRS volunteers if they observe the Al-Olofi Hospital policies and procedures mutually agreed upon by Yemeni administration and expatriate staff. The Yemeni nurses can

identify with expatriate nurses meeting the same basic patient care demands as required of them. Teaching/training approaches that are isolated from ward limitations, caused by the negative forces existing at Al-Olofi, are too unrealistic and have little motivating effect on the Yemeni nurses. (See Appendix for further explanation of CRS philosophy.)

An analysis of all the circumstances and responses during this report period has caused the CRS Director of Nurses, CRS Hodeidah Program Assistant, and CRS Program Director to begin to hold regular planning meetings with the General Director of Health, the Hospital Administrator, and the Yemeni Director of Nurses.

Staff In-Service Training:

The CRS Nurse Director and the Yemeni Nurse Director counterpart continue to have "head nurse" meetings weekly, and staff nurse meetings monthly to provide some in-service training.

Every other Wednesday, the CRS nurses have short planning meetings also; lately these meetings have been addressing the basic support needs of the nurses, i.e., housing problems, concerns about staffing, inequities between permissions given to Yemeni as to permissions given to expatriates, i.e., evening and night shifts for women nurses (Yemeni women do not take night shifts on male wards).

Cleaner Training Program:

The hospital administration hired a qualified Public Health Sanitarian from Ethiopia who is bi-lingual. Dr. A. S. Obadie appointed him as Supervisor of the Cleaners and identified him as the one who could implement the Cleaner Training Program. All the final plans were made with all parties concerned and the program began in February with 15 cleaners attending the first class (see Appendix A).

The first class completed the course and that was documented in the last semi-annual report. They were awarded their certificates and are awaiting their new uniforms (the hospital tailor is making them). The second class of cleaners has been temporarily halted because the Public Health Sanitarian recently was appointed head of the laundry and he is unclear as to his role function at this time. The Hospital Administrator has promised to clarify this, however.

An evaluation of the cleaners' efforts and functions at this time does reveal that the cleaners have several major negative factors to contend with:

1. Broken, blocked plumbing that prevents proper cleaning of the bathrooms and washing areas.
2. Inequities in job functions between men and women, i.e., unspoken tradition that men do not have to clean the bathrooms.
3. Inequitable salaries and long shifts of 24 hours.

The CRS Cleaner Program, besides providing a temporary merit award, would hope to encourage the hospital administration to identify sources within the community to support continued awards to cleaners of merit.

Kitchen Supervision/Training:

The CRS volunteer Kitchen Supervisor, Sr. Joanela Bextermiller, has continued to maintain organization, cleanliness and sanitation in the kitchen environment. She has trained her staff to continue this work when she leaves in September 1979.

Hospital administration, upon request of physicians, is now interested in projecting the necessary budget requirements for special diets.

The WHO advisors have recommended that a hot water unit to provide boiling water for washing dishes and kitchen utensils be installed.

The CRS Administrative Consultant has begun a process to obtain the present operating budget so that the CRS Nutrition Consultant may assist with some nutrition planning based on the realities of the budget.

IV. HOSPITAL DEPARTMENT OPERATIONS

Administration:

Regular meetings are held with CRS Program Assistant, CRS Nurse Director and Yemeni Nurse Director. Specific concerns and projects addressed during this period were:

1. Policies and procedures for the Blood Bank implemented by the CRS Blood Bank Supervisor Volunteer.
 - a. Training program for Blood Bank assistants.
 - b. Installation of the generator for Blood Bank.
2. Cleaner Training Program.
3. Patient Support needs:
 - a. laundry,
 - b. plumbing facilities,
 - c. incinerator, and
 - d. cool drinking water in all wards.
4. Medical supplies.
5. Staffing concerns--on call policies.
 - a. Emergency call of Blood Bank Supervisor.
 - b. Emergency call of surgery staff.
 - c. Placement of CRS personnel without notification and planning.

The meetings are usually productive except in several key areas:

1. The hospital physicians often cause hospital administration to interfere in nursing service coordination of nurse staffing in the hospital.
2. Physicians frequently identify nursing deficiencies as the major cause for serious patient crisis; Nursing Service has data that shows often the doctor's slowness to respond or his lack of availability have been the major factors in the problem.
3. CRS Administrative Consultant and the CRS Nurse Director are not involved in the planning of areas in which they are involved and decisions are shared with them after the fact. While the language barrier is a factor here, it seems important that participation occur at all stages of the planning and implementation of efforts.

