# NARRATIVE REPORT ON TREATMENT OF MINOR EYE CONDITIONS UNDER WEEK of COMPASSION FUNDS IN RURAL TANZANIA, JANUARY to JULY 2019.

## 1. Introduction

IMA World Health (IMA) and the Tanzanian Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) implement the Surgery, Antibiotics, Facial Cleanliness, and Environmental Cleanliness (SAFE) Project in rural Tanzania using the World Health Organization (WHO)-endorsed strategy of the same name. The SAFE project is implemented in six District Councils in Mtwara Region, namely Masasi DC, Tandahimba DC, Newala DC, Mtwara DC, Nanyumbu DC and Nanyamba TC. With funding support from the UK Aid's Department for International Development (DFID), IMA has implemented outreach surgery in Mtwara and prevented sight loss to 7,582 individuals through eyelid surgery. The project focuses solely on performing trachomatous trichiasis (TT) surgery to eliminate blinding trachoma in Mtwara, southwestern Tanzania. From project inception in July 2014, IMA identified a gap among the communities served via the SAFE Project. The number of individuals who have minor eye conditions (allergic-eye conditions, infections, and blunt trauma) was three times that of those in need of surgical care, and as such, many individuals were not benefitting from project activities. In December 2018, Week of Compassion (WoC) first funded procurement and dispensing of medication via USD $25,067 to treat minor eye conditions, now complimenting the TT eyelid surgeries in Mtwara which are funded by UK Aid. In order to implement the sub-activity, the project organized refresher training to some government eye care personnel to successfully diagnose and treat individuals with minor eye conditions in the area. The district eye personnel (district officials) in the implementing areas were trained to identify and treat common eye conditions as well as indications and contra-indications of the eye drop medicines to patients in need of the treatment (see Annex 1).

**Table 1. Number of beneficiaries of WoC-funded activity in Mtwara**

| Type of Medication (eye drops) | Primary Conditions treated | # of beneficiaries | # of vials/items dispensed |
|---|---|---|---|
| Sodium Cromoglicate eye drops (2%) | Allergic eye conditions especially to children | 1,270 | 2,258 |
| Hydrocortisone eye drops (1%) | Allergic eye Conditions | 1,970 | 2,893 |
| Dexamethasone eye drops (0.1%) | Allergic eye conditions, trauma. | 460 | 600 |
| Dexamethasone & Neomycin eye drops (combined solution) | Treating swelling, redness, and itching due to inflammation | 360 | 400 |
| Dexamethasone &Chloramphenicol eye drops (Combined solution) (0.1%+0.5%) | Bacterial infection and other eye infections | 350 | 380 |
| Ciproflaxine eye drops (0.2%) | Broad spectrum bacterial infection for conjunctivitis & corneal ulcer | 600 | 900 |
| Timolol eye drops (0.5%) | Glaucoma | 500 | 1560 |
| Total | | 5,510 | 8,991 |

*NB: In some cases, a beneficiary was given more than one items and/or type of medication at once because some individuals had multiple eye conditions while others had chronic eye conditions.*

## 2. Diagnosis and Treatment of Minor Eye Conditions During Outreach Camps

Normally, patients with minor eye conditions were not prioritized by the SAFE Project because the project was designed to specifically help those with TT. This means that patients with other eye conditions were given referrals to seek medical attention in nearby drug shops or at a public health facility. Unfortunately, lower-level public health facilities have no such medication to treat most non-TT eye conditions and thus, no one benefitted from the referral. In order to identify and keep record of those in need of WoC eye drop medication and those who received eye drop medication, IMA took advantage of fully-funded SAFE outreach camps in Mtwara

DFID supported districts and deployed one eye care personnel to join SAFE outreach teams to help confirm, document and dispense the appropriate eye drop medicine to non-TT patients in the area. Almost everyone presenting with non-TT eye conditions in Mtwara were treated with the WoC funded medicines, with the exception of a few cases that were more difficult, including surgical cataract conditions which were referred to the higher-level health facility in town. Though every member of the district surgery team was oriented on treatment of minor eye conditions, IMA appointed only one eye care personnel in each district (referred to as the "district lead WoC support focal person*"*) to oversee treatment logistics including recording and managing the medicine. During implementation, patients were identified by SAFE project case finders and then verified by project screeners before confirmation by the appointed district lead WoC support focal person in the respective district. Everyone in need of WoC treatment was brought to the attention of the district lead WoC support focal person to confirm the disease and dispense appropriate eye drop medicine.

