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Emergency Medical Care

CENTRAL REGION  
SOMALIA

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In Cooperation with:

Saacid

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Changing Somali lives...



...one life at a time.



ADRA EMERGENCY MEDICAL CARE IN CENTRAL REGION, SOMALIA

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## FOREWORD

*After many years of virtual neglect, and the disastrous results of civil war, the people of Middle Shabelle has gained access to a health structure to satisfy their basic health needs. The Emergency Medical Project has been aimed to improve the quality of life of the inhabitants of these lands.*

*Amid most adverse circumstances a joint effort was made by project staff, by the communities and by other fellow relief workers. The vision: to create an opportunity for health; to guarantee the right to be cared for; to place within reach, a better chance to live.*

*Emergency help has been provided. The rehabilitation of organized health services in Adale has started. The foundation for the establishment of an effective operational network has been laid.*

*Undoubtedly, many lives have been spared, countless wounds have been healed. Children pain relieved and mothers tears, shed. True, in such short period as the life of this project, dramatic impacts cannot be completely ascertained. Only one thing has surely been accomplished: a new start for Adale.*

H R SOSA, Feb 1994

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## I PROJECT SUMMARY

**Grant Number** 968 - 1032 - G - 00 - 3033 - 00

**Country** SOMALIA

**Grant Title** "EMERGENCY MEDICAL CARE IN CENTRAL REGION, SOMALIA"

**Disaster Description** Lack of basic medical services due to civil strife and consequent break down of necessary infrastructure and dispersion of professional staff.

**Time Period** Original: From January 1 to September 30, 1993.  
No Cost Extension: From October 1 to November 30, 1993.  
(See Appendix 1: PROJECT TIMELINE)

**Targeted Population** Immediate vicinity: 80,000 est. population of Adale District. Large catchment area for the hospital outside of the District.  
(See Appendix 2: INTERVENTION AREA MAPS)

**Purpose of Project** Provision of emergency medical services to the general population; Provision of MCH activities to mothers and young children infants, and pregnant mothers; prevention of further deterioration of the health situation of the region.

**Total Cost** US \$ 504,035.0

**Total OFDA** US \$ 385,775.00

**Other Funding Sources** ADRA US \$ 118,260.00

## II INTRODUCTION

### 11.1 BACKGROUND

Civil war and strife took their toll on the vulnerable population of Middle Shabele in Central Somalia. The violence and the lawlessness caused the collapse of the already feeble economy and the interruption of basic services. These factors provided the conditions that led to an accelerated increase in the incidence of infectious disease and infant mortality rates.

Responding to the appeal of elders, women's groups and other community leaders of the Adale District, ADRA began supporting emergency medical services in the month of September 1992. This operation began in partnership with "SAACID", an indigenous voluntary organization, active with food relief in the area.

At that time, health services to the entire District's population were virtually nonexistent. All previous health facilities were looted and destroyed. Without essential medical care, children, women, and other vulnerable groups became highly exposed to the rage of uncontrolled infectious disease. This situation caused an enormous amount of grief and suffering to the families living in this area.

To shelter the initial relief interventions a semi-destroyed rural hospital building was rehabilitated. A health team was immediately mobilized to the area, consisting of three physicians (one expatriate and two nationals), and two qualified nurses. They organized the local paramedic staff previously working in the hospital, to begin the operation of an outpatient clinic, an emergency room and a basic pharmacy. To reach the families living in the surrounding villages, many miles away from the hospital, a mobile clinic/ambulance was sent to visit those locations on a routine basis.

### 11.2 PROJECT OVERVIEW

In September 1993, the Emergency Medical Care Project began its operations. With the financial support of the United States Agency for International Development (A.I.D.), the capability of ADRA and Saacid to provide medical relief, became substantially strengthened .

This grant has permitted the continuation and expansion of services and the significant increase of patient coverage. The opening of the urgently needed Inpatient Department (17 beds total), the construction of the clinical laboratory, a larger pharmacy and the hospital kitchen, were all made possible.

At the community level, a crucial step has been taken with the initial training of Village Health Workers (VHW's), and the opening of the Community Health Posts. These facilities form the network that made possible the introduction of programs for the control of infectious disease. All these elements have encouraged the return of many displaced families to their native villages.

### III PROJECT DESCRIPTION

**111.1 GOAL** To provide emergency health and MCH services from the former Adale District Hospital and through satellite health posts in Adale District and neighboring districts of the Middle Shabelle Region of Central Somalia during February to September (Extended to October), 1993.

**111.2 PURPOSE** To improve the current living conditions in Middle Shabele; To reduce the incidence of deaths and illness among young children, women and other vulnerable persons. And encourage the return of displaced residents through the provision of basic health services.

**111.3 LOCATION** The Adale District Hospital is 160 Km. north of Mogadishu on the coast (See Appendix 2: Maps: Area of Intervention). From Adale Town, the district villages are located N.E. and S.E, within a radius of approximately one hundred kilometers.

#### **111.4 OBJECTIVES**

- 1) **Reduction in death and illness among young children, women and vulnerable persons in the general population through the following services:**

OPD: General examination room, dressing and injection room, two private examination rooms.

MCH: Growth monitoring, supplemental feeding, ORT unit, delivery attention, pre/post natal care, EPI (cold chain sub-station)

IPD: Labor and delivery/maternity rooms: 6 beds; General medical care: Male ward: 2 beds; Female Ward: 6 beds; Total IPD beds: 17.

- 2) **Strengthening of district MOH and district Health services:**

- Involvement of MOH staff in coordination, planning, training;
- Minimum of eight health outposts with a minimum of 16 trained, district health post leaders. Essential drug supply.
- Somalia Health Professionals re-attached to national health institutions.

#### IV IMPLEMENTATION OF ACTIVITIES AND ACCOMPLISHMENTS:

The Adale Medical Center (AMC) is located in Adale, 100 miles North of Mogadishu, on the coast. The eight Village Health Posts are operating in Wargadi, Mohamed Said, Ali Gudud, Burdaar, Gel Gub, Hagi Ali, Addo Ul and Ragga Elle (See Appendix 2-B).

- 1 **PROVISION OF HEALTH CARE SERVICES:**  
During the life of the project nearly 100,000 patient visits were registered in the different forms of the Health Information System.

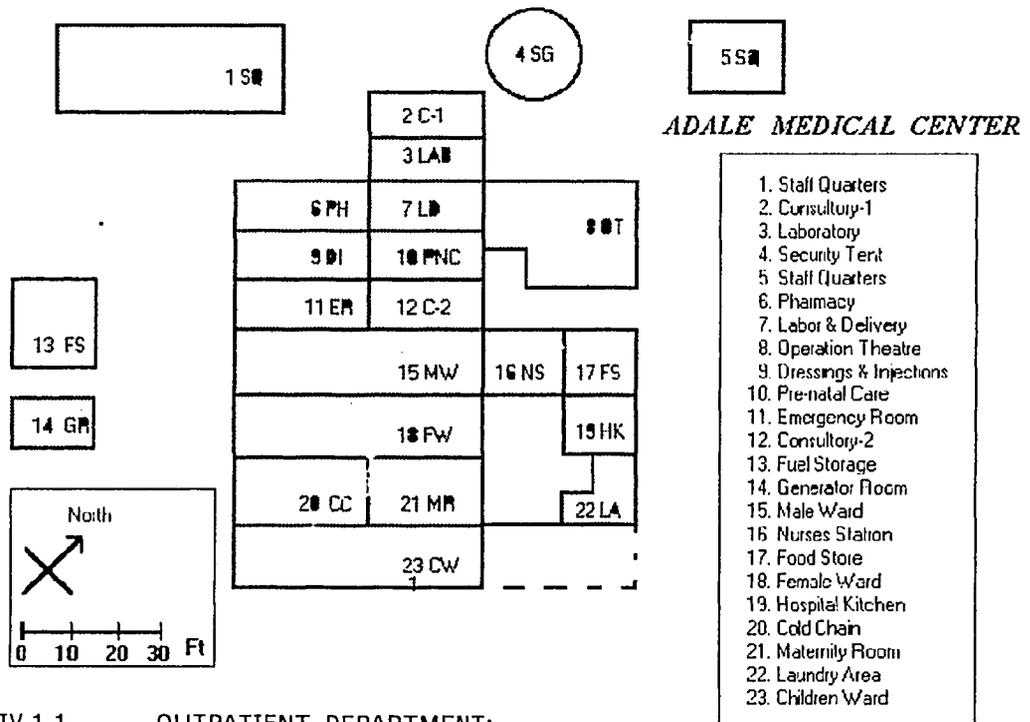
TABLE 1: Description of Services and Attention Figures

DEPARTMENT	SERVICES OFFERED	PATIENTS ATTENDED
AMC Inpatient	General Inpatient Care: 17 Beds	
	Children.... 6 beds	268
	Female..... 4 beds	116
	Male..... 5 beds	175
	Maternity... 2 beds	56
	Total	615
AMC Outpatient	General Medical Consultation	5752
	Total	5752
AMC MCH Activities	Pre-Natal Care	189
	Immunization Programs	1155
	Total	1344
AMC Emergency Room	General Medicine and Emergency Procedures	1089
	Injections and Dressings	23300
	Total	24389
AMC Specialized Attention	TB Clinic (supervised daily treatment)	
	Surgical Procedures	4740
	Ophthalmology Clinic	88
	Total	347
		5175
Health Posts	TB Clinic (supervised daily treatment)	
	Basic Health Care Consultation	33306
	Immunization Programs	23754
	Total	1472
		58532
	ADALE MEDICAL CENTER (AMC)	37453
	COMMUNITY HEALTH POSTS	58532
	GRAND TOTAL	95807

IV.1 ADALE MEDICAL CENTER (AMC).

- 2 **COMPLETE REHABILITATION OF THE ADALE HOSPITAL:**  
 With most of the former hospital staff working, the participation of other national health professionals, and the management and training skill of expatriate volunteers, the quality of health care is better than in the past.

FIGURE 1. AMC FLOOR PLAN



IV.1.1 OUTPATIENT DEPARTMENT:

The two general examination rooms (See C-1 and C-2 in above figure) attended by the medical staff have been in use since February 1993.

Daily consultation figures for the OPD yield an average of 30 patients per clinic/day.

Like in all other services of the project, women and children are given the priority. However, people of all ages are welcome for consultation. Over half of the patients consulted are children and nearly one quarter of them are women (Figure 2).

As it was to be expected, the majority of patients consulted suffered from some type of infectious disease (figure 3).

FIGURE 2

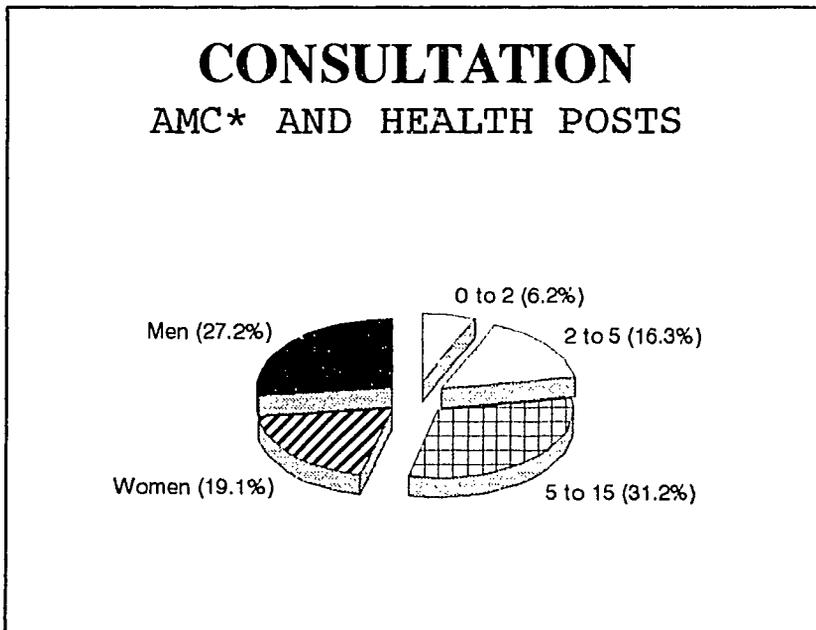
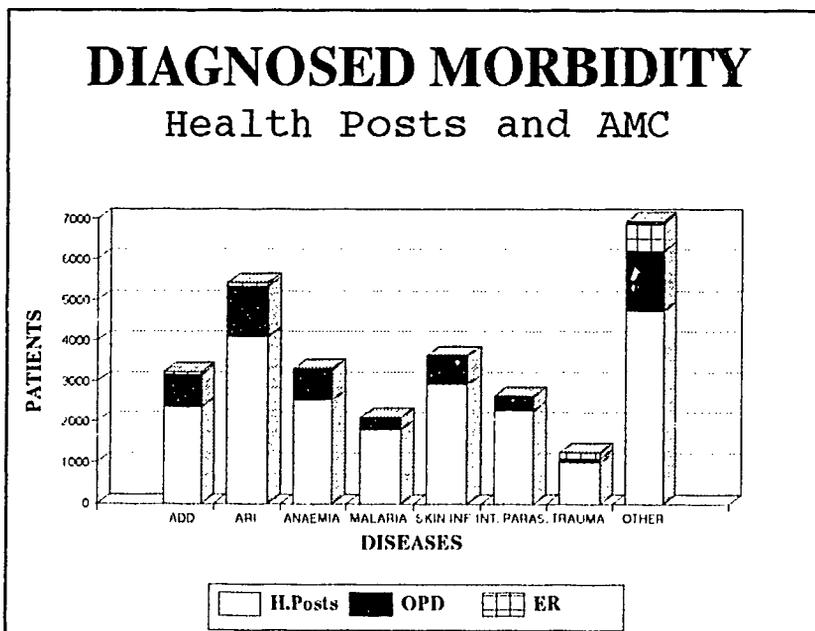


FIGURE 3



#### IV.1.2 INPATIENT DEPARTMENT:

Most of the patients admitted to the hospital came from the communities. Many were brought by the project's mobile unit team. The Community Health Workers played an essential role in finding and transferring critically ill patients to the hospital.

Two qualified nurses, one practical nurse and four nurse assistants cover the 24 Hr. shifts of the inpatient service.

TABLE 2. Most common reasons for admission.

CHILDREN		WOMEN		MEN	
Total Patients: 268		Total Patients: 175		Total Patients:161	
S.Dehydration	16.0%	Obstetrics	25.7%	Trauma	19%
Trauma	11.6%	Sev.Anaemia	12.0%	UTI	10%
Sev Pneumonia	10.8%	Trauma	7.4%	Hepatitis	9%
Skin Infect.	7.4%	UTI	6.8%	Malaria	7%
Pertussis	4.1%	Malaria	5.1%	Poisoning	6%
Malnutrition	3.7%	STD	5.1%	Skin Infect.	5%

#### REMARKS

##### CHILDREN:

- ◆ **SEVERE DEHYDRATION:** Due to Acute Diarrhoeal Disease, severe dehydration is found to be the number one cause of hospitalization in children. Over 80% were caused by viral infections and the remainder cases were due to protozoal or bacterial dysentery. Although diarrhoeal disease is also common in men and women most of such patients were managed as ambulatory.
- ◆ **TRAUMA:** Second and third degree burns in little children account for 43% of the trauma cases. Child abuse is undoubtedly an important contributing factor for these unfortunate occurrences.
- ◆ **SEVERE PNEUMONIA:** Affecting mainly infants and toddlers (62%). Poor living conditions and sudden changes in weather are the main factors.
- ◆ **PERTUSSIS:** An outbreak of whooping cough in several of the communities resulted in some serious cases that required hospitalization. Immediate control measures taken by the project staff avoided a worst crisis (See Appendix 4: "Pertussis Control Campaign Report").
- ◆ **MALNUTRITION:** Here are classified those children suffering from severe malnutrition. Various degrees of malnutrition are also the underlying cause of all the above categories.

## WOMEN:

- ◆ **OBSTETRICS:** This line includes all labor and deliveries as well as other problems during pregnancy. Several cases of abortion threat and incomplete abortion were admitted. Initially all the patients requiring dilatation and curettage were referred to Mogadishu; after the operation theater was installed, those cases were attended in the hospital.
- ◆ **SEVERE ANAEMIA:** Most of these cases were secondary to post-partum haemorrhagia in already malnourished mothers. Others were secondary to abortion.
- ◆ **TRAUMA:** Vehicle accidents, bullet wounds, second and third degree burns, and some cases as a result of married couples fights.
- ◆ **UTI:** Pyelonephritis is the main diagnosis. This problem seem to be associated to scarce water consumption and it was markedly exacerbated during the month of Ramadan.
- ◆ **MALARIA:** Most of the patients are from the satellite villages, particularly those that have water catchment reservoirs. Most of the hospitalized cases were found to be due to chloroquine resistant strains.
- ◆ **SEXUALLY TRANSMITTED DISEASE:** An unusually high number of secondary and tertiary syphilis patients have been admitted. Also patients with complications due to gonococcal infection. The laboratory is not equipped for the detection of AIDS and no cases have been reported. However there has been one male tuberculosis patient with highly suggestive symptoms of the disease. In spite of treatment this patient died.

## MEN:

- ◆ **TRAUMA:** Fire arm wounds are the main cause. Second and Third degree burns are the second. All these burns cases were not accidental but perpetrated by wives as an act of jealousy or as revenge for abuse of some kind.
- ◆ **UTI:** As in women, pyelonephritis affected men probably due to the same reason: poor water intake.
- ◆ **HEPATITIS:** Viral hepatitis type E due to contaminated water consumption, seem to be an endemic problem in this region. One patient died in the hospital due to complications of the disease. However the number of cases has decreased sharply as the sanitation has improved.
- ◆ **MALARIA:** Malignant malaria and several cases of Cerebral malaria due to chloroquine resistant strains required long inpatient stays for treatment. Fortunately only one of this patients died in the hospital as a result of the infection.
- ◆ **POISONING:** Ninety percent of these cases were due to contaminated milk from cows treated with pesticides.
- ◆ **SKIN INFECTIONS:** These patients suffered from ulcers and other infected wounds caused by thorns or other traumatic lacerations.

#### IV.1.4 EMERGENCY ROOM:

The ER was attended by one doctor, one qualified nurse and a nurse assistant and was open 24 hours a day. A group of these patients was given emergency treatment and then admitted, or referred to the outpatient clinic for follow-up.