Periodic meetings are being held to clarify areas of cooperation that could be more productive with better communications and understanding.

Finance:

The Hospital Administrator has agreed to provide a copy of the hospital's operating budget so that CRS can make better informed decisions regarding the future project areas we support.

Hospital administration still has some concern that the CRS presence at Al-Olofi causes Sana'a to reduce their required budget. CRS administration in Sana'a will attempt to inquire about this situation. It is most important, at this time, that CRS is identified only as a complementary assist to Al-Olofi. Unless the MOH provides the data to think otherwise, CRS understands that the YARG MOH does have the necessary financial resources to support Al-Olofi. CRS desires to provide experienced personnel only. Other small project support is provided for the demonstrative impact to change the system and to provide improvements in patient care. This support is meant to provide the initial stimulus and it is always expected that the MOH will assume financial responsibility as quickly as possible (this on a planned time-line).

Medical Records and Statistics:

The Director of Medical Records still desires CRS to provide a skilled assistant to him. CRS efforts to recruit to fill the vacancy left by S. Maristell Shanen have not been successful.

It is hoped that some support can be provided to this department with the initiation of our Tihama Project insofar that more accurate data will be available from the Out-Patient, Emergency Referral Departments.

Personnel:

This department still needs assistance with screening and identification of appropriate qualifications for nursing positions. There are a few expatriate hospital personnel who have been recruited and hired for nursing positions who are not qualified. To make matters worse, these persons often receive salaries twice as high as the qualified personnel.

Hospital personnel are not held accountable for their assigned work days; there is still much absenteeism or "loose"

arrangements for shift coverage--this does not provide the type of nursing care to maintain a safe environment for the patients. While the CRS Nursing Director tries to assist where she can, it is impossible by her efforts alone to maintain proper staffing on all the wards. A unified effort by hospital administration, hospital personnel and Nursing Service is needed.

CRS suggests that all personnel working at the hospital need to observe the same staffing policies and procedures for an improved staffing observance to occur. CRS has communicated to Al-Olofi administration that the CRS expatriate personnel cannot be requested to assume overtime responsibilities just because local personnel fail to meet their responsibilities.

Central Supply:

The CRS Nurse Director has completed an inventory of all the important nursing supplies and linens. A system of accountability is being implemented to maintain these supplies. There still is a grave need for the following types of supplies:

1. Blood bags
2. Disposable syringes/needles
3. Thermometers
4. B.P. cuffs
5. Scalp vein sets

The statement of the above needs at the hospital is made with the awareness that perhaps the need is based on the failure of the supply system from Sana'a. A qualified Central Supply Clerk working with the Hodeidah Supply Director might be able to remedy this problem.

Department of Surgery:

Dr. Teresa Zuzek, CRS volunteer Anesthesiologist, still works in this area. In addition, a CRS surgical nurse has been assigned to this department during this reporting period. A Peace Corps surgical nurse who is most experienced also is assisting in improving standards in this area.

Dr. John Wilson, surgical professor from Stanford University, made an on-site visit to the surgical department at Al-Olofi to see if he could consider a contract here. He will give his decision within the next few months.

There have been some personnel changes on the Russian and Chinese teams also but the numbers and types of surgeons remain the same.

The E.N.T. and Eye Departments maintain separate surgical suites. There is an urgent need for supplies in all these areas. CRS is in the process of submitting separate small projects for certain high priority materials.

Department of Pediatrics:

At least two CRS volunteers are kept on the Pediatric Ward at any given time. Great care is given to supervising the accuracy of the medication dose; motivation is given to the nurses to see that they assist the mothers in preparing the appropriate feedings for the infants/children over the 24 hour period.

During this period, there was a misunderstanding between hospital Nursing Service and the Nutrition Education Program set up for Pediatrics by a Peace Corps volunteer. The hospital Nursing Service is encouraging methods of feeding to insure that all babies requiring oral feeding receive these feedings. The hospital Nutrition Service felt that bottle feeding was completely inappropriate. No compromise could be reached so the Nutrition Education Program was temporarily discontinued (see Appendix B).

The CRS Health/Nutrition Project awaits the proper time to reinstate this hospital-based program which is so important to the mothers and children.