**A district lead WoC support focal person dispenses eye drop medicine to patient with a minor eye condition in Madaba village, Newala district, Tanzania.**

From the process of identifying and treating non-TT eye conditions, about 5,510 patients with minor eye conditions were diagnosed from community gatherings organized through SAFE outreach camps and received medication by district lead WoC support focal person (Table 1). The IMA SAFE project officer oversees the whole process, from patient identification (both TT and minor eye conditions) to final treatment and counselling to ensure patients adhere to medical advices given. Distributing medications to treat minor eye conditions has been so beneficial to the SAFE Project. Since the medicine was introduced as part of the outreach treatment package in Mtwara Region, the number of individuals who are in queue for routine outreach services tripled. With this additional treatment package, communities where the SAFE project operates are very happy with the project for they are no longer required to travel as often to town to access eye drops and other medicine to treat chronic eye conditions, since they can now access it at the community level. As one grandmother remarked, *"I didn't realize that you have treatment*

*options for eye itching, as my grandson has suffered constant eye itching for a number of years. Look at his discoloured eyelids - he is always scratching the eyelid. Thanks, so much for the medication''*

IMA has learned that the majority of beneficiaries receiving eye drop medications were women (63%) and the least were school-age children (5.2%). 83% of beneficiaries were found to have allergic eye conditions, while 9% had bacterial or viral eye infections, and the rest presented with refractive errors and cataracts. Experience from the last six months of the additional eye care treatment package via the WoC funding shows that eye care health-seeking behaviour among community members in the area has significantly increased. Initially, 20% of individuals were seeking care for non-TT-related eye conditions, and by the completion of the project, 60% of individuals at the treatment camps were seeking care for non-TT eye problems. There are now crowds at the camps, seeking eye drop medication to treat minor eye conditions, and in some cases, the crowd becomes larger when the screening camp is held closer to public primary schools, as many school-age children have none-TT eye conditions especially allergy-related eye conditions. With this shift in eye care health-seeking behaviour, the SAFE project has taken advantage of the crowded screening points to identify and treat more TT cases in the area and achieve targets in time.

## 3. Expenditure analysis

Availability of eye drop medication by WoC fund to treat non-TT eye conditions at the outreach camps has significantly lowered the average unit cost to USD $3 from initial average cost that ranged from USD $4 to USD $7 per diagnosis or per individual patient, as patients who had minor eye conditions would have to cover the entire cost of accessing the eye drops at the drug shops in town. The average cost was affected by factors such as distance travelled to and from town centre and hospital consultation costs; therefore, the WoC funding support has omitted the potential additional costs by providing eye care services close to communities, free of charge.

**Table 3: Six-month expenditure report on WoC Funding support (Jan – June 2019)**

| **Analysis showing WoC budget spending in six Months from January to June, 2019** | | | | | |
|---|---|---|---|---|---|
| Total Budget (USD) | Jan-March 2019 Spending (USD) | April-June 2019 Spending (USD) | Total Spending (Jan-June 2019 (USD) | Budget Balance (USD) | Variance |
| $25,067 | $8,362 | $5,701 | $14,063 | $11,004 | 44% |

***NB:*** *The budget balance includes unpaid allowances to district lead WoC support focal person in the implementing districts (the focal person was mistakenly charged into SAFE-DFID funded activity)*

## 4. Success and Challenges

### 4.1. Successes

- Improved community satisfaction of SAFE project activities in the area.
- Community understood better the magnitude of non-TT eye conditions of public health importance in the SAFE implementing areas.
- WoC program supported a large number of community members who were in need of eye care services in Mtwara Region, southwestern Tanzania.
- Raised the popularity of the IMA- SAFE project in Mtwara and Tanzania at large.