Since most of the inpatients (as many as 85%) were admitted through the ER, the significant morbidity figures closely resembled those of the inpatient department. Data from the files of this department are analyzed together with the other ambulatory services in IV.5.

#### IV.1.5 ANCILLARY SERVICES:

IV.1.5.1 **PHARMACY:** The construction of a larger building permitted the stock and storage of a wide selection of drugs and supplies (See Appendix 5). The pharmacy satisfied the supply needs of all the hospital departments as well as the community health posts and other community programs.

Most outpatients and all of the inpatients received more than one category of medicine depending on the treatment modality. During the life of the project there was absolutely no charge for any of the drugs or services of the project.

Over \$40,000 worth of medicines and supplies were used during the project. Loss of medicines due to theft or misappropriation was insignificant, if at all. This contrasts with incidents of other projects in which losses were numerous.

IV.1.5.2. **LABORATORY:** With the introduction of this department the diagnostic capability of the different project services increased. Able to support the inpatient department and outpatient clinics, the laboratory became a pillar of the Tuberculosis control Program. ADRA/Germany donated valuable automated equipment that enhanced the laboratory capabilities.

IV.1.5.3 **HOSPITAL KITCHEN:** Before the project began, inpatients received their food from relatives and friends. Naturally, once the hospital kitchen was built and food was provided to the patients, patients' response to treatment improved markedly. The majority of children admitted to the hospital were suffering from various degrees of malnutrition, clearly as an underlying factor of their disease. There were given special high calory diets.

IV.1.5.4 **OTHER DEPARTMENTS:** The food and fuel stores were effectively managed by local staff. Laundry, maintenance and housekeepers worked under the supervision of a local Staff Manager.

#### IV.1.5.5 REFERRALS:

There were some cases beyond the capability of the AMC. Almost all of these patients were transferred to Mogadishu by the project's vehicles, to the Keysaney Hospital. On a few more critical cases a helicopter was made available by the Italian Army.

## IV.2 MCH ACTIVITIES:

The Maternal Child Health center was not installed in the AMC to avoid duplication of services provided by UNICEF and the forming Ministry of Health.

To complement the services of the above center, Immunization Activities were conducted by project staff. Also, a pre-natal clinic was established as part of the Outpatient Department.

In addition, ORT treatment was available in the AMC and in each of the Community Health Posts. CHW's were trained to recognize danger signs of dehydration and to refer serious cases. Also, training of mothers in prevention and home treatment of diarrhoea was provided by the CHW's. As a result of this strategy, there was marked decrease in the incidence of acute diarrhoeal disease.

### IV.2.1 PROGRAMS ON IMMUNIZATION:

#### 3

IMMEDIATE IMPLEMENTATION OF MEASLES VACCINATION.  
PERTUSSIS OUTBREAK RESPONSE.  
REACTIVATION OF DISTRICT EPI PROGRAM.

#### IV.2.1.1 MEASLES VACCINATION

With the initial facilitation of UNICEF, an agreement was made in cooperation with the Ministry of Health and other NGO's working in the area: CISP, WC, and MSF-Spain, to participate in a mass measles campaign to vaccinate all children between the ages of 5 months to 5 years of age. Mr. Paul Litchfield, UNICEF consultant and Dr. Abdi Kharim, Acting Minister of Health, headed the coordination effort.

ADRA/Saacid took charge of the Adale District: Adale town and 8 satellite villages; CISP conducted vaccination in El Dhere district; WC and later MSF-Spain assisted the Adan Yabal District; MSF-Spain again, assisted Jowhar; and UNICEF provided three vaccination teams to work in Mogadishu North and selected areas of the above Districts not covered by the respective Agencies.

Training of two vaccination teams made of project staff members and the initial field supervision was provided by MOH personnel.

UNICEF provided the equipment for the District Cold Chain which was then installed in the AMC. Mr. Salax Mohammed Abdalla, a local staff member, was sent to Mogadishu for special training as Cold Chain Manager.

The measles campaign began in December of 1992 and was completed in May of 1993. From this date on, measles immunization has been continued as part of the EPI.

#### IV.2.1.2 DISTRICT EPI REACTIVATION

Full EPI began with Adale in late July. For this initiative, the CHW's themselves have received training for the administration of the vaccine. Unlike the measles program, EPI in Adale District is not conducted in a campaign form by vaccination teams, but rather the establishment of permanent primary care EPI network. However, the use of temporary mass campaigns will be considered to complement the effort.

#### IV.2.1.3 RESULTS ON IMMUNIZATION ACTIVITIES

TABLE 3. IMMUNIZATION, CHILDREN:

VACCINE	AGE			TOTAL
	UNDER 1 YEAR	1 TO 5 YRS	OTHERS	
BCG	66	120	0	186
POLIO - 0	7	-	0	7
POLIO - 1	66	362	44	472
POLIO - 2	2	23	0	25
POLIO - 3	0	0	0	0
DPT - 1	66	362	44	472
DPT - 2	2	23	0	25
DPT - 3	0	0	0	0
MEASLES	67	821	1098	2026

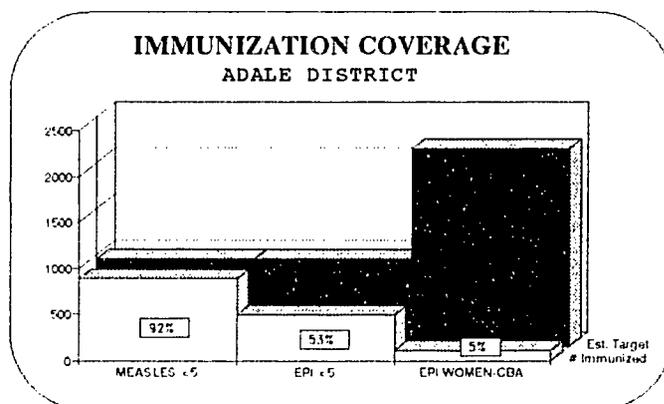
TABLE 4. IMMUNIZATION, WOMEN OF CBA:

VACCINE	VACCINATION FOR WOMEN OF CBA		TOTAL
	PREGNANT	OTHERS	
TT1	14	89	103
TT2	0	0	0
TT3	0	0	0
TT4	0	0	0
TT5	0	0	0
TOTAL TT	14	89	103

TABLE 5. EPI ESTIMATED COVERAGE:

Community	< 5 Est.Pop	EPI	Cover- age	Women of CBA	EPI	Cover- age.
Adale	380	200	52%	950	49	5%
Wargaadi	42	21	50%	80	0	0%
Mohammed Saciid	22	20	91%	50	18	36%
Ali Gudud	154	96	62%	260	13	5%
Burdaar	24	8	29%	60	0	0%
Gel Gub	53	15	28%	90	3	3%
Hagi Ali	111	34	30%	200	9	5%
Addow Ul	83	61	73%	160	10	6%
Ragga Elle	88	40	45%	300	6	2%
Total	957	494	52%	2150	108	5%

FIGURE 4.



RESULTS:

- ◆ Of the 2,026 children immunized against measles, 888 belong to the under five age bracket. With an estimated target population of 957, this represents a coverage level of 92%.
- ◆ A total of 494 (52%) of Under 5 Year Old and 108 (5%) Women of CBA were started in EPI. Whereas the EPI coverage for children is very satisfactory for an initial intervention, coverage for women of CBA appears to be low. A carefully designed strategy needs to be developed in order to raise the coverage level for TT immunization in women.
- ◆ A quick health assessment conducted by Dr. Abukar Ali Martini of UNICEF in early December, found a EPI coverage level of 53% for children under five. This corresponds with the estimated by ADRA.
- ◆ The figures given above are based on population estimates only. A population census needs to be conducted in order to have a real denominator for precise indicator calculations.

#### IV.2.2 PERTUSSIS OUTBREAK RESPONSE:

In January 1993, there was an outbreak of whooping cough in Adale and some of the villages. An immediate response to the problem was conducted. This effort avoided a worst calamity. With the initiation of EPI this kind of problem will be prevented. More details of this event are described in Appendix 6.

#### IV.3 SPECIALIZED PROGRAMS

##### IV.3.1 DISTRICT TUBERCULOSIS PROGRAM

#### 4 District TB Pilot Programme in Adale and 3 villages with smear conversion rates at 2/3 months of 90%.

**NOTE:** This program has been implemented in cooperation with the World Health Organization. WHO is perceived as the entity which has the expertise and the leadership necessary to initiate, coordinate and monitor the development of health services in the country.

##### IV.3.1.0 SITUATION OF TB CONTROL IN SOMALIA

The exact magnitude of the tuberculosis burden in Somalia is unknown in the absence of statistics relating to the disease. However, from surveys conducted in the past, it can be estimated that approximately 150 - 200 sputum smear positive patients are expected to occur for every 100,000 population in a year. Lack of a national tuberculosis programme, the absence of policy and standard guidelines for tuberculosis control, and the abuse of anti-tuberculosis drugs (which are freely available in local vendor shops, and there are no qualified national pharmacists at present in Somalia), leads to the potential danger of the emergence of multi drug resistance tuberculosis in the country. The extent of HIV infection in the community and its prevalence among TB patients in the country is unknown. However, it is expected that this problem does exist in the country, and worsening of the situation should be anticipated due to the prevailing socioeconomic conditions and breakdown of the social structure in the community as a consequence of war and displacement of populations (TB Workshop Report, WHO, Dec. 1993).

Due to the magnitude of the problem in the Adale District, the ADRA/Sacid project began a Pilot Tuberculosis Program, under the coordination of Dr. Mohamud Mohamed Ali, an AMC staff member and previous administrator of the FINNIDA Tuberculosis Programme.

The activities were conducted in the town of Adale and in 3 villages: Ali Gudud, Addo-Ul and Hagi Ali. Supervised TB treatment was given at Adale Hospital and the three Community Health Posts.

### IV.3.1.1 GENERAL ASPECTS OF THE PROGRAM

Case finding was done by passive methods, based on examination of patients who presented themselves at the AMC or one of the Health Posts.

Laboratory at the AMC provided support in the diagnosis and monitoring of patients.

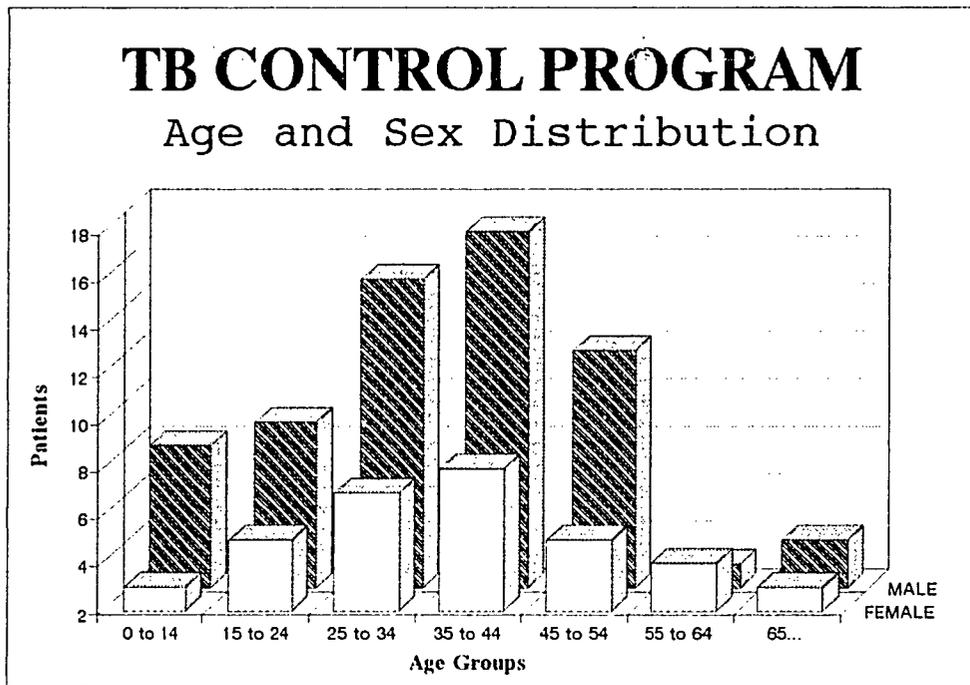
The classification of disease, chemotherapy regimens and recording and reporting system followed, conform those recommended by WHO and IUATLD.

### IV.3.1.2 DISTRICT TUBERCULOSIS REGISTER

This register contains information on all tuberculosis patients registered in the program. It helps to monitor each patient according to their disease category and regimen. (Appendix 7A).

A total of 103 patients were registered during the period of January 14 to November 19, 1993. The combined quarterly report (Appendix 7B) presents the following data: There were 11 children and 92 Adults. Females accounted for 32% of the patients and male TB patients were 68% of the total. The classification of disease was: 81% Pulmonary and 19% Extrapulmonary. There were 88 new cases and 15 relapses.

FIGURE 5.

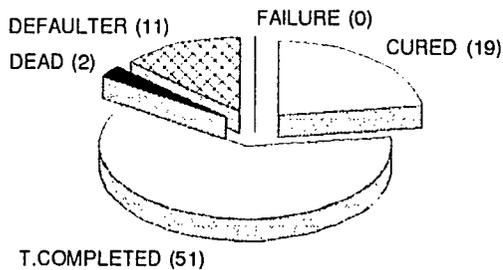


#### IV.3.1.3 PROGRAM RESULTS:

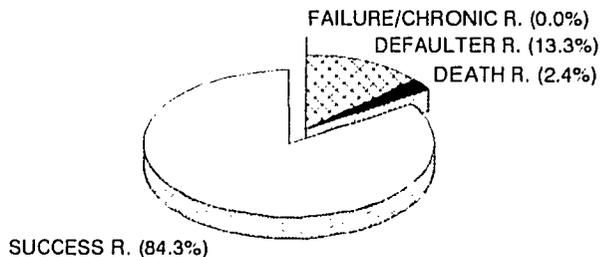
By the end of November 1993, 83 of the 103 TB patients registered had stopped the treatment. The following results were obtained:

FIGURE 6.

## TB Control Program RESULTS OF THERAPY



### RESULT RATES



Over half of the defaulters were classified as extrapulmonary and had completed an average of 2 months of treatment prior to abandoning the program. The remaining 5 were pulmonary TB cases. Two of these patients had negative smear results prior to stopping the treatment.

The deaths indicated above occurred in very severely ill patients within the first few days of diagnosis.

A smear conversion at 2/3 months after treatment of 90% and a success rate of 84%, renders the pilot program very satisfactory.

The success of the Adale program is due to:

- ◆ Passive case finding.
- ◆ Reliable laboratory services.
- ◆ Drug intake was supervised by health workers daily.
- ◆ Continuous drug supply was ensured.
- ◆ Cure of patients enhanced confidence in the community and increased the credibility of the programme.
- ◆ Participation of Somali professionals in the coordination.
- ◆ Opportune orientation and advice by WHO personnel.
- ◆ Excellent logistic support by the SCP.

## IV.3.2 SURGICAL INTERVENTIONS:

- 5 Installation of a Surgical Theater saved additional lives and restore the health of many patients.

### IV.3.2.1 INSTALLATION OF THE SURGICAL THEATER:

During the month of August with the direct support of ADRA Headquarters the Operation Theater of the AMC was installed and fully equipped. It consists of one surgery suite, a minor procedures suite, sterilization chamber, supplies room, dressing enclosures, and a sludge area.

During that time, a list of patients that had long been waiting for surgical treatment was prepared. The condition of this patients was assessed and pre-surgical treatment began with the support of Dr. Mahamoud Ahmed Jimale, the chief surgeon of Key Saney Hospital in Mogadishu.

### IV.3.2.2 OBJECTIVES OF THE SURGICAL PROGRAM:

The main objectives of the Surgical Program were these:

- ◆ The installation of a fully equipped surgery theater.
- ◆ To begin with an emergency and elective surgery campaign.
- ◆ To continue with routinely programmed surgical interventions.
- ◆ To train local staff in surgical attention.
- ◆ To enable future campaigns of specialized nature.

### IV.3.2.3 INITIAL SURGERY PHASE:

Dr. Ruben Urrejolas, a Chilean surgeon specialized in cancer surgery arrived early in September. He directed the initial surgery activities conducted in a campaign mode. From Kendu Bay Adventist Hospital, Dr. Erastus Odera, surgery specialist, and Dr. John Mokka, anesthetist, were also part of the visiting team.

During the initial intensive phase, interventions ranged from relatively simple minor surgery, such as foreign body excision and sebaceous cyst resection, to very complicated major interventions such as thyroidectomy and abdominal grand-surgery.

During this initial phase also a number of severely injured patients were attended. Among them were 36 year old lady with a total skull scalp and a young man with a deep shoulder laceration and exposed arm fracture.

### IV.3.2.4 CONTINUATION PHASE OF SURGERY:

Following that initial period, a number of traumatologic and obstetric cases have been attended in the surgery room with the use of local and general anesthesia.

TABLE 6. SURGERY PERFORMED AT THE AMC:

Type of Surgery	Initial Phase	Continuation Phase	Total
Head and Neck	4	1	5
Abdominal	4	0	4
OBS-GYN	2	10	12
Traumatic	6	17	23
Skin Conditions	12	5	17
Plastic Surgery	6	0	6
Burn Debridement	0	12	12
Other	7	2	9
<b>Total</b>	<b>41</b>	<b>47</b>	<b>88</b>

IV.3.2.5 FOLLOW UP:

The surgical activities were started successfully attending 41 patients on the initial phase and 47 on the continuation phase for a total of 88 patients.

Plans are underway for new interventions of specialized surgery utilizing the surgical facilities to serve populations even outside the hospital catchment area. These include:

- ◆ **Eye Surgery:** To treat blindness primarily due to complications of infectious disease.
- ◆ **Plastic and Reconstructive Surgery:** Intended for those with disabling war related conditions.
- ◆ **Gynecological Surgery:** Surgery particularly aimed for women with longstanding debilitating ailment.

IV.3.3 EYE CLINIC AND NEEDS ASSESSMENT ON OPHTHALMIC CARE:

A Needs Assessment and Eye Clinic was conducted by Isaaq Nuur Ibrahim, former CBM Project Manager to determine the extent of the eye disease problem in the District and to detect conditions that are surgically treatable.