Department of Medicine:

The Medical Model Ward never has been opened due to the acute staffing shortage. The ward was prepared; four Peace Corps nurses and one CRS volunteer wished to begin but there were no Yemeni nurses available to be released for this endeavor. The aforementioned staffing would have placed a burden on the other wards also.

The Medical Department opened their dialysis unit during this period. As mentioned in previous reports, the Medical Department has the greatest readiness for refinement of standards.

Department of Obstetrics and Gynecology:

This department still has the same professional physician staffing pattern: a Yemeni, a Russian female doctor, and a Chinese physician. During this period a CRS volunteer midwife was assigned to the area also.

Presently, four of the Yemeni midwives assigned are illiterate. This presents a problem in administration of medications, documentation of births/deaths, and accurate following of physicians' orders.

It is estimated that Al-Olofi still has an unusually high infant/mother mortality rate. This may be due in part to the late arrival of the mothers at the hospital, the lack of pre-natal clinics available to the rural areas, the over-the-counter availability of oxytocics which women use to hasten labor. The CRS Health/Nutrition Project training community health nurses is attempting to provide some response to this urgent need.

Blood Bank:

The CRS volunteer Blood Bank nurse supervisor has set up a well organized hospital Blood Bank but it cannot function according to its full capacity due to the following factors:

1. Blood bags are in short supply from Central Supply in Sana'a; additional blood bags ordered from New York have not arrived.
2. Hospital administration has not yet installed the back-up generator to maintain constant temperature in the Blood Bank refrigerator.
3. The Laboratory Director still has not assigned several lab technicians to the Blood Bank Supervisor to learn the techniques of blood banking; the on-call emergency system is thus limited.

The positive aspects of this area are that over 100 units of blood have been administered. The easy availability of blood has thus saved many lives in this reporting period.

Outpatient Department/Emergency Room:

The hospital administration has just recently adjusted the entire nurse staffing pattern in the emergency room. A CRS volunteer staff nurse has also been assigned to work with these Yemeni nurses. Some basic improvement in patient care and

emergency standards of care have been made.

There are no qualified nurses working at this time in the outpatient department of the hospital. A Peace Corps volunteer has been observing patient flow through this area to provide the CWS Health Planner/Developer with data needed to plan for the reorganization of this department that will happen in the Tihama Primary Care Project. The hospital statistics indicate that as many as 317 patients utilized the outpatient and emergency departments daily. Considering the fact that some of the clinics do not keep accurate registrations of patients and all the patients coming to the emergency room are not accounted for, the patient volume flow is even greater.

Even now the present clinics of surgery, obstetrics/gynecology, medical, dermatology, family planning are receiving professional and self referrals from the community. There is no system for proper reception of new patients at the hospital, screening and direction to the proper clinic areas, and follow-up systems are lacking completely.

Al-Olofi continues to be the only major hospital in the entire Tihama area so any patient with an acute and serious illness seeks assistance here. Since the majority of patients are emergency patients, the common understanding of the people is that you only go to the hospital to die.

The concept of Al-Olofi being a place where teaching/learning about illness occurs, where patients can be referred for diagnosis and treatment of less common diseases, a center cooperating with the health facilities in the communities, is not yet being implemented. Yet, Al-Olofi has a beginning readiness to serve as the major referral center for the primary care of the Tihamas.

Its major strength as a referral center are:

1. Physicians in all the major specialties except orthopedics.
2. Outpatient department space.
3. Areas and basic equipment for diagnostic work in laboratory and X-ray.
4. Surgical department.
5. Inpatient beds.

Its major weaknesses are:

1. No functional record and patient flow system that gives assurance of good reception of patients and accurate documentation of findings for sharing back with the referring professionals.
2. Insufficient support nursing staff for treating physicians to provide teaching/learning situations to the patients needing to understand their illness so that they can cooperate in their care.

There is community readiness and professional community readiness for Al-Olofi to be a referral center. Some time before the General Director of the Hodeidah Governorate did support the physicians in a general plan that all patients sent to Al-Olofi should have a referral statement from a physician in the community. The system is not working yet because it does need more organization and skilled outpatient department staff to implement the system. The Tihama Plan would supply some support staff to the outpatient area to correct the weaknesses and thus provide a workable outpatient department and referral system.

Supplies:

During this reporting period one shipment from Memisa was sent to Al-Olofi Hospital at the request of CRS. See Appendix C for an itemization of supplies. A study of the items will indicate that the majority of the supplies were helpful to the surgical department of Al-Olofi and put to immediate use.