### 4.2.Challenges

- Common complaints from many older people were regarding their poor vision and cataracts, which we could not treat through this program. Instead all older individuals presenting with poor vision and cataracts were referred to the higher-level health facilities in town.
- We have not dispensed all the available eye drop medication to those in need, due to competing priorities and limited timelines, as the SAFE-DFID project ended in June and staff were working on closeout activities.

## 5. Way forward

IMA-SAFE Project is planning to have TT outreach activity in four DFID supported districts in Mtwara to complete post-transition surgical outreach activity in the area as projected to be done in the next two months (August & September, 2019) therefore, IMA will make use of the

opportunity to spend the balance ($ 11,004) by procuring and dispensing the eyedrop medicine to non-TT patients and pay allowances to district lead WoC support focal person in four proposed districts.

**Annex 1: Guidance on how to dispense eye drop medication to non-TT patients.**

1.Ciprofloxacin eye drops (0.2%)

- DOSE:
  - 1 drop X 2 for 7-14 days
- SIDE EFFECTS:
  - Burning eye
  - Red and itching eye pain
  - Feeling something in the eye
  - Unpleasant taste
- Indication:
  - Bacterial infection or conjunctivitis
  - Corneal Ulcer

2. Hydrocortisone eye drops (1%)

- DOSE:

In severe swelling:

- 1-2 drops after every 30 to 60 minutes

After reduced swelling:

- 1 drop every 4 hrs

- Contraindications
  - Allergic to hydrocortisone
  - Undiagnosed red eyes
  - Glaucoma
  - Eye infection producing pus
  - Fungal infection of the eye
  - Do not use hydrocortisone for more than 7 days
  - Discard 14 days after opening
  - Breast feeding and pregnancy
- Indication
  - Treat non-infectious condition (e.g swelling of the eye)
  - Treat viral infection of the eye
  - Prevent graft reaction of the eye
  - Treat injury of the cornea

3. TIMOLOL Eye drop (0.5%)

DOSE:

- 1 drop per day in elderly
  1 drop twice in adolescent

Indications

- Glaucoma

Contraindication:

- Diabetes Mellitus
- Cardiovascular disease
- Asthma, pulmonary disease
- Surgical cases
- Breast feeding and pregnancy
- Hepatitis C patient.

4. DEXAMETHASONE eye drop (0.1%)

DOSE:

- 1 drop X 4 up to six times per day depending on severity

Indication

- Used to treat certain eye conditions due to eye inflammation (allergic conjunctivitis)
- Used in treating swelling, redness, and itching due to inflammation

Contraindication

- Acute untreated bacterial infection
- Mycobacterial ocular infection
- Epithelial Herpes simplex

5. Chloramphenicol eye Drops (Antibiotic; 0.5 W/V)

DOSE:

- 1 drop X 4 for 5-7 days

Indication

- Used in both elderly and children
- Treat bacterial infection and other eye infections

Contraindication

- Allergic to Chloramphenicol

6. Sodium Cromoglicate 0.2%

DOSE:

- 1 drop every four hours

Indication

- Relieve and prevent seasonal eye symptoms
- Relief from symptoms such as tearing, itching, burning, and sensitivity to light
- Allergic conjunctivitis

**Contraindication**

- Hypersensitive to ingredients

## Annex 2. Data Collection tool.

| District; | | | | Wards covered | | | | | | | Outreach site: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date of Service provision; | | | | | | | | | | | |
| # | Name of Patient | Gender | | Age | Village | Sub Village | Diagnosis | Treatment/ Medication dispensed (*) | Quantity of medicine dispensed | Referred to… (Health Facility) | Name of health care provider |
| | | M | F | | | | | | | | |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
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| 14 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |
| Total | | | | | | | | | | | |

***Note: Medication *1= Sod = Sodium cromoglycate eye drops * 2= TCL = Tetracycline eye ointment***
****3= Dexa = Dexamethasone eye drops *4=Dexa Neo= Dexamethasone with Neomycin *5= Dexa Chloro = Dexamethasone with Chloramphenicol *6= Hydro = Hydrocortisone eye drops***
****7=Cipro=Ciprofloxacin eye drops *8= Tim =Timolol eye drops *9= OTH =Others.***