The recommendations from the study were as follows:

- ◆ A campaign to detect and treat Syphilis to avoid ophthalmic complications.
- ◆ Include primary eye care as part of PHC activities.
- ◆ Conduct a mass eye operation for 70 cataract patients.
- ◆ Obtain an adequate supply of eye medicines.
- ◆ Add a second operating table for the eye surgery campaign.

(SPECIALIZED CARE: EYE CLINIC, CONT.)

As a result of the study, an agreement has been made between ADRA and CBM officials based in Kenya has been made to conduct an "Eye Camp" (mass eye surgery campaign) in the month of March 1993. This activity will include the training of a local health worker to make early diagnosis and prevention of eye conditions that can cause blindness. This may result in the installation of the primary eye care program in the District.

#### IV.4 COMMUNITY BASED HEALTH CARE

##### IV.4.1 THE COMMUNITY HEALTH WORKER

The concept of the Community Health Worker is not new to Somalis. Three of the eight satellite villages already had a worker with basic knowledge of primary health care. In those that did not had a previous health worker, was left to the community to choose the person responsible for this task. This was done in order to encourage community participation from the beginning.

Of the five villages that had no previous workers, four of them chose male workers. One village, Raga Elle, chose a female worker which has been one of the most outstanding of the Health Post Leaders (See Health Post Leaders in Appendix 8).

The CHW's responsibility has been to provide primary health care and training to children, mothers and other fellow villagers.

##### IV.4.1.1 TRAINING PRIORITIES

To address the number one problem of children morbidity and mortality priority was given to the training on the control of acute diarrhoeal disease. In addition, instruction was given for the diagnosis and treatment of malaria and intestinal parasitosis. Other problems were discussed in a more general manner.

The training curriculum included the following aspects:

- ◆ Recognition of danger signs in patients suffering from acute diarrhoea.
- ◆ Principles of ORT and prevention of dehydration.
- ◆ Aspects of prevention of diarrhoeal disease.
- ◆ Diagnosis and treatment of malaria.
- ◆ Diagnosis and care of the child infected with measles.
- ◆ Symptoms and Treatment of intestinal parasitic infestation.
- ◆ Basic techniques of First Aid Attention.

#### IV.4.1.2 OTHER TRAINING:

In addition to the above topics, all Health Post Leaders received training on Immunization activities. In EPI they are in charge of all vaccinations under the supervision of the Field Nurse.

Three of the VHW's were also trained in supervised Tuberculosis treatment and patient follow up.

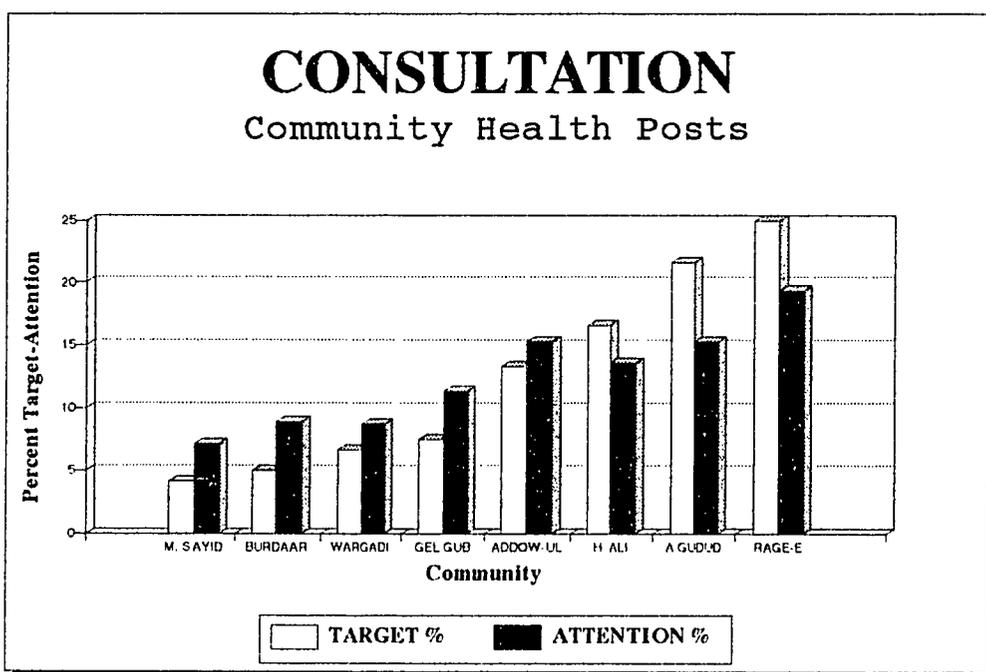
#### IV.4.2 THE COMMUNITY HEALTH POST:

The simple facility and basic furniture was made available by the communities as their contribution to the program. The medicines equipment and supplies, as well as training and supervision to the VHW's, were provided by the project.

The health posts have opened for consultation during the morning and late afternoon hours for regular visits. The worker has been available at all other times to care for emergencies.

When the complexity of disease is beyond her or his scope of work, the VHW referred the case to the Mobile team nurse, or doctor who visited them regularly. If the ailment was so severe that it required immediate attention, the worker mobilized whatever community resources were available in order to transfer the patient to the AMC. Countless lives were spared thanks to the combined efforts of health workers and mobile team.

FIGURE 7.



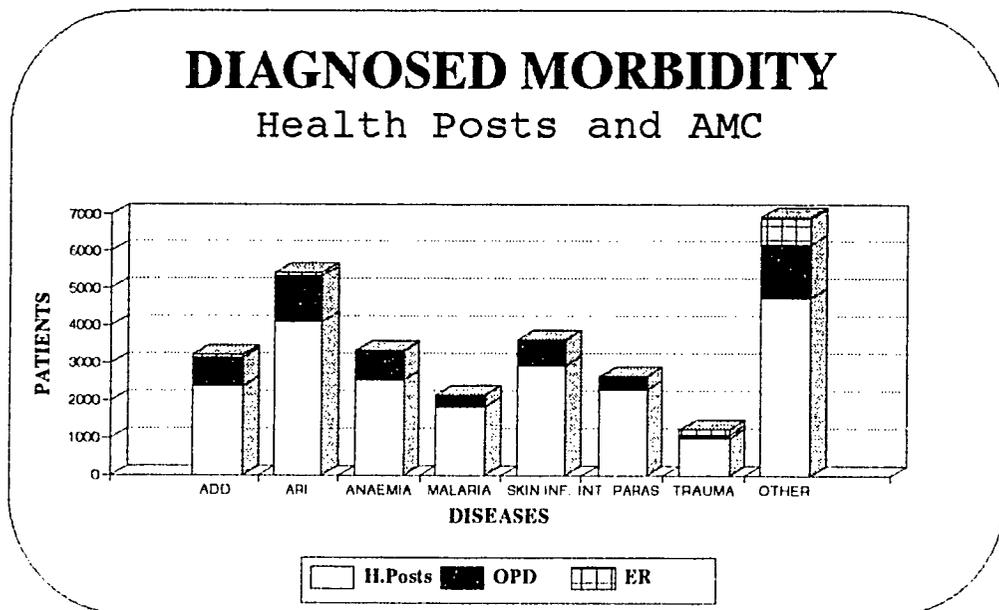
IV.4.2.1 SERVICE PERFORMANCE:

A total of 33,306 patients were attended at the eight community health posts. As it was previously pointed out in IV.1.1 and Figure 2, three out of every four patients attended were children or women. A large number of this patients belonged to nomad families living in areas surrounding the communities. Many of them walked long hours to reach the community health posts. In many instances it was the man of the family who reached the posts looking for help for their ill women or children left at home.

Figure 7 attempts to demonstrate the service performance of the health posts in relationship with the estimated population size of each community (called target %). The figures are percent expressions of the total service number: 33,306 patients. It can be observed that most of the health posts have a service average that surpasses the expected target percent. The last three communities did not reach the expected target percent. However, the estimated number of population for those communities is almost double, or even triple, than that of the other ones. Considering the amount of time and effort needed to reach that level of attention, the results remain quite satisfactory. If other service factors are also considered in the analysis, the communities of Addow-Ul, Ragga-Elle and Mohamed Sayid deserve a special mention for their outstanding performance.

IV.4.3 EPIDEMIOLOGY AND MORBIDITY STATISTICS

FIGURE 8.



In section IV.1.2 there is a detailed discussion of most common diagnosis for children, women and men done at the AMC. Much of what has been said in that section applies to the disease categories seen in Figure 8.

The most notorious difference is the order of importance of each category. Acute Respiratory Infections and Skin Infections are at the top of the list as the two most frequently diagnosed problems. They are followed by Acute Diarrhoea and Malaria.

Acute Respiratory Illness include all viral and bacterial infections that affect the respiratory tract. The majority are simple coughs and colds but bronchitis and pneumonia are included as well.

Skin Infections are common in all ages due to contaminated insect bites, mainly infected scabies. Another common insect that causes those stubborn lesions are sand flies, quite abundant in the area.

Although these two disease categories are common cause of illness, a small percentage of them can result in death. Acute diarrhoeal infections, on the other hand, affecting primarily children, often complicate and lead to severe dehydration or even death.

Infant mortality rates of 270 for children under one year of age, and above 800 for under fives were obtained during the Pertussis survey study done at the beginning of the project (see Appendix 6). Of the deaths reported, 76% were caused by a complication of diarrhoea. This was the main reason of making the control of diarrhoeal disease the priority intervention in this project.

The following diagrams show the curves of the six most common infectious disease problems plotted along the course of the project period.

Figure 9 presents the detailed month by month changes. Figure 10 is a summarized diagram showing initial, mid-term and final morbidity data. Although definitive conclusions cannot be drawn due to the relatively short duration of the study, important changes can be measured.

The positive changes consist in a 71% reduction of acute diarrhoeal disease and a 30% decrease of intestinal parasitic infections. The incidence of malaria and anaemia have also declined markedly. Since the impact can be important in reducing mortality figures, this activities will continued to be emphasized.

In contrast, a 45% increase in respiratory infections and 41% in skin lesions can be observed. This is a problem that will need to be address in the near future.

Summarizing the above results, a net decrease of 8% in overall morbidity, during the duration of the project, may lead to an important reduction of the infant mortality rates and improvement of the overall health status of the population. Naturally, it will be necessary to follow-up all of these strategies and emphasize on prevention to experience a more sustained impact.

FIGURE 9.

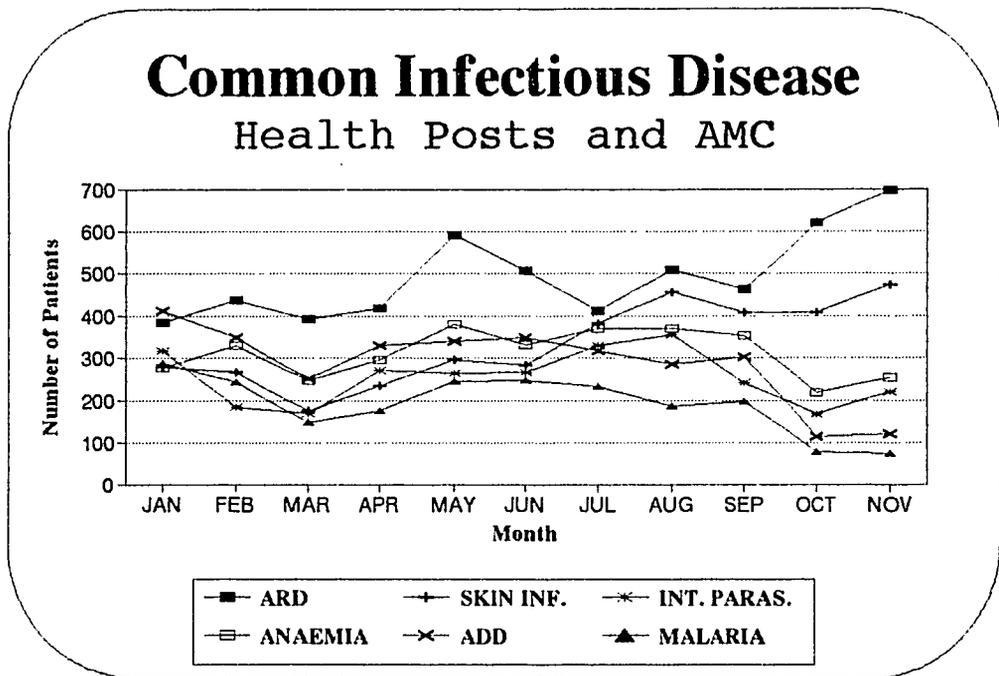
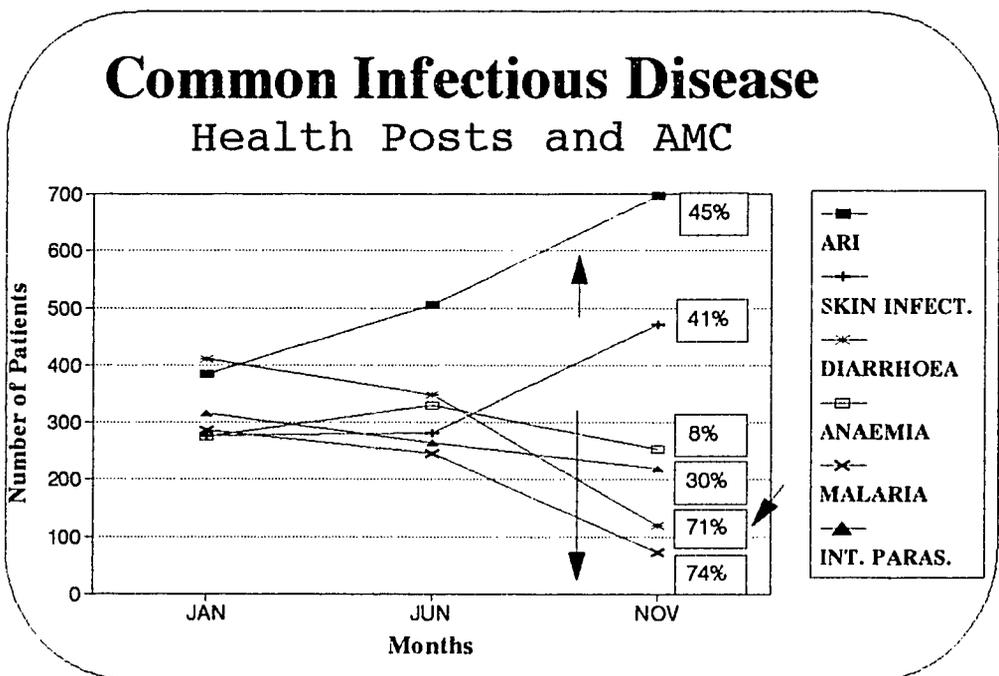


FIGURE 10.



## **IV.5 PROJECT CONSTRAINS**

### **IV.5.1 SECURITY THREAT:**

Although the District of Adale can be considered relatively safe, the conditions of the zone have repeatedly been quite short of ideal.

In the town of Adale, early in the project, the threat of bandits attacks on the AMC mobilized the hole community to defend the hospital. At that time, UN troops were just beginning to move into Somalia.

Later, a violent dispute between subclans of the area posed a threat serious enough to consider total evacuation. After several days of much uncertainty, the problem was resolved and no more bloodshed was necessary.

Several of the Health Posts located towards the southwestern corner of the district, lacked adequate support and medicines for some time due to the high incidence of casualties in that particular area. Even military troops were discouraged from circulating through those roads. To this effect, all the communities have been warned repeatedly to help ensure the security of the area lest the project withdraw its support.

In early June, after the killing of the UN Pakistani troops, all expatriate staff were forced to abandon the country and remain out during that month. All expatriate volunteers return to their positions before the situation could be consider calm.

In September 25, 1993, the US Department of State released a public announcement warning US citizens to defer all travel to Somalia due to kidnap threats by Aided people. ADRA's US volunteers remained in Somalia in spite of the threat.

### **IV.5.2 LOGISTICS:**

Road trips have always been a very risky operation. Transportation of materials and supplies into the country and to the project site has been a major task. Military troops have provided logistical support and some improvement in the security of the zone. But the risks continue to be high.

Although the lives of expatriate workers have been spared, several somali staff have been wounded or killed in clashes with the bandits along the roads.

### **IV.5.3 CONTINUITY:**

In spite of the many constrains, the emergency relief project team has been able to deliver uninterrupted services to the district's population. This has been possible, to great measure, thanks to the partnership with Saacid, which has provided the local manpower to continue the operations even in the most adverse circumstances. Also the determination of the expatriate and somali staff to provide services without interruption.

## V OTHER PROJECT ASPECTS:

### V.1 PROJECT COORDINATION

#### V.1.1 THE NEED FOR COORDINATED EFFORTS:

The delicate situation in Somalia has encouraged ADRA and its local partner, Saacid, to keep close coordination with the different organizations working in the area. There have been a number of instances in which mutual cooperation between ADRA and other agencies has enabled the effective continuation of support.

#### V.1.2 MINISTRY OF HEALTH:

Although there is no official institution recognized as Ministry of Health in Somalia, special efforts were made to maintain close coordination with the forming MOH in Mogadishu North. One good example of cooperation was the Mass Measles Campaign in which all the agencies participated in coordination with UNICEF-MOH.

Although it will take some time before the national reconciliation results in a proper Ministry of Health, ADRA/Saacid's project has made a very significant contribution to the establishment of an operational health network in Adale and other neighbor districts in Middle Shabelle.

#### V.1.3 UN AGENCIES:

##### V.1.3.1 UNICEF:

Joint efforts with this agency made possible the installation of the District's Cold Chain and the implementation of immunization activities. The initial supplies for five of the community health posts were donated by UNICEF.

Future more solid links with UNICEF are highly desirable for an effective implementation of MCH activities.

##### V.1.3.2 WORLD HEALTH ORGANIZATION (WHO):

This agency provided the project with very significant material and technical support. The District Tuberculosis Control Programme was possible thanks to the combined efforts of ADRA/Saacid, WHO and the PSF supported Somali Central Pharmacy. (See Appendix 7D).

Other programs, such as the ADD, ARI and Malaria control are also being implemented with various degrees of cooperation with WHO.

##### V.1.3.3 UNOSOM MILITARY:

Significant logistical support was provided by the Italian Armed Forces at the beginning of the project. Also they made contributions of food and medical supplies. Food convoys were made available by the Italian and Pakistani Troops.