Other support supplies to the Blood Bank and the X-ray department are in transit to Hodeidah from New York at this time (see Appendix D).

CRS is attempting to clarify to the YARG central administration in Sana'a that any provision of supplies is only complementary and not meant to interfere with the necessary budgetary allotment due to Al-Olofi for its own major supply source. The CRS Program Assistant has requested and been promised a copy of the hospital budget so that coordination of supplementary support can be based on the actual hospital need as reflected in the fiscal report.

V. PROJECT CONCLUSION/EVALUATION

As this project concludes, the CRS Project Coordinator notes that the urgent need for training nurses remains acute. Has this CRS sponsored USAID OPG 1237 Grant accomplished its purpose of training local staff if the need is still so urgent? To properly analyze the situation we must consider the following:

1. Al-Glori has grown from the 260 beds opened at the initiation of this grant to a 360 bed hospital and from an outpatient department daily flow of 130 to over 300 patients daily.

2. The grant originally addressed the need for training, not only in nursing but in fields of nutrition, preventive medicine and specialized X-ray, and laboratory techniques; now there are Yemeni laboratory technicians and X-ray technicians-- there still is not a Yemeni radiologist. There still is a need for a Yemeni dietitian at the hospital. The Tihama Project is addressing the need of a preventive approach to health care as well as the present OPG Health/Nutrition Grant 1255. This grant activity has promoted preventive nutrition programs for mothers of children at the hospital.

3. The grant addressed a need for training in nursing and has made limited gains in this area but the gains have been countered by negative forces beyond the ability of this grant to effect:

a. Low salaries causing nurses to leave the hospital for employment elsewhere and limiting the ability of the HMI/WHO school to recruit new candidates.

b. Limited abilities and high resistance of "nurses" (inexperienced in nursing standards) to accept standards of nursing techniques; these personnel transferred from the old hospital, and comprise the majority of hospital support nursing staff. Strong bi-lingual nurse educators are necessary to work with these persons.

c. Yemeni physicians have continually and consistently pressed for opening of new wards without sufficient nursing personnel to staff; this has continued to increase the stress on Nursing Service and has continually been a factor causing poor morale in the nursing staff because they are pressed beyond their limits.

d. Hospital administration is not yet able to have a certain supply of hospital equipment/supplies from Central Supply in Sana'a; the lack of basic nursing equipment daily jeopardizes good/safe approaches to nursing care; nurses are limited in their abilities to perform according to standards. Often this causes indifference and carelessness of approach.

e. The MOH Hospital System has not yet given priority to preventive maintenance programs in their hospitals. Multiple equipment in disrepair, broken and stopped up plumbing, inadequate water supplies, and poorly motivated cleaners cause major breaks in a clean, safe patient environment; the nurses must cope with this unsafe environment which offers little support to patient care. Even the most highly motivated nurses often lose interest in these circumstances.

4. A high and rapid attrition rate of many of the professionals recruited by the grant caused frequent turn-over which further limited gains. On the positive side of this picture, the grant experience has shown the necessity of recruiting not only qualified nurses but highly experienced nurses for the following reasons:

a. A nurse must have strong internalization of safe standards of care and a clear vision of how to organize this care herself since there is yet no infrastructure for safe nursing care at Al-Olofi unless the nurse brings it.

b. Nursing care at Al-Olofi needs daily, frequent improvisation because often the necessary equipment is not present.

c. The Yemeni physicians and physicians of other countries often need to be called to their professional responsibilities, i.e., accuracy of medication dosage ordered, presence during patient crisis, appropriate orders on admissions, pre and post-op directions.

d. The high mortality rate of Al-Olofi patients causes severe strain on anyone dedicated to the preservation of life.

e. Ethical/moral issues of providing care to patients regardless of their ability to pay when many Yemeni providers will only provide care in response to "bakshiesh".

