

SUPPLEMENTARY MATERIAL

Supplementary material 1: Semi structured KAP questionnaire for Pharmacy attendants in Uganda

1. How often do customers visit your medical shop seeking help and advice for eye/vision related problems? (only one response is permitted)
 - a. Rarely, less than 1-2 per month
 - b. About 1-2 per month
 - c. About 1-2 per fortnight
 - d. About 1-2 per week
 - e. About 1-2 per day
 - f. More than 2 per day
 - g. Can't say exactly, varies day to day

2. What challenges do you face when dealing with customers seeking advice for eye related problems? (>1 response permitted)
 - a. Diagnosing the disease
 - b. Which eye drop to give for what condition
 - c. Varies from patient to patient
 - d. Don't know if a drug is working on patient
 - e. Knowing when to refer them to a health post, clinic or hospital

3. Which of the following conditions may cause a patient to present with a painful red eye? (> 1 response permitted)
 - a. Conjunctivitis
 - b. Cataract
 - c. Night blindness (Xerophthalmia)
 - d. Corneal abrasion
 - e. Injury

4. Which is more serious: itching and redness in the eye or a painful red eye? (Only one answer required)
 - a. Both
 - b. Itching with redness
 - c. Red eye with pain
 - d. Not sure

5. What do you know about corneal infection? (>1 response permitted)
 - a. It is a whitish appearance in the black part of eye
 - b. It is the result of sin in a person's life
 - c. It is very serious, if not treated properly a person can lose their eye or sight
 - d. A minor abrasion following trauma may result in corneal infection if not treated promptly
 - e. It usually gets better without treatment

6. Do you think any antibiotic eye drops will cure redness and pain in the eye?

- a. Yes
- b. No
- c. Maybe
- d. Don't know

If your answer is yes or maybe. what is the antibiotic eye drop you prefer to prescribe?

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Why?.....
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7. Which statement(s) about topical steroids is correct for use in the eye? (>1 response permitted)

- a. If the patient has a red eye, steroids should be used to reduce the redness
- b. If the patient has a painful eye, steroids should be given to treat the pain
- c. Both a) and b)
- d. Topical steroids are only appropriate for selective cases
- e. Steroids can delay wound healing and suppresses the body's immunity
- f. Steroids can raise the pressure in the eye
- g. I am unsure whether to use them in the eye

8. What do you advise a patient with red eye as a result of minor trauma?

- a. Prescribe antibiotics
- b. Prescribe steroids
- c. Prescribe steroids in combination with antibiotics eye drops /ointment
- d. Prescribe oral medication (tablets)
- e. Refer directly to the health centre or an eye hospital without giving anything
- f. Prescribe antibiotics and refer them to an eye hospital/clinic urgently
- g. Prescribe combination therapy (antibiotics + steroids) and refer to an eye hospital/clinic urgently

9. If you prescribe tablets, please tell us which oral medication you would recommend?

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10. Do you agree or disagree with the following statement:

Customers presenting with pain, redness, photophobia, and watering in the eye(s) must be referred to health posts or a nearby eye hospital

- a. Agree

- b. Don't agree

If you don't agree, why not?

- a. We can treat them so no need to refer
- b. I don't know where to refer the customer
- c. This is not a serious condition and therefore does not need referral

If you chose answer 'a'. What process would you follow in treating them? Name the medication you would prescribe:

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10. Do you think that corneal blindness is an important issue/problem in your community?

- a. Yes (go to Q.11)
 - i. If yes, why?

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- b. No
 - i. If no, why not?

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- c. I do not know / I'm not sure

11. What is the risk that someone in your community will suffer minor trauma or injury to the eye during the next 6 months?

- a. High risk
- b. Medium risk
- c. Low risk
- d. No risk
- e. I don't know

Please explain the reasons for your response to this question

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13. Do you think public health centres can treat the patients with minor eye injuries?

- a. Yes
- b. No
- c. I do not know / I'm not sure
- d. No answer

14. Do you think a public health centre or general hospital can treat emergency eye conditions?

- a. No, they can't
- b. Only some places can
- c. They can but they don't want to
- d. They are same as us
- e. Of course, they can

15. Which of the following initiatives could be implemented in partnership with pharmacy shop owners to help reduce corneal blindness resulting from eye infections?

- a. Emphasizing the need to refer all cases to a health centre/eye care centre/eye hospital without treatment
- b. Instruct which antibiotics to prescribe before urgently referring cases to a specialist eye care centre
- c. Provide training for pharmacists to enable them to recognise and treat minor eye conditions

Other:

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Supplementary material 2: In-depth interviews topic guides for pharmacy attendants in Uganda

1. According to your understanding, what is the best course of action following any form of injury to the eye?
2. Can you tell me what you know about infections of the cornea (microbial keratitis / corneal ulcer)?
3. What do you think causes this eye condition?
4. How often do people seek your help for this condition?
5. What do they tell you about what they think has happened to their eye?
6. How do you advise patients with this condition?
7. What treatment options can you offer these patients?
8. Can you tell us about any recent experiences you have had advising/treating a customer with this type of eye infection?
9. Are there occasions when you would refer people with this condition to a health centre or to a hospital? If yes, please tell us about why you advised them to seek help in these places?
10. What steps could be taken to make it easier/more convenient to refer patients with eye problems to health centres or hospital, without any delay, when they present at your pharmacy?

Supplementary material 3: Focused group discussions guide

1. What is the best course of action following any form of injury to the eye?
2. Knowledge about infections of the cornea (microbial keratitis / corneal ulcer)?
3. Causes of corneal infections.
4. Experiences in managing corneal infections (presentation/history/treatment options)?
5. Experiences in referral of patients with corneal infections (indications, challenges)
6. What steps could be taken to make it easier/more convenient to refer patients with eye problems to health centres or hospital, without any delay, when they present at your pharmacy?