**V.1.2 OTHER NGO'S:**

ADRA/Saacid has been registered in the NGO Consortium since this entity began its activities in the beginning of 1993. This association has proven useful to the project for more effective coordination among NGO's.

MSF-Spain working in a neighbor district maintained useful mutual relations with ADRA/Saacid. This resulted in material, as well as moral support. Other agencies such as ICRC, World Concern, IMC, and AMREF contributed in different manners to the successful implementation of the project.

**V.1.3 OTHER ADRA PROJECTS:**

**V.1.3.1 ADRA/KENYA:**

Provided important logistical and administrative support, particularly during the initial stages of the project.

**V.1.3.2 WATER YARDS PROJECT:**

During the duration of the project, ADRA was simultaneously implementing a sanitation project. This consisted in the perforation and rehabilitating Wells in the district of Adale with USAID/OFDA funding. Of the ten villages in the Adale district, five have already had improvements on their water systems. Distributions points have been set up; water troughs have been constructed for livestock; other wells have been cleaned and rehabilitated; and, where necessary, new pumps have been installed. In the remaining five villages, work is still in progress to improve their water systems.

The availability of clean water supplies is beginning to have a strong impact in the incidence of infectious disease in the District's population.

**V.1.3.3 CLOTHING DISTRIBUTION:**

ADRA International, through its local donor source, donated a total of 5 Containers of Clothing to ADRA Somalia during the life of this project. Bails and boxes of clothes were distributed in all the villages of the district. Large number of boxes contained exclusively children clothes. In addition to the finished clothes several dozens of rolls of fabric were used to manufacture "somali styled" women clothing. This clothes were manufactured by seamstress from the Adale communities.

**VI PROJECT FINANCIAL REPORT**

(PLEASE, REFER TO ATTACHED PROJECT FINANCIAL REPORT.)

**VII PROJECT EVALUATION**

(PLEASE, REFER TO EXTERNAL PROJECT EVALUATION REPORT.)

# APPENDICES

## **APPENDIX 1:**

### **◆ Project Time Line**

Activity	Months	1992				1993												1994		
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	
Beginning of ADRA services in Adale *		♦																		
Award of OFDA Grant #0		✓				♦														
Renovations MCH, Pharmacy and OPD *						♦														
Initiation of MCH Services							♦													
Mass Measles Campaign #0						♦														
Training of Health Post Workers c						✓	✓		♦											
Health Posts in Operation 0							♦													
Begin Inpatient Services *							♦													
District Tuberculosis Control Prog#0							o													
Expanded Programme on Immunization#0																				
Major Surgery Services *																				
Ophthalmic Care Campaign #0																				
EOP Evaluation #0																				
Audit and Final Report																				
						Period of Activity (Original)						Extension								
Period of Activity (Amended)																				

\* Adale Hospital

♦ Projected

0 Community Health Posts

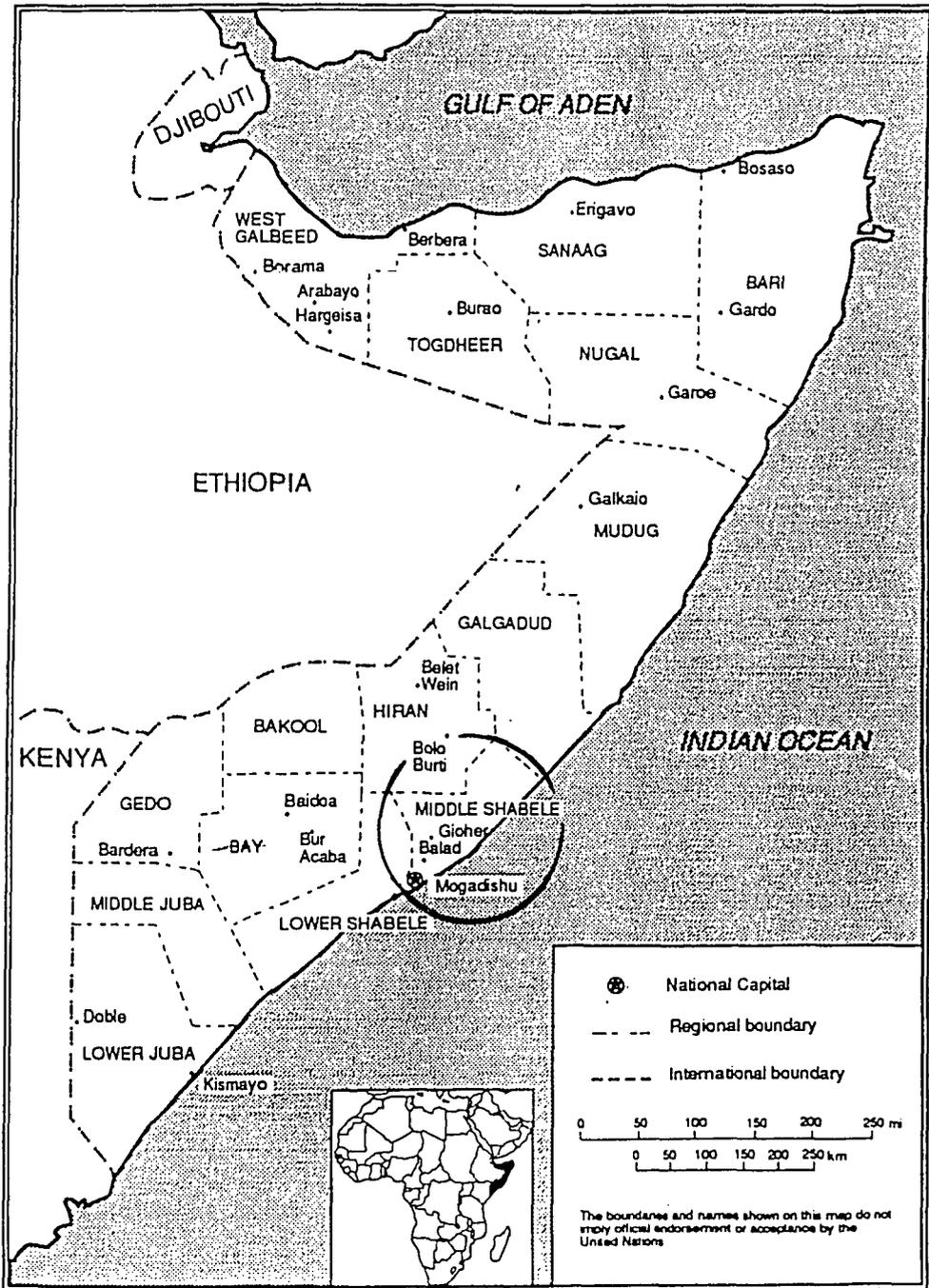
o Not Projected

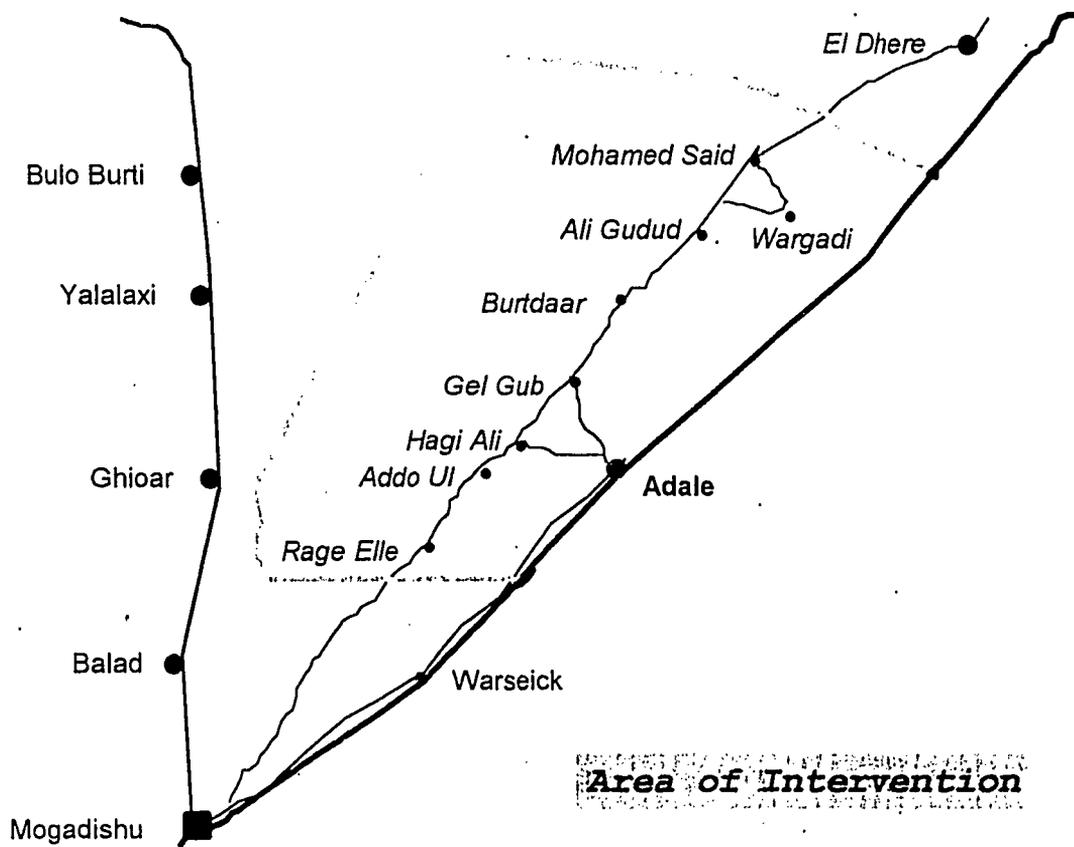
✓ Actual Implementation

## APPENDIX 2:

- ◆ Country Map
- ◆ Area of Intervention

# SOMALIA





## **APPENDIX 3:**

- ◆ Activity Report – H Posts**
- ◆ Activity Report – AMC-OPD**
- ◆ Activity Report – AMC-ER**
- ◆ Activity Report – AMC-IPD**



MONTHLY ACTIVITY REPORT  
WARBIXIN BILEEDKA

UNIT

HEALTH POSTS - TOTAL\*

MONTH

SUMMARY: JANUARY - NOVEMBER

YEAR

1993

	0-2 years		2-5 years		5-15 years		ADULTS		TOTAL		%	
	M	F	M	F	M	F	M	F	M	F	M	F
DIARRHOEA	56	91	226	237	329	339	192	167	803	834	49	51
BLOODY DIARRHOEA	8	12	25	31	123	149	215	160	371	352	51	49
RESP. TRACT INF.	145	151	389	330	678	620	885	611	2097	1712	55	45
PNEUMONIA	15	26	36	43	69	44	27	16	147	129	53	47
JAUNDICE	2	0	3	8	70	87	202	132	277	227	55	45
ANAEMIA	66	116	262	280	460	436	490	426	1278	1258	50	50
MALARIA	9	12	71	119	320	286	532	470	932	887	51	49
EYE INFECTION	12	7	8	8	64	83	159	120	243	218	53	47
SKIN INFECTION	57	92	259	244	622	474	701	491	1639	1301	56	44
WORMS	74	135	310	297	497	422	328	220	1209	1074	53	47
MALNUTRITION	0	0	0	1	1	0	0	0	1	1	50	50
MEASLES	8	14	38	49	43	48	2	2	91	113	45	55
BILHARZIA	0	0	2	3	0	0	0	2	2	5	29	71
NEONATAL TETANUS	0	0	0	0	0	0	0	0	0	0	0	0
URINARY TRACT INF	0	0	4	6	71	101	363	290	438	397	52	48
SEXUALLY TRANS D	0	1	1	0	0	21	234	164	235	186	56	44
TUBERCULOSIS	0	0	0	0	1	2	16	8	17	10	63	37
TRAUMA	15	10	60	47	197	132	382	152	654	341	66	34
OTHERS	26	36	85	93	283	215	943	585	1337	929	59	41
TOTAL	493	703	1779	1796	3828	3459	5671	4016	11771	9974	54	46

\* Morbidity data for the Community of Gel Gub are not included on this table. Please, refer to the text for explanation.



EMERGENCY MEDICAL PROJECT FOR MIDDLE SHABELE  
MONTHLY ACTIVITY REPORT  
WARBIXIN BILEEDKA

UNIT

AMC-OUTPATIENT

MONTH

SUMMARY: JANUARY - NOVEMBER

YEAR

1993

	0-2 years		2-5 years		5-15 years		ADULTS		TOTAL		%	
	M	F	M	F	M	F	M	F	M	F	M	F
DIARRHOEA	34	51	83	101	108	91	143	39	368	282	57	43
BLOODY DIARRHOEA	1	0	0	3	36	20	58	34	95	57	63	37
RESP. TRACT INF.	64	54	111	92	194	145	217	155	586	446	57	43
PNEUMONIA	21	21	44	49	26	38	9	7	100	115	47	53
EAR INFECTION	7	6	36	25	47	26	8	5	98	62	62	38
JAUNDICE	1	0	0	0	4	30	80	57	85	87	49	51
ANAEMIA	40	40	75	61	125	107	166	160	406	368	58	42
MALARIA	0	0	13	20	60	44	103	71	176	135	57	43
EYE INFECTION	0	1	12	17	41	30	76	55	129	103	56	44
SKIN INFECTION	28	43	68	62	120	119	144	114	360	338	52	48
WORMS	26	26	71	59	70	54	28	24	195	163	54	46
MALNUTRITION	7	19	23	10	2	3	0	0	32	32	50	32
MEASLES	5	4	11	14	1	0	0	0	17	18	49	51
WHOOPING COUGH	9	15	18	19	0	0	0	0	27	34	44	56
TETANUS	0	0	0	0	0	0	0	0	0	0	-	-
BILHARZIA	0	0	0	0	0	0	0	0	0	0	-	-
URINARY TRACT INF	0	0	1	0	16	15	115	92	132	107	55	45
SEXUALLY TRANS D	0	0	0	0	0	0	48	29	48	29	62	38
TUBERCULOSIS	0	0	0	0	3	0	11	1	14	1	93	7
POISONING	0	0	0	0	0	0	0	0	0	0	-	-
BURNS	0	1	1	0	0	1	0	0	1	2	33	67
OTHER TRAUMA	0	0	23	22	26	18	12	3	61	43	59	41
OBSTETRIC	0	0	0	0	0	1	0	1	0	2	0	100
OTHERS	6	4	4	4	31	31	201	117	242	156	61	39
<b>TOTAL</b>	<b>249</b>	<b>285</b>	<b>594</b>	<b>558</b>	<b>910</b>	<b>773</b>	<b>1419</b>	<b>964</b>	<b>3172</b>	<b>2580</b>	<b>45</b>	<b>55</b>



EMERGENCY MEDICAL PROJECT FOR MIDDLE SHABELE  
MONTHLY ACTIVITY REPORT  
WARBIXIN BILEEDKA

UNIT

AMC-EMERGENCY

MONTH

SUMMARY: APRIL - NOVEMBER

YEAR

1993

	0-2 years		2-5 years		5-15 years		ADULTS		TOTAL		%	
	M	F	M	F	M	F	M	F	M	F	M	F
DIARRHOEA	9	11	11	3	6	7	1	5	27	26	51	49
BLOODY DIARRHOEA	0	0	0	1	2	2	6	4	8	7	53	47
RESP. TRACT INF.	11	14	15	10	3	6	12	1	41	31	57	43
PNEUMONIA	8	4	0	1	4	2	0	1	12	8	60	40
EAR INFECTION	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	0	0	0	0	0	0	0	0	0	0	0	0
ANAEMIA	1	3	2	0	7	5	10	3	20	11	65	35
MALARIA	0	0	0	2	0	3	9	2	9	7	56	44
EYE INFECTION	1	0	0	0	0	0	1	1	2	1	67	33
SKIN INFECTION	0	0	1	1	0	3	4	1	5	5	50	50
WORMS	0	0	1	0	1	1	1	1	3	2	60	40
MALNUTRITION	0	0	1	0	0	0	0	0	1	0	100	0
MEASLES	0	0	0	0	0	0	0	0	0	0	0	0
WHOOPING COUGH	1	2	1	0	2	0	0	0	4	2	67	33
TETANUS	1	0	0	0	0	0	0	0	1	0	100	0
BILHARZIA	0	0	0	0	0	0	1	0	1	0	100	0
URINARY TRACT INF	0	0	1	1	5	2	20	3	26	6	81	19
SEXUALLY TRANS D	0	0	0	0	0	0	1	1	1	1	50	50
TUBERCULOSIS	0	0	0	0	0	0	7	0	7	0	100	0
POISONING	2	1	0	2	1	2	1	0	4	5	44	56
BURNS	0	0	1	0	0	1	2	0	3	1	75	25
OTHER TRAUMA	3	5	28	23	31	19	35	18	97	65	60	40
OBSTETRIC	0	0	0	0	0	0	0	56	0	56	0	100
OTHERS	34	16	31	34	34	44	233	157	332	251	57	43
TOTAL	71	56	93	78	96	97	344	254	604	485	55	45



EMERGENCY MEDICAL PROJECT FOR MIDDLE SHABELE  
MONTHLY ACTIVITY REPORT  
WARBIXIN BILEEDKA

UNIT

AMC-INPATIENT

MONTH

SUMMARY: MAY - NOVEMBER

YEAR

1993

	0-2 years		2-5 years		5-15 years		ADULTS		TOTAL		%	
	M	F	M	F	M	F	M	F	M	F	M	F
DIARRHOEA	7	9	8	2	5	4	1	5	21	20	51	49
BLOODY DIARRHOEA	2	1	0	1	2	2	5	4	9	8	53	47
RESP. TRACT INF.	2	5	3	1	0	0	2	0	7	6	54	46
PNEUMONIA	11	5	6	3	4	2	3	1	24	11	69	31
EAR INFECTION	0	2	1	0	0	0	0	0	1	2	33	66
JAUNDICE	2	1	1	0	3	1	15	6	21	8	73	27
ANAEMIA	1	2	1	0	1	8	6	21	9	31	23	77
MALARIA	0	0	3	0	4	2	14	9	21	11	32	68
EYE INFECTION	0	0	0	0	0	0	1	0	1	0	100	0
SKIN INFECTION	3	5	2	1	2	7	8	3	15	16	48	52
WORMS	0	1	3	1	0	0	0	0	3	2	60	40
MALNUTRITION	1	2	5	1	1	0	2	3	9	6	60	40
MEASLES	3	2	1	2	0	0	0	0	4	4	50	50
WHOOPING COUGH	2	4	8	5	1	2	0	0	11	11	50	50
TETANUS	1	0	0	0	0	0	2	0	3	0	100	0
BILHARZIA	0	0	0	0	0	0	1	0	1	0	100	0
URINARY TRACT INF	0	0	1	0	2	1	16	12	19	13	59	41
SEXUALLY TRANS D	0	0	0	0	0	0	4	9	4	9	31	69
TUBERCULOSIS	1	0	0	1	2	0	5	3	8	4	67	33
POISONING	1	2	3	1	4	1	9	2	17	6	74	26
BURNS	3	2	5	2	1	0	9	1	18	5	78	22
OTHER TRAUMA	2	1	3	0	8	4	21	12	34	17	67	33
OBSTETRIC	0	0	0	0	0	2	0	45	0	47	0	100
OTHERS	9	9	8	2	2	1	37	39	40	14	74	26
TOTAL	51	53	62	23	42	37	161	175	316	288	52	48

## **APPENDIX 4:**

- ◆ Inpatient Chart - Front 1**
- ◆ Inpatient Chart - Front 2**
- ◆ Inpatient Chart - Front 3**

GENERAL CHART

ADDRESS

OCCUPATION

RELIGION

TRIBE

DATE ADM.