5. Retention of some grant recruited nurses who adapt too closely to the Yemeni non-system of nursing has not assisted us to effect the impact first envisioned:

a. A few practical nurses were recruited to give leadership to the Yemeni practical nurses; these nurses function only at a low level and have not been able to provide improvement to the system. CRS has discontinued their contracts but the MOH has given them contracts so they remain at the hospital. The MOH provides contracts to any nurse regardless of their abilities due to the acute shortage.

b. Some three year graduate nurses have been recruited from countries with depressed economic systems; the betterment of their own socio-economic status has become their chief goal for remaining in Yemen--their own urgent needs keep them from responding with any professional motivation to improvement of situation on the wards at Al-Olofi.

c. At Al-Olofi there is no common frame of reference-concept of patient care because the Yemeni physicians who dominate the system have been trained in various countries, i.e., Russia, Egypt, Rumania, England; this does provide a challenge to Nursing Service to interpret nursing care and nursing services. There is not a great deal of readiness for Nursing Service to provide leadership in patient care in their own right.

Keeping all the above forementioned in mind, during this reporting period Al-Olofi did graduate 20 three-year nurses this year (only four of these are going to remain in Hodaidah) and six practical nurses. True, Al-Olofi could use 80 additional nurses at this time but at least the grant activities have provided a better clinical environment at the hospital than there would be otherwise (see Report No. 5 and Appendix D, summarization of Report No. 5).

Even though a great lack of organization can still be identified throughout the hospital, it does remain that in formal and informal reports (see Report No. 5, Appendix D), Al-Olofi is stated to be the best hospital in Yemen because of its various attempts in Nursing Service to provide 24 hour care, nursing shifts, nursing standards, etc.

VI. PROJECT FINDINGS/RECOMMENDATIONS

The greatest needs Al-Olofi has at this time are:

1. Organization and management approaches to resolution of urgent problems:

a. Acute nurse shortage

(1) Until such time as there are more nurses, Nursing Service, in planning with hospital administration, should reduce the number of beds available for patient care; adequate nurse staffing can then be maintained on every ward, on every shift.

(2) International assistance should be increased to the School of Nursing so that only very highly qualified, bi-lingual staff are instructors.

(3) Retention of nurses at the hospital should be encouraged with better salaries; recruitment will easily increase with increased salaries.

(4) Unqualified nursing personnel should be retrained; expatriate nurses should be carefully screened. There is no justification for recruiting a practical nurse from another country.

(5) The practical nursing course for Yemeni nurses should be provided with greater regularity.

(6) Yemeni nurses should be sent abroad to study nursing supervision/management.

b. Lack of nursing care/patient care supplies

(1) This should be addressed through a hospital budget system that projects needs a year in advance. The Central Supply in Hodeidah can then negotiate with Sana'a to keep the flow according to monthly need.

(2) Nursing Service should have control of direction of supplies budget.

c. Unsanitary, unclean patient care environment should be remedied by:

(1) Daily laundry functioning to provide clean sheets; this needs an experienced laundry supervisor. (A modern laundry has been equipped but now needs a proper electrical source.)

(2) A scientific approach to house cleaning by an experienced cleaner supervisor who motivates, teaches/trains all cleaners to properly maintain their area.

d. All broken machinery/sterilizers, and suction surgical equipment should be maintained by a preventive care approach under the direction of a skilled mechanic.

2. High skilled professionals highly experienced to effect improvement in the deficient systems:

Highly qualified, experienced nurses
hospital administrator
laundry supervisor
central supply supervisor
housekeeper supervisor
maintenance person
orthopedic surgeon
pediatric surgeon
ob/gyn surgeon

Only after strong justification, should CRS provide any type of direct monetary aid in the way of supplies and equipment; the YARG MOH appears to have other resources for this type of assistance; they do need our assistance with skilled, experienced personnel.

3. Team approach to improvement: CRS should increase its volunteer group to at least 25 to accomplish the necessary impact; presently, our reduced number does not provide the power base needed to speak to the necessary changes that should be effected. Unless we can increase both our quantity and quality within the next three months, we should seriously consider phasing out the Al-Olofi Hospital Program.

4. Conclusion:

A. Hospital Administrator should be trained abroad, he should have a service commitment of at least five years. The present two-year assignment does not effect continuity of effort.

During these next three months, CRS administration should utilize all the learnings of this project experience to give direction in the recruitment process. Given CRS recruitment of the quality and type of persons identified, CRS should maintain their presence at Al-Olofi and continue to cooperate with the General Director of Health and MOH in Sana'a. If CRS finds that they cannot recruit the necessary expertise, then it is suggested that CRS begin a phase-out program with the MOH on a well identified time line that extends over a six month

period; qualified nurses who wish to stay could be picked up on MOH contracts.

