

# REPORT ON THE FIRE ACCIDENT AT MANGOCHI DISTRICT HOSPITAL



4/16/2018

Details of the 15th April Fire Accident , Report and Urgent Needs of the Hospital

# Report on the fire accident at Mangochi District Hospital

## **INTRODUCTION**

On the morning of 15<sup>th</sup> April 2018, between 9:30 and 10:00 am, a fire erupted and burnt down the integrated Maternal and Child Health (MCH) block of Mangochi District Hospital.

The MCH building is one of the largest hospital blocks measuring 43m by 12 m and contains 28 rooms. It housed the following maternal and child health services: Antenatal clinic (ANC), Under-5 out-patients services, ETAT (emergency triage and treatment), Extended Program of Immunization (EPI) for both babies and pregnant mothers, Cervical Cancer screening and treatment (Cryotherapy), Family planning (FP), HIV testing and counseling services (HTC) and Anti-Retroviral Therapy(ART) for pregnant women. The building also housed research offices where Baylor and College of Medicine carry out different research activities. Next to the building were two tents and a drop box that were used as HIV testing rooms. These were also affected.

This report provides details of the fire, the accident response and strategies put in place to restore normal service delivery. The report also includes the urgent assistance the hospital needs.

## **PROBABLE CAUSE OF THE FIRE**

On the morning of the fire, there was a black out from around 6 am. When the electricity came back around 9:30 am, electrical sparks were observed in the pediatric ward. This was reported to the electrician who came and rectified the problem. A few moments later, smoke was observed coming out of the MCH building, which is closed over the weekend. We believe high electric voltage on restoration of power to be the cause of the fire.

## **ACCIDENT RESPONSE**

When the fire started, communications were made to call out for help. Efforts to get a fire truck on the scene on time proved futile because the nearest truck is in Zomba.

Immediately patients were evacuated by health care workers and guardians. Critical patients were taken to the ART department temporarily; mothers in labor were temporarily taken to Baylor tents situated on the eastern flank of the hospital. Two deliveries took place there and the mothers and babies are all fine. Some patients were transferred to Koche community hospital. Overall, there were no deaths or serious injuries as a result of the fire.

During this time, large crowds of the community quickly came in and started putting out the fire using water and sand, while helping to salvage some of the equipment in the MCH building. Evacuation of equipment from the rest of the hospital also commenced immediately because at this point it was not clear whether the fire would be controlled.

Unfortunately, a lot of equipment was damaged or lost in the chaos that ensued. The Police promptly responded and together with the hospital guards and some members of the community, provided security, controlled traffic and protected drugs.

Power was promptly disconnected by Electricity Supply Commission of Malawi (ESCOM). The fire was contained by 12 noon.

### **PRELIMINARY ASSESSMENT OF DAMAGES**

As stated above the whole MCH building, with its furniture and almost all equipment in it was burnt down. Our preliminary technical assessment has written off part of the building and we are awaiting an assessment by the office of the Director of Buildings. Apart from the damage directly caused by the fire, other pieces of equipment were damaged during the evacuation in an attempt to save them. Also, the water that was used to stop the fire damaged documents kept in other offices not directly affected by the fire.

The damage from the fire, both direct and collateral, has compromised our first point of clinical service i.e. the out-patient department (OPD) for both children and adults. Other buildings adjacent to the building that has been burnt were also affected, with doors, window panes, window frames, office equipment and furniture numbering among the damaged items.

The detailed list of the equipment damaged will be produced in due course. However, annex 1 indicates the equipment that has been damaged during the process and is in urgent need of replacement.

### **IMMEDIATE PLANS FOR RESUMING SERVICE DELIVERY**

By 6pm yesterday, the hospital interior had been cleaned by hospital staff. All health workers due for the night shift were in their respective duty stations and patients had re-settled in the wards. Routine clinical care is being provided in the wards, though some equipment is unavailable.

Currently 2 tents have been erected to provide temporary rooms for providing services that were initially housed in the MCH building. These cannot be relied upon in the intermediate term. Currently discussion is underway with the College of Medicine, to allow us to use the hostels inside the hospital campus as a temporary service provision area.

### **IMMEDIATE EQUIPMENT REQUIRED**

Annex 1 indicates the list of equipment that was damaged but needs to be replaced immediately for us to resume our normal service delivery.

### **LONG TERM RECOMMENDATIONS**

1. Part of the MCH building should be demolished and a new one should be constructed, subject to a report by the Director of Buildings. The other section just requires rehabilitation.
2. To prevent and mitigate future occurrences of fire accidents, we have outlined the following:
  - Fire extinguishers should be checked and serviced regularly.
  - Smoke detectors to be installed, for curbing of future emergencies
  - The whole electrical system to be assessed and if need be reworked
  - Fire hydrants to be supplied to the district hospital and all other major buildings
  - We should have fire drills
3. Provision of fire engine to Mangochi town council for response to future incidents if they should happen
4. We need large marquee tents to be supplied to the town council for emergencies like these.