TIME

ADM. BY

DATE DISCH.

WARD

ROOM

BED No.

CLOTHES No.

NAME

AGE

SEX

O.P. No.	DATE																								
	DAY IN HOSP.	a.m.		p.m.																					
160 (105.8) 41 C	P. T.																								
140 (104) 40 C																									
120 (102.2) 39 C																									
100 (100.4) 38 C																									
80 (98.6) 37 C																									
60 (96.8) 36 C																									
40 (95) 35 C																									
HOSP. No.	Stool,																								
	Urine,																								
	Emesis,																								
	B. P.,																								
	Resp																								
Bath																									
Weight																									

**HISTORY**

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**PHYSICAL**

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IMPRESSION:

FINAL DIAGNOSIS:

# LABORATORY REPORT SHEET

**NAME** \_\_\_\_\_ **HOSP. No.** \_\_\_\_\_

HEMATOLOGY							Unit Charge	Total Charge
DATE						@		
BF								
HGB								
WBC								
RBC								
DIFF								
PCV								
ESR								
PLATELET								
RETICULO								
VDRL								

URINALYSIS							
DATE							
S & A							
S.G. & pH							
MICRO							

STOOL							
DATE							

CHEMISTRY							
DATE							

MISCELLANEOUS							
DATE							

*391*









## **APPENDIX 5:**

### **◆ Drug Supply-X-Reference**

A.V.M. Syrup (see METACLOPRAMIDE)  
ACICLOVIR  
Actifed (see PSEUDOEPHEDRINE + TRIPROLIDINE)  
ADRENALINE  
Advil (see IBUPROFEN)  
ALBUTEROL  
ALLOPURINOL  
Alprim (see SULPHAMETHOXAZOLE + TRIMETHOPRIM)  
AMILORIDE + HYDROCHLOROTHIAZIDE  
AMINOPHYLLINE  
AMITRIPTYLINE  
Amolin (see AMOXYCILLIN)  
AMOXYCILLIN  
AMPICILLIN  
Ampycin (see AMPYCILLIN)  
Analgesic Ear Solution  
Analgin  
Antifungal Lotion - Red  
Antiscabbia (DDT mixture)  
Apo-Propranolol (see PROPRANOLOL)  
Apresoline (see HYDRALAZINE)  
ASCORBIC ACID  
Ascriptin A/D (see ASPIRIN)  
Aspegic (see ASPIRIN)  
ASPIRIN  
Benemid (see PROBENECID)  
Bengué's Balsam  
BENZYL BENZOATE  
BENZYL PENICILLIN SODIUM  
Betadine (see POVIDONE-IODINE)  
Biltricide (see PRAZIQUANTEL)  
Bimixin (see NEOMYCIN + BACITRACIN)  
BISACODYL  
Bivinal (see Vitamin B Complex)  
BUPIVACAINE  
Buscopan (see HYOSCINE)  
Calamine Lotion  
Calcigard-10 (see NIFEDIPINE)  
CALCIUM GLUCONATE  
Capoten (see CAPTOPRIL)  
CAPTOPRIL  
CARBIMAZOLE  
Cetridine Forte (see CETRIMIDE + CHLORHEXIDINE)  
CETRIMIDE + CHLORHEXIDINE  
Chinino Composto (see QUININE + PARACETAMOL + CAFEINE)  
CHLORAMPHENICOL  
CHLORHEXIDINE GLUCONATE  
Chlorimide (see CETRIMIDE + CHLORHEXIDINE)  
CHLOROQUINE  
CHLORPHENIRAMINE  
CHLORPROMAZINE  
CIMETIDINE  
Clamocyl (see AMOXYCILLIN)  
CLOTRIMAZOLE  
Clotrine (see Clotrimazole)  
CLOXACILLIN  
Co-Trimoxazole (see SULPHAMETHOXAZOLE + TRIMETHOPRIM)  
Compound Magnesium Trisilicate (see MAGNESIUM TRISILICATE)

COMPOUND SODIUM LACTATE (see Hartmann's Solution)  
Cortisporin Otic Sol.  
Crema Deodorante (see Deodorant Cream)  
Crystal Violet (see GENTIAN VIOLET)  
CYANOCOBOLAMINE  
D.T.S. (see Oral Rehydration Salts)  
Dawadur (see Penicillin 6:3:3)  
Deodorant Cream  
DEXACHLORPHENIRAMINE  
DEXAMETHASONE  
DEXTRAN 70 + DEXTROSE  
DEXTROSE  
DIAZEPAM  
DICLOPHENAC  
DIGOXIN  
Dolmen (see TENOXICAM)  
DOPAMINE  
DOXYCYCLINE  
ECONAZOL  
Elycort (see HYDROCORTISONE)  
Elypen (see PENICILLIN V POTASSIUM)  
EPHEDRINE  
ERGOMETRINE  
Eritromicina (see ERYTHROMYCIN)  
Erythrocin (see ERYTHROMYCIN)  
ERYTHROMYCIN  
ETHAMBUTAMOL  
Fansidar (see SULFADOXINE + PYRIMETHAMINE)  
Farganesse  
FERROUS FUMARATE  
FERROUS SULPHATE + FOLIC ACID  
Flagyl (see METRONIDAZOLE)  
FOLIC ACID  
Fortified Procaine Penicillin (see PROCAINE PENICILLIN +  
PENICILLIN G SODIUM) FRUSEMIDE  
Fumarate Ferreux (see FERROUS FUMARATE)  
FUROSEMIDE  
Geangin (see VERAMPIL)  
Genacitine (see CHLORAMPHENICOL)  
GENTAMYCIN  
GENTIAN VIOLET  
GLIBENCLAMIDE  
Grifulin Forte (see GRISEOFULVIN)  
GRISEOFULVIN  
Gynostat Vagnal Tablets (see NYSTATIN)  
Hartmann's Solution  
Hemorrhoidal Suppositories  
HYDRALAZINE  
HYDROCHLOROTHIAZIDE  
HYDROCORTISONE  
Hydrocortone (see HYDROCORTISONE)  
HYOSCINE  
I.D.A. (see Oral Rehydration Salts)  
IBUPROFEN  
Ilotycin Gluceptate (see ERYTHROMYCIN)  
IMIPRAMINE  
Inderal (see PROPRANOLOL)  
Indocin (see INDOMETHACIN)

INDOMETHACIN  
Insect Repellent  
ISONIAZID  
K-Y Jelly (see Lubricating Jelly)  
KCl (see POTASSIUM CHLORIDE)  
KETAMINE  
KETITOFEN  
Kloxy (see CLOXACILLIN)  
Lactated Ringer's Solution  
Lanoxin (see DIGOXIN)  
Lariago (see CHLOROQUINE)  
Lasix (see FRUSEMIDE)  
Laxacodyl (see BISACODYL)  
LEVIMASOLE  
LIDOCAINE  
Lifenac (see DICLOPHENAC)  
LIGNOCAINE  
LITHIUM CARBONATE  
Lopedium (see LOPERAMIDE)  
LOPERAMIDE  
Lozione Insettorepellente (see Insect Repellent)  
Lubricating Jelly  
Lybrile (see ASPIRIN)  
LYSOL  
MAALOX  
MAALOX-Plus  
MAGALDRATE + SIMETHICONE  
MAGNESIUM TRISILICATE  
Malocide (see SULFADOXINE + PYRIMETHAMINE)  
Mamex Infant Formula  
Marcaine (see BUPIVACAINE)  
Maxamycetin (see CHLORAMPHENICOL)  
MEBENDAZOLE  
MEFENAMIC ACID  
MENADIONE  
MENAPHTONE  
METACLOPRAMIDE  
METHONIDAZOLE  
METHYLATED SPIRIT  
METHYLDOPA  
METHYLSALICYLATE  
Metoclopramide (see METACLOPRAMIDE)  
Miambutol (see ETHAMBUTAMOL)  
Mintezol (see THIABENDAZOLE)  
Mobilat Gel  
Multivitamin  
Mundidone (see POVIDONE-IODINE)  
Naprosyn (see NAPROXEN)  
NAPROXEN  
Natural Fibre Laxative (see PSYLLIUM HYDROPHILIC MUCILLOID)  
Neo Mercazole (see CARBIMAZOLE)  
NEOMYCIN + BACITRACIN  
Neosporin (Original)  
Neosporin Plus  
NEOSTIGMINE  
NIACIN  
NICLOSAMIDE  
NIFEDIPINE

NITROFURANTOIN  
Nix (see PERMETHRIN)  
Normal Saline (see SODIUM CHLORIDE)  
Novaclor (see CHLOROQUINE)  
Novamine (see PROMETHAZINE)  
Novo V-K (see PHENOXYMETHYLPENICILLIN)  
NYSTATIN  
O.R.S. (see Oral Rehydration Salts)  
Oraclor (see CHLOROQUINE)  
Oral Rehydration Salts  
Otosporin  
OXYTOCIN  
Panadol (see PARACETAMOL)  
PARACETAMOL  
Paratal (see PARACETAMOL)  
Penicillin (see BENZYL PENICILLIN SODIUM)  
Penicillin 6:3:3  
Penicillin VK (see PHENOXYMETHYLPENICILLIN)  
PENICILLIN V POTASSIUM  
PERMETHRIN  
PETHIDINE  
Pevaryl (see ECONAZOL)  
PHENOBARBITONE  
PHENOXYMETHYLPENICILLIN  
PHENYLBUTAZONE  
PHENYTOIN  
PHLOROGLUCINOL  
PILOCARPINE  
PIPERAZINE CITRATE  
Polaramine (see DEXACHLORPHENIRAMINE)  
Polysporin  
Pomata Metilesalicilata (see METHYLSALICYLATE)  
Ponstan (see MEFENAMIC ACID)  
POTASSIUM CHLORIDE  
POVIDONE-IODINE  
PRAZIQUANTEL  
PREDNISOLONE  
PREDNISONE  
Preparation-H (see Hemorrhoidal Suppositories)  
PROBENECID  
PROCAINE PENICILLIN + PENICILLIN G SODIUM  
PROMETHAZINE  
PROPRANOLOL  
Prosobee  
PSEUDOEPHEDRINE  
PSEUDOEPHEDRINE + TRIPROLIDINE  
PSYLLIUM HYDROPHILIC MUCILLOID  
PYRAZINAMIDE  
PYRIDOXINE  
QUININE  
QUININE + PARACETAMOL + CAFEINE  
RANITIDINE  
Restozine-25 (see PROMETHAZINE)  
RETINOL  
RETINOL + Vitamin E  
Ribomicin (see GENTAMYCIN)  
Ricelyte  
RIFAMPICIN + ISONIAZID

SALBUTAMOL  
SILVER SULPHADIAZINE  
SODIUM DICARBONATE  
SODIUM CHLORIDE  
SODIUM FLUORIDE  
Solu-Cortef (see HYDROCORTISONE)  
Soluzione Antialgica Semplice (see Analgesic Ear Solution)  
Spasfon (PHLOROGLUCINOL)  
Spasmosedal (see HYOSCINE)  
Specialfeldine (see FOLIC ACID)  
Sporinex (see TINIDAZOLE)  
Statrol  
STREPTOMYCIN  
Sudafed (Severe Cold Formula)  
Sudafed Nasal Decongestant (see PSEUDOEPHEDRINE)  
SULFADOXINE + PYRIMETHAMINE  
SULPHADIMIDINE  
SULPHAMETHOXAZOLE + TRIMETHOPRIM  
SULPHUR  
Syntocinon (see OXYTOCIN)  
TENOXICAM  
TETRACYCLINE  
TETRACYCLINE + PHENIRAMINE  
Tetramil (see TETRACYCLINE + PHENIRAMINE)  
THEOPHYLLINE  
THIABENDAZOLE  
THIAMINE  
TINIDAZOLE  
Tintura Antimicotica Rubra (see Antifungal Lotion - Red)  
Tri-Hist Expectorant  
Tri-Histina (see Tri-Hist Expectorant)  
TRINORDIAL  
Trioderm  
Triple Sulfa Vaginal Cream  
Ulgel - Low Sodium (see MAGALDRATE + SIMETHICONE)  
V-Cillin K (see PENICILLIN V POTASSIUM)  
Valium (see DIAZEPAM)  
Ventolin (see SALBUTAMOL)  
VERAMPIL  
Vicks Vapor-rub  
Vitamin A (see RETINOL)  
Vitamin A + Vitamine E (see RETINOL + Vitamin E)  
Vitamin B Complex  
Vitamin B-1  
Vitamin B-12 (see CYANOCOBOLAMINE)  
Vitamin C (see ASCORBIC ACID)  
Vitamin K-3 (see MENAPHTONE)  
Voltaren (see DICLOPHENAC)  
Water Purifying Tablets  
WATER (for injection)  
Whitfield's Ointment  
Xylocaine-MPF (see LIDOCAINE)  
Zaditen (see KETITOFEN)  
Zantac (see RANITIDINE)  
Zovirax (see ACICLOVIR)

## **APPENDIX 6:**

### **◆ Pertusis Outbreak Control**

PERTUSIS OUTBREAK IN THE ADALE DISTRICT  
Hugo R. Sosa, MD et al.

In early January, two patients were admitted to the Adale Medical Center' with symptoms of whooping cough. A two year old girl and a four year old boy were assigned to isolation rooms and given antibiotic therapy and supportive care. After seven days they were discharged and sent home. During that month an increasing number of children and adults came to our outpatient clinic presenting common colds and coughs. No other suspected pertusis cases were diagnosed until the first week of February. By the 7th of this month a full 25% of the children seen in the OPD had symptoms compatible with this disease.

## EPIDEMIOLOGICAL MEASURES TAKEN

Malnutrition, overcrowding living conditions and lack of immunization protection made the infant population of the Adale area very vulnerable to the pertusis infection. Since appropriate isolation of cases was virtually impossible we conducted a house to house survey to detect suspected patients and treat with erythromycin diminishing infectivity to others. Concurrently, appropriate doses of the antibiotic were administered to infants presenting early symptoms of the disease in an attempt to abort or reduce its course. Other susceptible children and possible adult carriers were also treated.

## METHODOLOGY

Three teams of hospital staff, made up of physicians and nurses visited sections of the town of Adale including permanent and displaced populations. Parents or guardians were interviewed in their homes with children present. A sample of the questionnaire and data sheet is provided.

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1. The Adale Medical Center has been in operation since last October by the joint cooperation of ADRA (Adventist Development and Relief Agency) and SAACID (Aid), an international and a Somali NGO. The center has an outpatient clinic serving over 100 patients daily and an Inpatient capacity of 14. The center also supports and supervise the work of 8 community health posts in satellite villages and provides mobile clinic medical assistance for patients out of the scope of the health posts. WHO has assisted this project with medicines and supplies. UNICEF, PSF France and ICRC have also made important contributions. The Italian troops in Somalia have provided security as well as important logistical support to the project.

## CLINICAL AND THERAPEUTIC GUIDELINES

Each case must be analysed individually.

1. Are there any children or adults living here, that have a cough, a runny nose or is sneezing?

NO	COUGH	RUNNY NOSE OR SNEEZING
Next home	Go to question # 2	Go to question # 3

2. Is the cough either persistent or classical for Pertusis?

NO	YES
Go to # 3	Record age and go to # 5

3. Is the patient under 5 years of age?

NO	YES
Next home	Go to # 4

4. Does a patient with suspected Pertusis live here?

NO	YES
Next home	Record age and go to # 5

5. Distribute prescriptions according to age. (Erythromycin)

Under 6 Mo	\$ A \$
6 M - 2 Y	\$ B \$
2 Y - 4 Y	\$ C \$
4 Y - 8 Y	\$ D \$
8 Y - 15 Y	\$ E \$
15Y or more	\$ F \$

DATA SHEET

INDICATOR	0 - 1	1 - 5	5 or more
How many children and adults live in this home.			
Suspected Pertussis Patients			
At Risk children under 5			
< 5 yo deaths since 2Raxmadan			
< 5 yo deaths last month			

## RESULTS

TABLE I: Summary data of pertusis cases detection survey.

Variables	Age			Total
	0 - 11 mo	1 y - 4 ys 11 m	5 yrs +	
Population Examined	59	356	2287	2702
Suspected Pertusis Patients	17	77	35	129
At risk Patients	21	111	52	184
Under 5 Deaths Last year	33	49		82

From the above data we can observe that 94 children presented symptoms compatible with pertusis. This represents approximately 22% of the total Under five population. In addition, 35 older children and adults were suspected of having the disease. The 184 at risk patients treated add up to a total of 278 patients given antibiotic therapy.

Crude birth rate can be calculated at 92 for Feb.1992 to January 1993. Then an infant mortality rate per 1000 live births is approximately 270, and Under five deaths per 1000 live births is above 800.

TABLE 2: Causes of Under 5 deaths during last year.