At this time the CRS Program Director in Sana'a is negotiating a hospital agreement whereby the MOH assumes all financial responsibility for this volunteer program. CRS, therefore, must recruit in all urgency to fill the nursing shortages. The experience of the past three grant years provides a clear direction to be highly selective in screening of our candidates and should thereby increase the productivity of those who are chosen.

APPENDIX A

Cleaning Training Program
First Class - May 1979

Kedija Ahemed Hussien	Awesh Abedella Selmoniya
Abuda Amin	Rukia Yeheya Mohamed
Aliya Ali Salem	Hamuda Hamude Jebeli
Awesh Abdella Muderiya	Saeda Bint Fetini Authman
Amina Ali Adile	Aminia Ahemed Al-Adeniya
Jumae Shuey	Awesh Ali Ahemed
Aisha Salem Abedella	Jewehera Mohamed Ali
Aisha Bint Yeheya	Fatuma Yeheya Hebati

The above attended the entire course and received their stipend and certificates according to the Cleaner Training Program Plan outlined in Report No. 5.

APPENDIX B

Catholic Relief Services Role Function at Al-Olofi

Initially, CRS was requested to administrate Al-Olofi by the Governor of Hodeidah and the MOH. CRS functioned as the chief administrators from 1973 until 1975 when a gradual transition occurred with the cooperation of the MOH. After Yemeni personnel assumed the major administrative roles, CRS continued to provide administrative consultation regarding policies, procedures and coordination of efforts at the hospital.

The CRS hospital personnel and nursing staff have always integrated their efforts toward patient care improvement with the Yemeni personnel. CRS feels that the counterpart approach to teaching/training is the most effective under the staff shortage circumstances.

CRS Relationship to Peace Corps Volunteers:

The Minister of Health, Dr. Jumaid, requested CRS to assist his office in the coordination of the volunteer Peace Corps nursing staff assigned to Al-Olofi. This original approach gave a stronger impact to the efforts of the expatriate nurses toward improved patient care.

The relationship between CRS coordinating personnel (the CRS Nurse Director and Program Assistant) was effective and positive until the difficulties of the model ward climaxed; at that time the Peace Corps volunteer nurses voiced two negative comments:

1. CRS, in their administrative role, was partly responsible for the major problems at Al-Olofi--problems of mis-administration, staffing and relationships between doctors and nurses.

2. CRS had no authority to assist in coordinating their efforts--"why was CRS coordinating the Peace Corps endeavors at all?"

CRS, Peace Corps negotiations with the Governorate/MOH resolved these concerns by deciding that the Peace Corps volunteers would coordinate their own efforts at the hospital.

Peace Corps nurse volunteers decided to continue functioning at the hospital but to remain outside the Yemeni staffing

policy and procedure; in this manner they have the freedom to perform select patient teaching efforts.

The Peace Corps volunteers also have decided to give their priority efforts to the developing Tihama Primary Care Project; a few of the Peace Corps nurses are now working with the CRS Project Planner and Developer regarding needed changes in the Outpatient Department and training for the Yemeni Community Health Nurse Program.

Peace Corps and CRS Present Understanding:

Thorough role clarification and orientation will initiate all mutual endeavors. The health problems of Yemen do need volunteer organization collaboration and cooperation to effect improvement. Our prime efforts for joint efforts will be the Tihama Primary Health Care Project. At least five Peace Corps volunteers will have key roles in this project at any given time.


J. J. Staal bv

Rotterdam Holland
 Bergweg 15, 4143 HK
 O.Box 70, 4140 AB
 telephone 03451 - 3784

"Memisa"
 Eendrachtsweg 49
 3012 LD ROTTERDAM

INVOICE NO.:
 OUR REF.: Pro-forma Currency:

d.fl.