**ANNEX 1: LIST OF EQUIPMENT AND MATERIALS URGENTLY REQUIRED**

EQUIPMENT	QUANTITY	COMMENT
Oxygen Concentrators	10	
Ambulatory oxygen concentrator	1	
Oxygen Splitters	4	
Oxygen Splitter tubes	16	
Nasal Prongs	50	
Oxygen face masks	50	
CPAP machine	1	
Nebulizers	6	
Digital BP Machines	50	
Thermometers	200	
Pulse Oximeter	20	
Adult weighing Scales	10	
Infant weighing scales	6	
Suction Machines	6	5 electrical, 1 manual
Fetoscope	20	
Stethoscope	50	
Glucometer	12	
Neck collars	10	
Knee guards	4	
Patella hammer	3	

Beds	250	
Mattresses	250	
Bed sheets	4000	
Blankets	2000	
Macintosh	5	rolls
Mosquito nets	30	bales
Wheel Chairs	10	
Patient trolleys	10	
IV Drip stands	50	
Bedside screens	50	
Examination couches	17	
Gynecological Couches	1	
Angle poised lamps	10	
Cryogun	1	
Speculums	40	Cuscos speculum
VLS 400 fridges	3	
VLS 350 fridge	1	
MK304 fridges	3	
Chester freezer	1	
Upright eletrolux freezer	1	
Cold boxes	3	
Vaccine carriers	8	
Droppers	250	
Cool packs	250	
Cold chain equipment	1	
Sorter scales	6	

Ordinary reffridgerators 300 litres	2	
Ordinary reffridgerators 130 litres	8	
60 litres buckets	50	
20 litres buckets with taps	150	
20 litres buckets without taps	300	
10 litres buckets	100	
5 litres buckets	100	
Mopping trolleys	20	
Feeding cups for nursery and KMC	50	
Measuring jugs	50	
Otto bins	50	
Plastic hand washing basins	100	
Plastic stools	100	
Electric kettles 2 litres	6	
Portable ultrasound machines	2	
Fire extinguishers	12	
Sterilization drums big	20	
Sterilization drums medium	30	
Sterilization drums small	30	
Norplant removal sets	10	
Kidney dishes – big	50	
Kidney dishes – small	50	
Theatre cloth	500 Metres	
Benches	100	

Office desks	15	
Tables	12	
Office Chairs	18	
Office chairs (visitors)	20	
Chairs	40	
Electric fans	20	
Air conditioners	7	
Wall clocks	15	
Communication systems within the hospital		
Desktop computers	7	
Printers	7	
Heavy duty printer	1	
Heavy duty photocopier	1	
Scanners	4	
Toner	12	
Stapler machines	30	
Punchers	30	
Laptops	5	
Rechargeable lamps	50	
Small Gensets	2	
Fuel		For gensets and increased referrals
Big tents	4	
Metallic drug trolleys	10	
Lockable drug cabinets	10	



Filing cabinets	15	
Guidelines and protocols for patient care		Assorted
<b>Medical stationary</b>	<b>QTY IN REAMS</b>	
LABOUR CHARTS	20	
TREATMENT CHARTS (ADULT)	10	
PAEDIATRIC ADM. FORMS	10	
NURSERY ADMSSION FORMS	5	
PAEDIATRIC CCP FORMS	10	
MEDICAL CASE SHEETS	25	
ADULT ADMISSION SHEETS	15	
NURSING CARE RECORD	25	
ECLAMPSIA FORMS	5	
MIDWIFE ADM. FORMS	20	
MATERNITY ADM. FORM	10	
OBSERVATION SHEETS(HDU)	5	
X-RAY FORMS	5	
THEATRE NOTES SHEETS	6	
NEONATAL DEATH REVIEW FORMS	2	
MICROBIOLOGY	10	
BLOOD AND BLOOD PRODUCTS FORMS	10	
HEMATOLOGY	10	
BIOCHEMISTRY FORMS	5	
SPUTUM REQUEST FORMS	10	
TB LABORATORY REQUEST FORM	10	
PALLIATIVE CARE ADM FORMS	3	
CONTINUATION SHEETS	10	

A4 Hardcover	300	Pieces
Ballpoint pens		
<b>Assorted registers</b>		
Maternity Registers	100	
Postnatal Registers	100	
PAC registers	20	
HBB registers	50	
ANC registers	100	
STI registers	10	
OPD registers	20	
DDA books	5	
Family Planning	100	
VIA registers	10	
MRDT registers	50	
LA Registers	50	
Under 2 registers	1000	
Under 1 registers	1000	
Over 2 registers	1000	
Vaccine stock book registers	1000	
TTV registers	1000	
Injection material stock book	20	
Temperature Monitoring charts	20	
Vaccine order book	10	
Vaccine dispatch book	10	

<b>Cleaning materials:</b>		
SURF	2000	Kilograms
HAND SOAP(PROTEX)	500	
MOPS	8000	
BIN LINERS	10000	
MOSQUITO COILS	50	Units
TOILET PAPERS	5000	
CANDLES (EACH)	4000	
MATCHES	30	Units
R14 BATTERIES	100	
R20 BATTERIES	100	
AA BATTERIES	1000	
AAA	100	
DOOM CAN	20	Cans
AIR FRESHNER	20	Cans
MUTTON CLOTH	100	Rolls
UTILITY GLOVES	1000	Pairs
DRAIN BRUSHES	100	
VIM SACHETS	500	Sachets
SCRUBBING BRUSHES	500	
HEAVY DUTY GLOVES	500	Pairs
RUBBER SQUEZZERS	50	
SCARLEX	50	Litres
GLUCOMETRE BATTERIES	100	
HIGH DUSTER	100	

Vaccines		Assorted
Electrical assessment of facility		