AGE	CAUSE OF DEATH			
	DIARRHEAL DISEASE	RESPIRATORY INFECTIONS	TETANUS	UNKNOWN
0 - 11 mo	37	4	2	11
1 - 5 yrs	25	3	0	0
<b>TOTAL</b>	<b>62</b>	<b>7</b>	<b>2</b>	<b>11</b>

## **APPENDIX 7:**

- ◆ **District TB Register**
- ◆ **DTR Follow-Up Table**
- ◆ **TB Quarterly Report-**
- ◆ **TB Program Coordination**

## DISTRICT TUBERCULOSIS REGISTER

Date of Registration	District T# Number	Full Name	Sex	Age	Name of Treatment Unit	Date start Treatment	Regimen	Disease Class.	Type of Patient					
									N	R	T	D	O	
14/01/93	001	ALI MAHAMUD DHOHOL	M	17	ALI GUDUD	16/01/93	12-mo	Pulmonary	✓					
18/01/93	002	HUSSEIN CALI MOHAMUD	M	50	ADDO-UL	19/01/93	12-mo	Pulmonary	✓					
18/01/93	003	DAHABO DIPLAWE ALI	F	30	ADDO-UL	21/01/93	12-mo	Extrapul.	✓					
23/01/93	004	HASSAN ALI MOUSE	M	37	ADALE	24/01/93	12-mo	Extrapul.	✓					
23/01/93	005	BATULA MACALIN ALASOW	F	32	ADALE	24/01/93	12-mo	Extrapul.	✓					
23/01/93	006	MUXDIN ROBLE HAGI	M	50	ADDO-UL	26/01/93	12-mo	Extrapul.	✓					
28/01/93	007	MAXAMED OSMAN HASSAN	M	44	ADALE	31/01/93	12-mo	Pulmonary	✓					
30/01/93	008	MADINA FARAH MAHAMUD	F	46	ADALE	01/02/93	12-mo	Extrapul.	✓					
30/01/93	009	AHMED ADAN ARIF	M	48	ADALE	01/02/93	Cat 2	Pulmonary		✓				
31/01/93	010	OMAR ALI HASAN	M	28	ALI GUDUD	02/02/93	12-mo	Pulmonary	✓					
01/02/93	011	HALIMA ARIF MOHAMED	F	70	ADALE	03/02/93	12-mo	Pulmonary	✓					
01/02/93	012	HIRABE MOHAMED AHMED	M	30	ADDO-UL	03/02/93	12-mo	Pulmonary	✓					
08/02/93	013	MOHAMED OMAR KHALIF	M	25	ADDO-UL	09/02/93	12-mo	Pulmonary	✓					
11/02/93	014	AMIR ALI HUNDUBER	M	35	ADDO-UL	12/02/93	Cat 1	Extrapul.	✓					
14/02/93	015	HUSSEIN ALI HUNDUBEY	M	36	ADDO-UL	15/02/93	Cat 1	Pulmonary	✓					
16/02/93	016	MOHAMED MOHAMUD ALI	M	48	ALI GUDUD	17/02/93	Cat 1	Pulmonary	✓					
20/02/93	017	LIBAN AHMED KARAN	M	2	ADDO-UL	21/02/93	Cat 3	Pulmonary	✓					
20/02/93	018	HAWA JILE ADDO	F	25	ADDO-UL	21/02/93	12 mo	Extrapul.	✓					
20/02/93	019	MUKTAR MACOW FIDOW	M	30	ADDO-UL	21/02/93	Cat 1	Extrapul.	✓					
24/02/93	020	ASHA IMAN OMAR	F	35	ADDO-UL	25/02/93	Cat 1	Extrapul.	✓					
24/02/93	021	MOHAMED MAHAMUD OMAR	M	40	ADDO-UL	25/02/93	Cat 1	Pulmonary	✓					
25/02/93	022	FADUMA ABDULLE FANIN	F	66	ALI GUDUD	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	023	MAKO MOHAMUD DHUHUL	F	16	ALI GUDUD	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	024	HAJI OMAR ARONE	M	87	ALI GUDUD	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	025	WAASUGA ALI MAHAMUD	F	35	ALI GUDUD	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	026	MACALIN CABDULE SHEQ	M	45	ALI GUDUD	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	027	ABUKAR ADDOW MACALIN	M	40	ADDO-UL	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	028	ABUKAR ALI EYBAKAR	M	45	ADDO-UL	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	029	MOHAMED GEDDI GAFFOW	M	55	ADDO-UL	01/03/93	Cat 2	Pulmonary		✓				
28/02/93	030	ABDULAH HASSANGEDI	M	30	ADDO-UL	01/03/93	Cat 2	Pulmonary		✓				
06/03/93	031	HASSAN ALI GIMALE	M	50	ADALE	01/03/93	Cat 2	Pulmonary		✓				
06/03/93	032	SEYNAB HAGI MOHAMUD	F	48	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	033	NADIFA ARIF ALI	F	16	ADDO-UL	07/03/93	Cat 1	Extrapul.	✓					
06/03/93	034	BAASHIR AHMAD ALI	M	36	ADDO-UL	07/03/93	Cat 2	Pulmonary		✓				
06/03/93	035	HASSAN MOHAMED GIMCALE	M	50	ADDO-UL	07/03/93	Cat 2	Pulmonary		✓				
06/03/93	036	BARRE MOHAMED HASSAN	M	19	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	037	SEYNEB ALI AHMED	F	19	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	038	HASSAN ADDO TOKOW	M	50	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	039	MOHAMUD GAB HASSAN	M	65	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	040	MUHUDIN MOHAMED AHMED	M	41	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					

DISTRICT TUBERCULOSIS REGISTER

Date of Registration	District TB Number	Full Name	Sex	Age	Name of Treatment Unit	Date start Treatment	Regimen	Disease Class.	Type of Patient					
									N	R	T	D	O	
06/03/93	041	MADINA CIISE CARIF	F	25	ADDO-UL	07/03/93	Cat 1	Extrapul.	✓					
06/03/93	042	HUSSEIN HASSAN ADAWE	M	74	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	043	SAIDO MOHAMED MOHAMUD	F	25	ADDO-UL	07/03/93	Cat 1	Extrapul.	✓					
06/03/93	044	ABDULLAHI MOHAMED ALI	M	18	HAGI ALI	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	045	HASNA HASSAN HIITE	F	55	HAGI ALI	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	046	IBRAHIM HASSAN CALASOW	M	25	HAGI ALI	07/03/93	Cat 1	Extrapul.	✓					
06/03/93	047	ABDULKADIR OMAR MOHAMED	M	16	HAGI ALI	07/03/93	Cat 1	Extrapul.	✓					
06/03/93	048	OMAR MOHAMED HIRABE	M	30	HAGI ALI	07/03/93	Cat 1	Pulmonary	✓					
06/03/93	049	HALIMA ALI MOHAMED	F	42	ADDO-UL	07/03/93	Cat 1	Pulmonary	✓					
12/03/93	050	MOHAMED SUBRIYE HUSSEIN	M	62	ALI GUDUD	13/03/93	Cat 1	Pulmonary	✓					
12/03/93	051	HINDIYO TOXOB MOHAMUD	F	40	ALI GUDUD	13/03/93	Cat 1	Extrapul.	✓					
12/03/93	052	HEYOW ODABA MOHAMED	M	50	ALI GUDUD	13/03/93	Cat 1	Pulmonary	✓					
12/03/93	053	CABDULAHI AHMED ROOBLE	M	30	ALI GUDUD	13/03/93	Cat 1	Pulmonary	✓					
12/03/93	054	CARIFEY TIFOW NUR	F	60	ALI GUDUD	13/03/93	Cat 1	Pulmonary	✓					
12/03/93	055	HALIMA OMAR MOHAMUD	F	60	ALI GUDUD	13/03/93	Cat 1	Pulmonary	✓					
13/03/93	056	MOHAMED CALI SHURIYE	M	25	ALI GUDUD	14/03/93	Cat 1	Pulmonary	✓					
15/03/93	057	ABDULAHI SHIEJ QAASIM	M	26	ADALE	16/03/93	Cat 1	Pulmonary	✓					
16/03/93	058	MOHAMED SUBIYE HUSSEIN	M	40	ALI GUDUD	17/03/93	Cat 1	Pulmonary	✓					
16/03/93	059	ASIA HASSAN SHEIK	F	40	ALI GUDUD	17/03/93	Cat 1	Pulmonary	✓					
16/03/93	060	DAHABO AHME GIMCALE	F	54	ADDO-UL	17/03/93	Cat 1	Pulmonary	✓					
16/03/93	061	JIMLA ADDOW BARRE	F	38	ALI GUDUD	17/03/93	Cat 1	Pulmonary	✓					
16/03/93	062	MARIAN MOHAMED MACALIN	F	40	ALI GUDUD	17/03/93	Cat 1	Pulmonary	✓					
16/03/93	063	FADUMA TURXUME MOHAMUD	F	45	ALI GUDUD	17/03/93	Cat 1	Pulmonary	✓					
16/03/93	064	MOHAMUD SABRIYE GANEY	M	24	ALI GUDUD	17/03/93	Cat 1	Extrapul.	✓					
17/03/93	065	MARIAN CALI GAABOW	F	35	ALI GUDUD	18/03/93	Cat 2	Pulmonary		✓				
19/03/93	066	HUSSEIN GIMCALE AFRAX	M	30	ADDO-UL	20/03/93	Cat 1	Pulmonary	✓					
19/03/93	067	MOHAMED MOHAMUD HASSAN	M	52	ADALE	20/03/93	Cat 2	Pulmonary		✓				
20/03/93	068	MOHAMUD AHMED MOHAMED	M	38	ADALE	21/03/93	Cat 1	Pulmonary	✓					
20/03/93	069	ABDIRAHMAN CALI TELEFAN	M	26	ADALE	21/03/93	Cat 1	Pulmonary	✓					
20/03/93	070	MOHAMED GUD LOWE	M	35	ADALE	21/03/93	Cat 1	Pulmonary	✓					
21/03/93	071	CABDI MOHAMED TUSUME	M	39	ALI GUDUD	22/03/93	12-mo	Pulmonary	✓					
21/03/93	072	ABDULAHI CALI DHIBLAWÉ	M	33	ADALE	22/03/93	Cat 1	Pulmonary	✓					
28/03/93	073	ABDULLAHI HUSSEIN MOHAMED	M	7	HAGI ALI	29/03/93	Cat 3	Pulmonary	✓					
28/03/93	074	MOHAMED CUMAR ALI	M	20	HAGI ALI	29/03/93	Cat 1	Pulmonary	✓					
30/03/93	075	NAASIR ALI RAGE	M	19	HAGI ALI	31/03/93	Cat 1	Pulmonary	✓					
31/03/93	076	ABUKAR AHMED TIFOW	M	30	ADDO-UL	31/03/93	Cat 1	Pulmonary	✓					
31/03/93	077	MOHAMED HASSAN MOHAMED	M	38	ADDO-UL	01/03/93	Cat 1	Pulmonary	✓					
31/03/93	078	ALI ESSE ARIF	M	8	ADDO-UL	01/04/93	Cat 3	Extrapul.	✓					
31/03/93	079	MOHAMED MOHAMUD FALYARAY	M	40	HAGI ALI	01/04/93	Cat 1	Pulmonary	✓					
31/03/93	080	HUSSEIN MOHAMED DUFLE	M	34	HAGI ALI	01/04/93	Cat 1	Pulmonary	✓					

ADALE DISTRICT TUBERCULOSIS PROGRAME - ADRA/SAACID

DISTRICT TUBERCULOSIS REGISTER

Date of Registration	District TB Number	Full Name	Sex	Age	Name of Treatment Unit	Date start Treatment	Regimen	Disease Class.	Type of Patient					
									N	R	T	D	O	
31/03/93	081	ARAY MOHAMUD MOHAMED	M	26	ADDO-UL	01/04/93	Cat 1	Extrapul.	✓					
31/03/93	082	RUQIYO MOHAMED HUSSEIN	FM	45	ALI GUDDU	01/04/93	Cat 2	Pulmonary		✓				
05/04/93	083	AHMED LIBOYD ALI	M	41	ADDO-UL	06/04/93	Cat 1	Pulmonary	✓					
05/04/93	084	ALI AXMED MAHAMUD	M	55	ADDO-UL	09/04/93	12-mo	Pulmonary	✓					
10/04/93	085	MUHUDIIN MOHAMUD TOHOW	M	18	ALI GUDDU	11/04/93	Cat 1	Extrapul.	✓					
10/04/93	086	MUNA ABUKAR	F	10	ADALE	11/04/93	Cat 3	Pulmonary	✓					
13/04/93	087	AHMED HURSHOW MOHAMED	M	42	HAGI ALI	14/04/93	Cat 1	Pulmonary	✓					
04/05/93	088	HALIMA SHIKH MOHAMUD	F	28	ADALE	05/05/93	Cat 1	Pulmonary	✓					
04/05/93	089	KHADIIJA HASSAN GIMALE	F	34	ADALE	05/05/93	Cat 1	Pulmonary	✓					
04/05/93	090	HUSSEIN MOHAMED ALI	M	9	ADALE	05/05/93	Cat 3	Pulmonary	✓					
04/05/93	091	SHIEKH MOHAMED SH IBRAHIM	M	78	ADALE	05/05/93	Cat 1	Pulmonary	✓					
16/05/93	092	ABUKAR TIROW MOHAMED	M	45	ADALE	17/05/93	12-mo	Extrapul.	✓					
18/05/93	093	FAISA ABUKAR MOHAMED	F	22	ADALE	19/05/93	Cat 1	Pulmonary	✓					
18/05/93	094	AYUB MOHAMED SHIEKH	M	12	ADALE	19/05/93	Cat 3	Pulmonary	✓					
06/06/93	095	SHAACIYO MOHAMED ARAYE	F	23	GEL GUB	07/05/93	Cat 1	Extrapul.	✓					
09/08/93	096	MOHAMED MOHAMUD GAAL	M	3	ALI GUDDU	10/08/93	Cat 3	Pulmonary	✓					
09/08/93	097	HAWA ABDULLE MOHAMED	F	6	ADALE	10/08/93	Cat 3	Extrapul.	✓					
05/08/93	098	MOHAMED ABDULLAHI DIPLAWE	M	8	MOG	10/08/93	Cat 3	Pulmonary	✓					
05/08/93	099	MARIAN ABDI RASHID	F	14	MOG	12/08/93	Cat 3	Pulmonary	✓					
05/08/93	100	IBRAHIM ABDIRASHID	M	17	MOG	12/08/93	Cat 1	Pulmonary						✓
27/10/93	101	ABDULKADIR ABDULAH I ALI	M	4	ADALE	28/10/93	Cat 3	Extrapul.	✓					
03/11/93	102	ASIYA MOHAMED MACALIN	F	75	ADALE	04/11/93	Cat 2	Pulmonary		✓				
19/11/93	103	FADUMA OMAR HAYOW	F	55	ALI GUDDU	20/11/93	Cat 1	Pulmonary	✓					
	104													
	105													
	106													
	107													
	108													
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ADALE DISTRICT TUBERCULOSIS PROGRAMME - ADRA/SAACID

DISTRICT TUBERCULOSIS REGISTER FOLLOW UP TABLE

Dist TB No.	Date Treat. Start	Regim	DC	Pre-treatment	End of 2nd m (new) 3rd m (ret)	5th month Smear	8th month Smear	12th month Smear	Date Treat. Stopped	Result of Therapy					
										1.C	2.TC	3.D	4.F	5.D	6.T
001	16/01/93	12-mo	Pul		(-) R219				05/05/93					✓	
002	19/01/93	12-mo	Pul			(-)R240	(-)022								
003	21/01/93	12-mo	Ext						16/03/93					✓	
004	24/01/93	12-mo	Ext						24/02/93					✓	
005	24/01/93	12-mo	Ext						11/04/93					✓	
006	26/01/93	12-mo	Ext						10/03/93					✓	
007	31/01/93	12-mo	Pul			(-)R241	(-)021								
008	01/02/93	12-mo	Ext												
009	01/02/93	Cat 2	Pul		(-) R242		(-)020		08/10/93	✓					
010	02/02/93	12-mo	Pul				(-)051								
011	03/02/93	12-mo	Pul			(-)R243	(-)019								
012	03/02/93	12-mo	Pul						22/03/93					✓	
013	09/02/93	12-mo	Pul			(-)R244	(-)018								
014	12/02/93	Cat 1	Ext						22/09/93	✓					
015	15/02/93	Cat 1	Pul			(-)R245	(-)017		22/09/93	✓					
016	17/02/93	Cat 1	Pul				(-)052		22/09/93		✓				
017	21/02/93	Cat 3	Pul						16/03/93			✓			
018	21/02/93	12 mo	Ext						22/03/93					✓	
019	21/02/93	Cat 1	Ext						22/09/93	✓					
020	25/02/93	Cat 1	Ext						22/09/93	✓					
021	25/02/93	Cat 1	Pul			(-)R246	(-)016		22/09/93	✓					
022	01/03/93	Cat 2	Pul			(-)053			26/11/93		✓				
023	01/03/93	Cat 2	Pul		(-) R261	(-)050			26/11/93		✓				
024	01/03/93	Cat 2	Pul		(-) R262	(-)049			26/09/93		✓				
025	01/03/93	Cat 2	Pul		(-) R263	(-)048			26/11/93		✓				
026	01/03/93	Cat 2	Pul		(-) R264	(-)047			26/11/93		✓				
027	01/03/93	Cat 2	Pul		(-) R239	(-)023			30/10/93		✓				
028	01/03/93	Cat 2	Pul		(-) R238	(-)024			30/10/93		✓				
029	01/03/93	Cat 2	Pul		(-) R237	(-)025			30/10/93		✓				
030	01/03/93	Cat 2	Pul		(-) R236	(-)026			30/10/93		✓				
031	01/03/93	Cat 2	Pul		(-) R259				30/10/93		✓				
032	07/03/93	Cat 1	Pul		(-) R235				09/05/93					✓	
033	07/03/93	Cat 1	Ext						15/08/93		✓				
034	07/03/93	Cat 2	Pul		(-) R234	(-)027			26/11/93		✓				
035	07/03/93	Cat 2	Pul		(-) R233	(-)028			30/10/93		✓				
036	07/03/93	Cat 1	Pul		(-) R232	(-)029			21/09/93		✓				
037	07/03/93	Cat 1	Pul		(-) R251	(-)030			22/09/93		✓				
038	07/03/93	Cat 1	Pul		(-) R230	(-)031			22/09/93		✓				
039	07/03/93	Cat 1	Pul		(-) R229	(-)032			22/09/93		✓				
040	07/03/93	Cat 1	Pul						22/09/93	✓					
041	07/03/93	Cat 1	Ext						22/09/93	✓					
042	07/03/93	Cat 1	Pul		(-) R228	(-)033			22/09/93		✓				
043	07/03/93	Cat 1	Ext						05/05/93					✓	
044	07/03/93	Cat 1	Pul		(-) R227	(-)034			22/09/93		✓				
045	07/03/93	Cat 1	Pul		(-) R226	(-)035			22/09/93		✓				
046	07/03/93	Cat 1	Ext						22/09/93	✓					
047	07/03/93	Cat 1	Ext						22/09/93	✓					
048	07/03/93	Cat 1	Pul		(-) R225	(-)036			22/09/93		✓				
049	07/03/93	Cat 1	Pul						15/05/93					✓	
050	13/03/93	Cat 1	Pul						22/09/93		✓				
051	13/01/93	Cat 1	Ext						22/09/93	✓					
052	13/03/93	Cat 1	Pul		(-) R265	(-)046			22/09/93		✓				
053	13/03/93	Cat 1	Pul		(-) R266	(-)045			22/09/93		✓				
054	13/03/93	Cat 1	Pul		(-) R267	(-)044			22/09/93		✓				
055	13/03/93	Cat 1	Pul		(-) R268	(-)043			22/09/93		✓				
056	14/03/93	Cat 1	Pul		(-) R269	(-)042			22/09/93		✓				
057	16/03/93	Cat 1	Pul		(-) R224	(-)037			22/09/93		✓				