Rotterdam,

21.12.1978

Quant	Unit	Cat.No	Article	Unit price	Amount
			Shipment on behalf of: Catholic Relief Services (dest. Al Olofy-Hospital) <u>YEMEN ARAB REPUBLIC</u>		
72	pc.		Operation coats	f 54,06	f 3.892,32
144	-		Operation caps	8,33	1.199,52
6	-		Needles for Sternal Puncture	2,04	12,24
144	-		Laparotomy sheets-large	40,60	5.875,20
144	-		Idem small	30,25	4.356,--
432	-		Towels	6,52	2.816,64
24	set		Dental splint arch wires	12,04	288,96
12	pc.		Electric water-sterilizers	50,75	609,--
43	-		Elastic rib-belts man/woman	35,57	1.707,36
14	-		Uterine curettes	12,15	170,10
600	-		Surgical blades	p.150 pcs: 42,60	170,40
630	-		Umbilical tape	2,04	1.285,20
24	-		Ice-bags	13,22	317,28
96	roll		Autoclave tape 2" x 1	9,69	930,24
72	-		Idem 1" x 1	11,65	838,80
70	-		Elastic bandages 8 cm	3,74	261,80
74	-		Idem 10 cm	4,68	346,32
140	pc.		Foley catheters	4,54	635,60
70	-		Oxygen catheters	2,45	171,50
24	-		Rectal tubes	2,15	51,60
12	-		Ascepto syringes 2cc	5,52	66,24
12	-		Bar syringes 100 cc	25,50	305,--
12	-		Idem 150 cc	29,45	353,40
300	-		Surgical gloves size 7 1/2, 8	1,56	468,--

GIFT BY MEMISA / Total amount

base, grossweight 270 kg dim. 120x75x100cm

base, - Bank 250 - Lüsscher Bank, Der Haag A/c hr. 22.58 04.093 Postgiro 582076

j 27.129,72

Siemens AG, Bereich Medizinische Technik
Postfach 3260, D-8520 Erlangen

PA-Rechnung No. 31684 E

Al Olofy Hospital

Yemen

Bei Bezahlung und Rückfragen bitte Werksauftrag und Rechnungsnummer angeben. Erfüllungsort für Lieferung und Zahlung wie auch Gerichtsstand: Erlangen.

Unser Werksauftrag

KGG 4 ny-ge

Erlangen, Sept. 28, 1973

Ihr Zeichen/Bestellung-Nr./Datum

BEGECA-Projekt-No. 316 - T 17

Pos.	Menge	Artikel-Nr.	Bezeichnung der Lieferung, Leistung	Gesamtpreis
1.	1	253/10	Mobile lead shield, 100 x 185 cm, Pb = 1 mm, with lead glass window 30 x 40 cm	2.665,--
2.	3	244/052/ M-110	MAVIG protective aprons, Pb = 0,5 mm, 110 cm long	870,--
3.	6	78	MAVIG adaption goggles	153,--
4.	1	215/055	Pair of MAVIG protective gloves, Pb = 0,5 mm	162,--
5.	1	6563	Darkroom timer, wall/table model, 60 min, in PVC-housing	138,--
6.	1	12 86 327 G 1501	Multilined stationary grid W 5/50, 24 x 30 cm	1.250,--
7.	1	12 86 319 G 1501	ditto, 30 x 40 cm	1.515,--
				DM 6.753,--
<p>The total price is to be understood for a delivery net fob German seaport including packing, excluding the costs for the transport insurance ex works</p>				

AVANCE

Appendix D

Additional Equipment for Al Olofy Blood Bank

<u>Item # 1</u> - Angle rotor for IEC centrifuge # 803, 6 place Tubes and bottles	\$ 125.00/unit (to follow)
<u>Item # 2</u> - Dry-bath DB-1221-E calibrated 37 ^o , 240V	198.00/unit ✓
<u>Item # 3</u> - Pipettes 5 3/4", packed 10 gross to a case	19.50/case ✓
<u>Item # 4</u> - Antiserum	
<u>Type A</u> - 3 boxes (6 bottles each) already available under Purchase Order YEMEN-152-INS (at # 35.00 per box)	105.00 ✓
<u>Type B</u> - same as above	105.00 ✓
<u>Type Rh</u> - same as above, but at \$ 35.00/box for 3 boxes	285.00 ✓
<u>Type C</u> - at \$ 8.00/bottle - two bottles requested	16.00 ✓
<u>Type E</u> - same as above	16.00 ✓
<u>Albumin</u> - (Bovine) - at \$ 6.75 per 30cc-vial - 6 vials requested	40.50 ✓
Anti-Human serum - (new item)	(to follow)
<u>Item # 5</u> - 500 collection bags, 400 ml. - packed 48 bags per case, at a price of \$ 145.00/per case - ten cases needed for 480 bags	1,450.00 ✓
- 500 collection bags, 500 ml. same as above	1,450.00 ✓
<u>Item # 6</u> - Identity labels at \$ 3.15 per roll - Requested: 24 rolls	75.60 ✓
<u>Item # 7</u> - Microscope	875.00 ✓