Dist TB No.	Date Treat. Start	Regim	Ext DC	Pre-Treatment	End of 2nd m (new) 3rd m (ret)	5th month Smear	8th month Smear	12th month Smear	Date Treat. Stopped	Result of Therapy					
										1.C	2.TC	3.D	4.F	5.D	6.T
041	07/03/93	Cat 1	Ext						22/09/93	✓					
058	17/03/93	Cat 1	Pul						22/09/93		✓				
059	17/03/93	Cat 1	Pul		(-) R270				22/09/93		✓				
060	17/03/93	Cat 1	Pul						16/06/93					✓	
061	17/03/93	Cat 1	Pul		(-) R271				22/09/93		✓				
062	17/03/93	Cat 1	Pul			(-) J054			22/09/93		✓				
063	17/03/93	Cat 1	Pul		(-) R272	(-) J041			22/09/93		✓				
064	17/03/93	Cat 1	Ext						22/09/93	✓					
065	18/03/93	Cat 2	Pul			(-) J055			26/11/93		✓				
066	20/03/93	Cat 1	Pul		(-) R223	(-) J058			01/10/93		✓				
067	20/03/93	Cat 2	Pul		(+) R222	(-) R277	(-) J057								
068	21/03/93	Cat 1	Pul		(-) R260				08/10/93		✓				
069	21/03/93	Cat 1	Pul		(-) R258	(-) J039			22/09/93		✓				
070	21/03/93	Cat 1	Pul		(-) R271				08/10/94		✓				
071	22/03/93	12-mo	Pul			(-) J056			22/01/93		✓				
072	22/03/93	Cat 1	Pul		(-) R257	(-) J007			07/10/93		✓				
073	29/03/93	Cat 3	Pul						26/09/93		✓				
074	29/03/93	Cat 1	Pul		(-) R256	(-) J008			20/10/93		✓				
075	31/03/93	Cat 1	Pul		(-) R255	(-) J009			20/10/93		✓				
076	31/03/93	Cat 1	Pul		(-) R254	(-) J010			01/10/93		✓				
077	01/03/93	Cat 1	Pul		(-) R253	(-) J011			01/10/93		✓				
078	01/04/93	Cat 3	Ext						22/09/93	✓					
079	01/04/93	Cat 1	Pul		(-) R252		(-) J069		18/10/93		✓				
080	01/04/93	Cat 1	Pul		(-) R251		(-) J012		20/10/93		✓				
081	01/04/93	Cat 1	Pul						01/10/93	✓					
082	01/04/93	Cat 2	Pul		(-) R273	(-) J040			30/11/93		✓				
083	06/04/93	Cat 1	Pul		(-) R250	(-) J013			08/10/93		✓				
084	09/04/93	12-mo	Pul		(-) R249	(-) J014									
085	11/04/93	Cat 1	Ext						26/11/93	✓					
086	11/04/93	Cat 3	Pul						08/09/93	✓					
087	14/04/93	Cat 1	Pul		(-) R248	(-) J015			18/10/93		✓				
088	05/05/93	Cat 1	Pul		(-) R247				18/10/93		✓				
089	05/05/93	Cat 1	Pul	(+) R221	(-) R276	(-) J058			17/10/93		✓				
090	05/05/93	Cat 3	Pul						03/10/93	✓					
091	05/05/93	Cat 1	Pul						10/09/93				✓		
092	17/05/93	12-mo	Ext												
093	19/05/93	Cat 1	Pul						19/11/93		✓				
094	19/05/93	Cat 3	Pul						05/10/93	✓					
095	07/05/93	Cat 1	Ext						28/11/93	✓					
096	10/08/93	Cat 3	Pul												
097	10/08/93	Cat 3	Ext												
098	10/08/93	Cat 3	Pul	(-) M-2											
099	12/08/93	Cat 3	Pul	(-) M-1											
100	12/08/93	Cat 1	Pul												
101	28/10/93	Cat 3	Ext												
102	04/11/93	Cat 2	Pul	(++) J076											
103	20/11/93	Cat 1	Pul	(++) J078											
104															
105															
106															
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ADALE DISTRICT TUBERCULOSIS PROGRAMME - ADRA/SAACID

Quarterly report on new case  
and relapses of Tuberculosis

Quarter: SUMMARY 1993

Name of District Tuberculosis Coordinator: Drs. Mohamud M. Ali & Hugo R. Sosa

Date of completion of this Form: January 10, 1993.

Signature:

Block 1	PULMONARY TUBERCULOSIS						EXTRA-PULMONARY TUBERCULOSIS		TOTAL			
	SMEAR POSITIVE					SMEAR NEGATIVE						
	NEW CASES			RELAPSES								
	M	F	T	M	F	M	F	M	F	M	F	T
45	18	63	11	6	-	-	11	12	67	36	103	

SMEAR POSITIVE NEW CASES:

Block 2	Age group (years)														TOTAL		
	0-14		15-24		25-34		35-44		45-54		55-64		65- >				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T		
6	2	6	2	12	2	12	4	4	3	2	3	3	1	45	18	63	



مكتب ممثل المنظمة

OFFICE OF THE WHO REPRESENTATIVE

In reply please refer to : WR/SOM/12/48

21 December 1993

Dear Dr. Sosa:

Thank you for your kind letter of 15 December 1993 and for your contribution to the workshop. Your participation, among other colleagues, has certainly enriched our experience during the workshop.

I am pleased to inform you that we have instructed Somalia Central Pharmacy (SCP) in Mogadishu to provide your organisation with the items requested and attached to your letter. As you are aware, unfortunately WHO does not have the logistical capability to deliver the requested supplies to Adale, but if you have any helpful suggestion, please let me know.

WHO is looking for partners like ADRA under your guidance. Therefore, I can assure you of our support as much and as far as we can.

Thank you for your kind invitation and I am looking forward for that as soon as I can.

With kindest regards and best wishes.

Yours sincerely

L. Al Kindi (Dr.)  
WHO Representative

Dr. Hugo R. Sosa  
Director for ADRA/Saacid Health Projects  
P.O. Box 14756  
3 Riverside Drive  
Nairobi

cc: DPM/EMRO  
TUB/HQ

ص. ب. : ٣٧٤ مقديشو تليفون : ٢١٣٨١ برقياً : بونست - مقديشو تلكس : ٧٧٦ مقديشو

P.O.Box 374, MOGADISHU Tel.: 21381 Telegr.: "UNISANTE" MOGADISCIO Telex: 776 WCAAF "FOR WHO"

## **APPENDIX 8:**

### **◆ Project Participants**

PROJECT PARTICIPANTS

NAME	NATIONALITY	TITLE
Marian Moalin Abdulle	Somali	Health Post Leader
Hussein Mohamed Ali	Somali	Health Post Leader
Mohamed Hussein Dable	Somali	Health Post Leader
Hussein Mohamed Moalin	Somali	Health Post Leader
Moalin Abdulle Kadie	Somali	Health Post Leader
Mohamed Mahamud Jandhay	Somali	Health Post Leader
Hussein Abdulle Hassan	Somali	Health Post Leader
Mohamed Ali Dable	Somali	Health Post Leader
Dahir Faradare	Somali	Driver
Mohamed Mahamud	Somali	Driver
Mohamed Rageh	Somali	Driver
Aden Mohamed	Somali	Driver
Ahmed Calasow Hassan	Somali	Maintenance
Mohamoud Mohamed Araye	Somali	Maintenance
Muhumad Godah Hilowle	Somali	Security Guard
Abdi Hussein Jimale	Somali	Security Guard
Antob Mohamed Ahmed	Somali	Security Guard
Omar Mohamed Abdi	Somali	Security Guard
Ali Hassan Ali	Somali	Security Guard
Ali Foley Adow	Somali	Security Guard
Omar Muse Adow	Somali	Security Guard
Ahmed Ali Grangor	Somali	Security Guard
Saleh Ahmed Yabarow	Somali	Security Guard
Abukar Omar Ahmed	Somali	Security Guard
Dahir Sheikh Muhumad	Somali	Security Guard
Qaasin Mohamoud Ahmed	Somali	Security Guard
Hirabe Mahamud Ahmed	Somali	Security Guard
Khasim Mahamud Camay	Somali	Security Guard
Daahir Mahamud Duhul	Somali	Security Guard
Mahamud Abdulahi Sheikh	Somali	Security Guard

Sahra Macow Mohamed	Somali	Cook Assistant
Mumina Mohamed Mahamud	Somali	Cook
Ubah Muhumad	Somali	Cook
Abshiro Dhiblawe Ahamed	Somali	Cook
Mohamed Yabarow Mohud	Somali	Cook
Dr. Ali Mahamud Ahmed	Somali	Physician
Dr. Abdullahi Shek	Somali	Physician
Ali Mahamud Mohamed	Somali	Nurse
Saleh Mohamed Abdallah	Somali	Nurse
Shukri Ary Robleh	Somali	Nurse
Ruqiyo Ali Subriye	Somali	Nurse
Hagi Ahmed Mahamed	Somali	Nurse Assistant
Yoonis Muse Mohamed	Somali	Nurse Assistant
Muse Mohamed Hassan	Somali	Nurse Assistant
Mohamed Hassan Eybakar	Somali	Nurse Assistant
Sh. Ahmed Mohamed Afrah	Somali	Nurse Assistant
Safia Nur Hassan	Somali	Nurse Assistant
Ahmed Alasow Gaomey	Somali	Nurse Assistant
Ali Mahamud Ahmed	Somali	Lab Assistant
Abukar Osman Ali	Somali	Translator
Abdi Hassan Abdi	Somali	Translator
Asia Hassan Goley	Somali	Cleaner
Mumina Moalim Hassan	Somali	Cleaner
Marian Moalin Abdulle	Somali	Cleaner
Hassan Abdule Rage	Somali	Bookkeeper
Dr. Mahamoud Ahmed Jimale	Somali	Surgeon
Dr. Isaaq Nuur Ibrahim	Somali	Ophthalmologist
Dr. Mahamoud Ahmed Jimale	Somali	Surgeon
Dr. Isaaq Nuur Ibrahim	Somali	Ophthalmologist
Samuel Chaka	Kenyan	Nurse
Evalyne Chizi	Kenyan	Nurse Assistant
Dr. E. Odira	Kenyan	Surgeon
Dr. E. Mooka	Kenyan	Anaestheologist
Dr. P. Mokaya	Kenyan	Physician

Dr. Peter Mokaya	Kenyan	Evaluation Team Leader
Mr. Benjamin Ireri	Kenyan	Evaluation Team
Willykester Arunga	Kenyan	Office Manager
Mike Odera	Kenyan	Accountant
Lucas Mramba	Kenyan	Lab Technician
Caleb Nyajery	Kenyan	Reg. Finance Officer
Roger Nyberg	Sweden	ADRA Regional Director
Sheila Robertson	Canadian	Physician
James Edward Bradford	Canadian	Head Nurse
Mike Mcarthur	Canadian	Volunteer Logistics
Colin Richardson	Australian	Liaison Officer
John Ladlow	Australian	Nurse
Dr. Ruben Urrejolas	Chile	Surgeon
Hugo Sosa	Guatemalan	Project Director
Haroldo Seidl	Brazilian	Senior Program Manager
Silmara Sosa	Brazilian	Nurse Assistant
Ron Kuhn	Brazilian	Director
Jacqueline Kuhn	Brazilian	Secretary
Rita Goesbeck	American	Admin. Asst. to S.P.M.
Joel MacCulloch	American	Volunteer Nurse
Peggy King	American	Volunteer Nurse
Warren Cheever	American	Volunteer Nurse
Jewel Cheever	American	Volunteer Nurse
Mary M. Lou	American	Volunteer Nurse
Richard Hall	American	Director
Wes Macdonald	American	Nurse
Bruce Roberts	American	Accountant
Frank Brenda	German	Logistics Volunteer
Fred Kumah	Ghanaian	Ag.Dir.,Fin. Officer
Lillian Sayi	Tanzanian	Logistics Director

## **APPENDIX 9:**

### **◆ The Project Illustrated**

Picture 1, 2, & 3 represents  
general hospital operations



Picture 1  
This is an outside view of the Adale Clinic. In the background are patients waiting to be seen



Picture 2  
A gun shot wound being attended to by  
one of the Somali staff nurses, Ali Aheier.



Picture 3  
Local nurses removing stitches from patient's head after surgery  
In the background are Safia Nur Hassan, and Ali Aheier, both nurses

Picture 4, 5, & 6 represent community health operations



Picture 4  
ADRA delegates visiting community health posts at Ali Gudul.  
In the background are Dr. Ali Mahomed, Roger Nyberg,  
and Maggie Nyberg



Picture 5:  
TB patients waiting outside Community Health Posts  
for their daily treatments



Picture 6:  
ADRA delegation observing Community Health Posts leader at work.

Picture 7:

Samuel Chaka Mwanzuka, a midwife and the community health posts director, after delivery a baby at the Adale Clinic. Mother and child are both doing well.



Picture 8:  
ADRA undertakes Expanded Program on Immunization (EPI) in Adale.  
Safia Hassan gives a shot to a child.



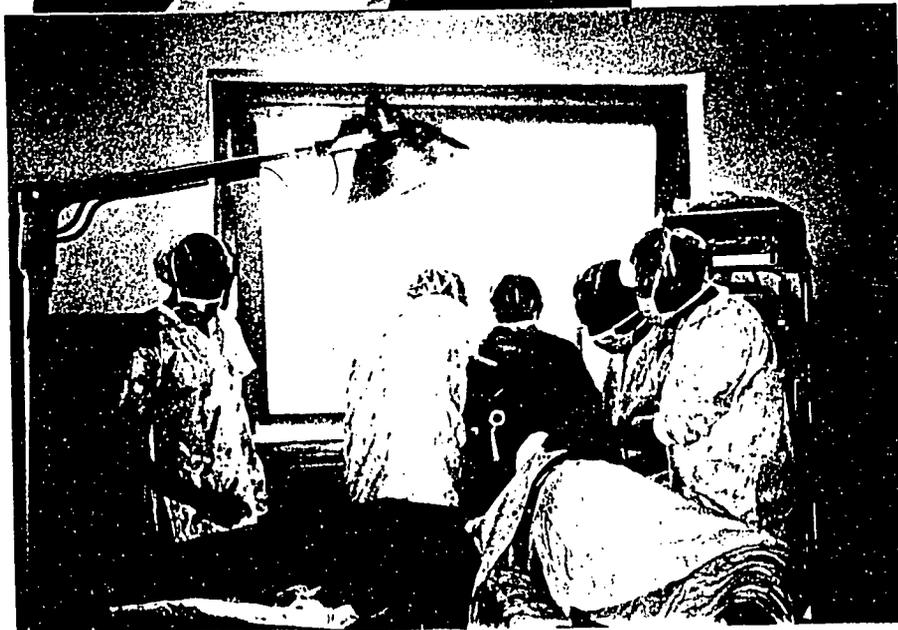
Picture 9:  
ADRA volunteer nursing staff, Peggy King and Joel McCouloch,  
coordinate the EPI campaign.



Pictures 10 & 11:  
Surgery related pictures:



Picture 10:  
Surgeon Ruben Urrejola, assisted by Dr. Hugo Sosa,  
perform surgery on a patient.

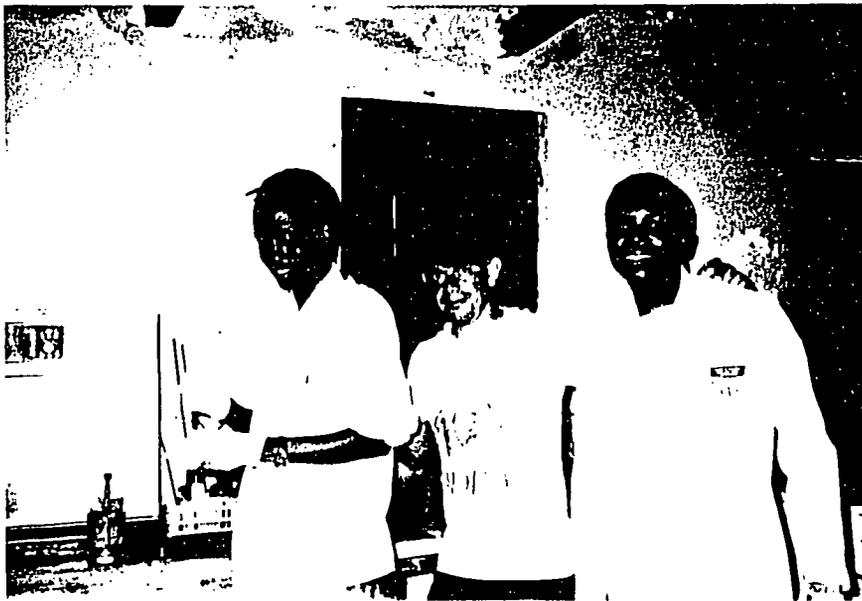


Picture 11:  
The surgical team at work in the newly constructed surgical wing of the Adale Clinic.

Pictures 12 & 13 depict the Laboratory:



Picture 12:  
Lucas Mramba, Laboratory technologists (Medical technologists) trains a local staff, Shukri Robleh, on how to run a laboratory.



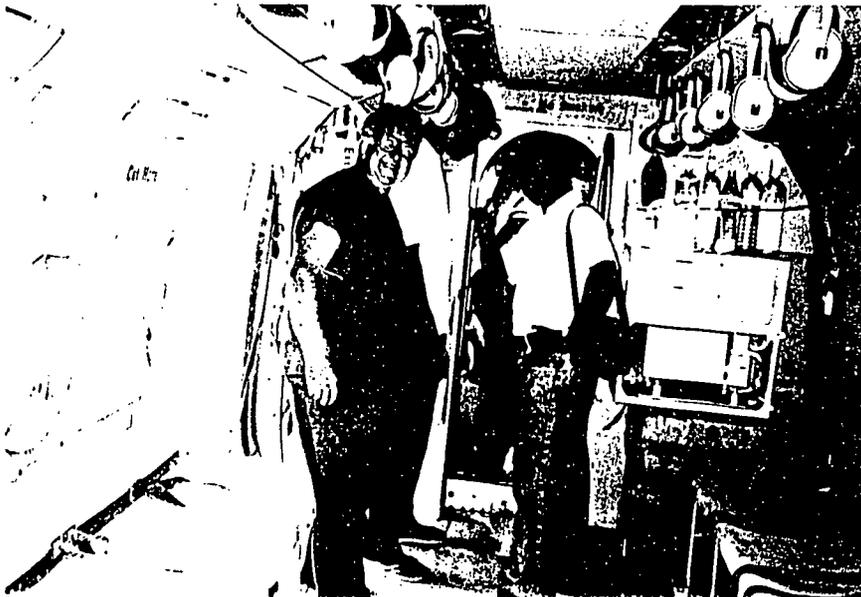
Picture 13:  
Project director, Dr. Hugo Sosa, poses with Laboratory staff, Ali Aheier and Lucas Mramba after opening the laboratory wing of the clinic.

11

Pictures 14 & 15 depict logistics support by the UN to ADRA.



Picture 14:  
On several occasions the UN and Italian forces transported critical cases out of Adale to more equipped hospitals in Mogadish. This was one such occasion.



Picture 15:  
In the UN helicopter, Acting Director, Fred Kumah, and Warren Cheever, Volunteer nurse pose for a picture.

Picture 16 & 17: Cloths were distributed on many occasions to the people of Adale.



Picture 16:  
Local Somali, led by Raha Janoqaw, distribute clothes to residents of Adale.



Picture 17:  
Trucks on their way to Adale to deliver boxes of clothes. In the background is Haroldo Seidl, Senior Project Manager responsible for ADRA Somalia projects at ADRA International.

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Picture 18:

The rehabilitation of the Adale wells and the subsequent provision of portable water to the town did a lot in improving the health of the people.



**FINAL REPORT**

**FINANCIAL STATEMENTS**

**USAID / OFDA 968-1032-G-00-3033-00**

Submitted to

**USAID / OFDA OFFICE**

by

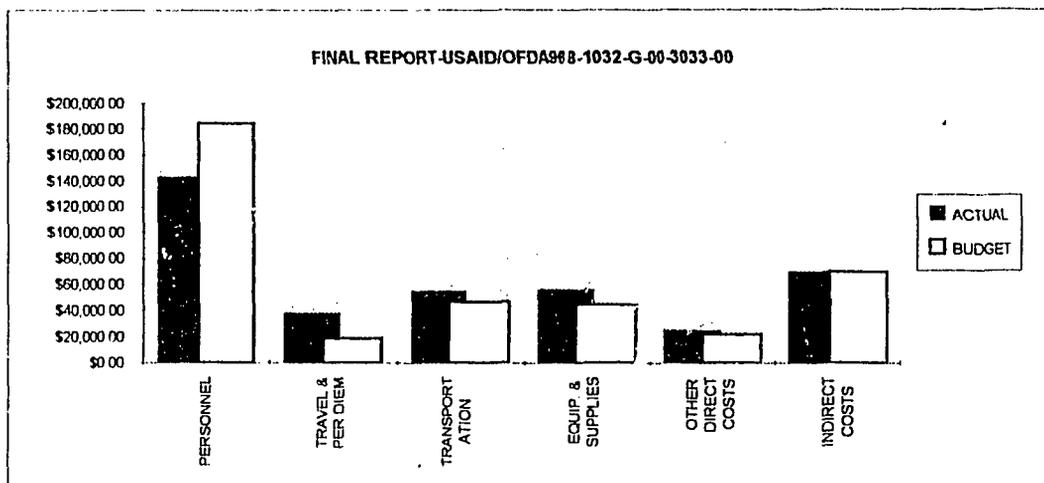
**ADRA Somalia Projects**

*Fred Kumah*

The following represents the final financial statements for the OFDA Clinic project. The first page has additional details to be found in the attachments, P1a, P1b, and P1c. The following pages are notes to the statement.

**EXPENSE REPORT FOR THE PERIOD JANUARY - NOVEMBER, 1993**

	ACTUAL	BUDGET	Variance
PERSONNEL	\$142,620.64	\$184,300.00	\$41,679.36
TRAVEL & PER DIEM	\$37,804.43	\$18,785.00	(\$19,019.43)
TRANSPORTATION	\$54,609.77	\$46,740.00	(\$7,869.77)
EQUIP. & SUPPLIES	\$55,719.78	\$44,460.00	(\$11,259.78)
OTHER DIRECT COSTS	\$24,868.27	\$21,925.00	(\$2,943.27)
INDIRECT COSTS	\$69,565.00	\$69,565.00	\$0.00
<b>TOTALS</b>	<b>\$385,187.89</b>	<b>\$385,775.00</b>	<b>\$587.11</b>



02/08/1994  
01:44:23

C-ADALE CLINIC  
ADRA-SOMALIA  
USAID-DFDA768-1032-G-00-3033-00  
BALANCE SHEET  
DECEMBER 31, 1993

PAGE 1  
USD = 1.0000  
CURRENCY : USD

ASSETS	USD	USD
-----		
CURRENT ASSETS		
-----		
BANK LOCAL -	0.00	0.00
BANK CITIBANK NY \$\$\$\$	0.00	0.00
A/R ADMINISTRATION	587.11	587.11
-----		
TOTAL CURRENT ASSETS	587.11	587.11
=====		
LIABILITIES		
-----		
CURRENT LIABILITIES		
-----		
A/P ADMINISTRATION	0.00	0.00
-----		
FUND BALANCE		
-----		
FUND BALANCE		
-----		
FUND BALANCE	587.11	587.11
-----		
TOTAL LIABILITIES AND FUND BALANCE	587.11	587.11
=====		

02/08/1994  
01:44:52

C-ADALE CLINIC  
ADRA-SOMALIA  
USAID-OFDA968-1032-G-00-3033-00  
STATEMENT OF INCOME AND EXPENSES  
FOR 12 MONTHS/12 ENDED DECEMBER 31, 1993

PAGE 1

USD = 1.0000  
CURRENCY : USD

	CURRENT MONTH	YEAR TO DATE	TOTAL BUDGET
INCOME			
-----			
DONOR			
-----			
USAID/OFDA	0.00	316,210.00	385,775.00
-----			
EXPENSE			
-----			
PERSONNEL			
-----			
SOMALIA DIRECTOR ASST.	0.00	5,628.86	16,000.00
OFFICE MANAGER	0.00	746.82	1,600.00
PROJECT DIRECTOR	0.00	38,988.66	32,000.00
ACCOUNTANT	0.00	10,151.20	6,800.00
HOSPITAL DIRECTOR	0.00	0.00	4,000.00
HOSP. PERSONNEL MANAGER	0.00	0.00	3,200.00
ASST. MEDICAL ADMIN.	0.00	1,900.00	2,400.00
PHYSICIANS (2)	0.00	12,340.40	12,000.00
VOLUNTEER PHYSICIAN	0.00	6,312.58	3,200.00
HEAD NURSE	0.00	7,700.00	16,000.00
NURSES (5)	0.00	11,246.51	16,000.00
VOLUNTEER NURSES (2)	0.00	5,138.45	6,400.00
NURSE-PHARMACIST	0.00	0.00	4,000.00
LABORATORY TECHNICIAN	0.00	1,000.00	4,000.00
NURSE ASSO. (4)	0.00	5,237.56	8,000.00
TRANSLATORS (2)	0.00	2,280.00	6,400.00
COOKS (2)	0.00	2,829.89	3,200.00
COOKS ASSO. (2)	0.00	443.34	2,800.00
DRIVERS (2)	0.00	2,369.98	3,200.00
SECURITY GUARDS (9)	0.00	15,509.44	14,400.00
MAINTENANCE WORKER	0.00	2,419.17	1,600.00
CLEANERS (3)	0.00	1,987.93	3,500.00
HEALTH POST LEADER INCEN	0.00	3,392.92	9,600.00
BOOKKEEPER	0.00	4,476.93	4,000.00
-----			
TOTAL PERSONNEL	0.00	142,620.64	184,300.00
-----			
TRAVEL & PER DIEM			
-----			
PER DIEM - KENYA & SOMAL	0.00	6,940.63	3,170.00
AIRFARES USA/NAIROBI	0.00	30,268.80	12,000.00
TRAINING-VACCINATORS (6)	0.00	0.00	765.00
TRAINING-POST LEADER (16)	0.00	0.00	2,600.00
MOB TRAINERS ALLOWANCES	0.00	595.00	250.00
-----			
TOTAL TRAVEL & PER DIEM	0.00	37,804.43	18,785.00
-----			

02/08/1994  
01:44:54

C-A DALE CLINIC  
ADRA-SOMALIA  
USAID-OFDA968-1032-G-00-3033-00  
STATEMENT OF INCOME AND EXPENSES  
FOR 12 MONTHS/12 ENDED DECEMBER 31, 1993

PAGE 2

USD = 1.0000  
CURRENCY : USD

EXPENSE	CURRENT MONTH	YEAR TO DATE	TOTAL BUDGET
-----			
TRANSPORTATION			
-----			
VEHICLE RENTAL	0.00	11,940.51	6,000.00
MOBILE CLINIC VEHICLE	0.00	6,550.00	12,000.00
FUEL-MOBILE CLINIC	0.00	8,718.44	5,000.00
FUEL-FOR VEHICLE	0.00	7,830.71	3,360.00
FUEL-FOR GENERATORS	0.00	1,950.00	11,520.00
MOTOR OIL	0.00	171.67	400.00
FREIGHT COSTS	0.00	6,376.55	5,460.00
LOCAL TRANSPORTATION	0.00	11,071.89	3,000.00
TOTAL TRANSPORTATION	0.00	54,609.77	46,740.00
-----			
EQUIPMENT & SUPPLIES			
-----			
PATIENT FORMS	0.00	599.51	1,500.00
MEDICAL EQUIPMENT	0.00	4,724.98	1,110.00
TRAINING SUPPLIES	0.00	3,509.87	800.00
KITCHEN EQUIP & SUPPLIES	0.00	2,833.08	3,500.00
FOOD & COOKING FUEL	0.00	14,161.53	8,600.00
GARDEN TOOLS	0.00	0.00	200.00
RADIO, POWER SUPPLY, ANT.	0.00	4,767.12	3,200.00
1000 WATT GENERATOR	0.00	1,796.43	750.00
KITCHEN & STERIL SHELTER	0.00	8,002.45	7,500.00
FUEL & GENERATOR ROOM	0.00	1,095.33	5,500.00
WATER SYSTEMS ROOM	0.00	3,883.26	2,300.00
OPD PATIENT SHELTER	0.00	1,446.22	1,000.00
NCH & PHARM SERVICES	0.00	8,900.00	8,500.00
TOTAL EQUIPMENT & SUPPLIE	0.00	55,719.78	44,460.00
-----			
OTHER DIRECT COSTS			
-----			
OFFICE/HOUSING & STORAGE	0.00	9,843.79	8,000.00
OFFICE SUPPLIES	0.00	1,978.48	850.00
OFFICE FURNITURE	0.00	1,250.00	1,275.00
COMPUTER SYSTEM	0.00	5,733.13	4,500.00
FAX	0.00	1,066.47	800.00
COPY MACHINE	0.00	2,807.14	1,500.00
EVALUATION	0.00	2,189.26	3,000.00
AUDIT	0.00	0.00	2,000.00
TOTAL OTHER DIRECT COSTS	0.00	24,868.27	21,925.00
-----			
TOTAL EXPENSE	0.00	315,622.89	316,210.00
-----			
INCREASE/DECREASE	0.00	587.11	69,565.00
=====			

## FINAL REPORT

### NOTES TO THE FINANCIAL REPORT OFDA968-1032-G-00-3033-00

As a background to the reason for the major variances, we think it is important to mention points that were raised at a USAID / OFDA workshop held in Nairobi and discussions with project officers of USAID / OFDA. It was made clear at the OFDA workshop that with the OFDA grants of Somalia, of which this is a part, there isn't any limitation on movements within budget line items, as well as within broad budget categories, provided one stays within the overall budget specifications and keeps the USAID / OFDA representatives informed. There has been variances within our broad budget categories, due to the circumstances that prevailed in Somalia during the course of the project. We did, as much as was possible, inform the USAID project officers responsible, and they gave us verbal approvals to continue as was possible.

**PERSONNEL:** The actual expenditure was less than the budgeted figure mainly because certain line items like, Hospital Director, Hospital Personnel Manager, and Nurse-Pharmacist were not utilized. Also, there were some line items that were under utilized because it took us sometime to find appropriate personnel for the post, hence the period between the beginning of the project and when we hired the employees represented saved funds. It is important here to mention the difficulty in staffing our project due to the volatile situation of Somali. This volatile and unpredictable security situation in Somalia resulted in a rather high turnover that led to increased costs in other categories. such as International Travel and Per diem.

#### **TRAVEL**

**& PER DIEM:** The actual expenditure exceeded budgeted figures because of two reasons:

- a. Due to the volatile and unsecure environment of Somalia, it was difficult to find contract workers that were willing to devote 11 months to the project. Even they did initially, the unsecure environment led to their termination of their contracts. Hence we had a frequent turnover in our expat staff, which meant more in terms of International travel costs to us. Increased movement led to higher than anticipated costs.
- b. Per diem was also high because of the need for frequent movement. On two occasions, on the advice of UNISOM and the US embassy, we had to evacuate our staff from the project site due to unrest in Mogadishu which posed potential security problems to our staff. They stayed in total for over five weeks. This meant increased cost in Hotels and food, and hence Per diem allowances. These were circumstances beyond our control which the local USAID office is well aware of.

#### TRANSPORTATION:

Vehicle rental rates in our region of operation went up, so did the cost for fuel. These two factors had a impact on our actual expenditures for that line item. Vehicles are scarce in Somalia, and demand for them by the International community is rather high. Mainly because, the international community and donors at large do not think it safe to purchase vehicle for use in Somalia. With demand exceeding supply, prices rise and for us, there was no alternative but to rent at available price rates.

#### EQUIPMENT &

**SUPPLIES:** The major variances in this category were, Food and Cooking fuel, and Medical Equipment. It was necessary atimes for us to import food in to Somalia from Kenya due to the limited food supply in Somalia. The costs involved was higher than we had budgeted for. Also Medical equipments were purchased above anticipated costs.

#### OTHER DIRECT

**COSTS:** This category was rather close to budgeted figures. There were two main variances, that of Office /Housing & Storage, and computer systems. With supply of houses being very limited, and demand by the International community for housing rather high, rental rates for house went rocket high, hence we had to spend more on that line item. Computer system and its accessories did costs us more than we had budgeted for. We had to purchase some of our computer equipment in Nairobi. Prices for computers and printers in Nairobi are atimes twice as high of that of the US. However, due to time constraints and the need to get going with the project, we were obliged to purchase locally, from Nairobi at rather high rates. Again, given a normal situation, we could have planned way ahead for things like this. However the situation in Somalia is far from normal, and atimes, one is obliged to take decisions that are out of the norm.

**INDIRECT:** As allocated to ADRA International.

Title of Property  
OFDA 968-1032-G- 00- 3033-00

**RE: Instruction regarding disposition of Assets**

The following represent assets purchased during the life of the above project that were above \$2,000.00:

Qty	Description	Costs	Ref.	Location
1	Gestetner Copier	\$2,700.00	JV 0009	Nairobi
1	Radio Repeater	\$3,790.31	JV 0164	Mogadishu

Per USAID regulations such Assets remain the property of the donor unless otherwise advised by Donor.

Other assets below \$2,000.00 but above \$500.00 are the following:

Qty	Description	Costs	Ref	Location
3	Portable Generators	\$532.14 each	JV 0005	1 in Adale, 1 in Mogadishu, and 1 stolen.
1	Epson Printer	\$857.14	JV 0022	Nairobi
1	VCR Hitachi	\$525.00	JV 0268	Nairobi
1	TV Hitachi	\$535.00	JV 0268	Mogadishu
1	Portable Computer(Sanyo)	\$1551.67	JV 0109	Adale
1	Canon Printer BJ 10	\$769.00	JV 0109	Adale
1	Slide Projector	\$502.00	JV 0273	Nairobi

Per USAID regulations, assets below \$2,000.00, title of such, reverts to participating agency at the end of the project.

Regarding the former lists, Assets over \$2,000.00, which title remains as USAID / OFDA property, we will like to propose the following:

We will kindly like to request your office to consider donating these two equipments to ADRA Somalia Projects. Since ADRA still has ongoing projects in Somalia, and proposes to have more projects with USAID, these two equipments, the Radio Repeater and the Gestetner Photocopier, will help ADRA strengthen its base offices. The Radio Repeater is an invaluable piece of equipment, without which communication is hampered. In Somalia, communication is a bear necessity. The Repeater will help improve on our communication systems. The photocopier will also serve an important role. That of duplicating material for presentation to beneficiaries, donors and interested parties. Having these equipments will do a lot to strengthen our capacity to meet the needs of the Somali's.

Thank you for your kind consideration.