



# Traditional Eye Medicines And The Factors Associated With Ocular Manifestations Among Patients Attending Mulago National Referral Hospital Eye Department

## Author information

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# Traditional Eye Medicines(TEM)

## □ TEM

- Any organic or inorganic substance (plant, animal, or chemicals) that were applied to eyes to achieve a desired ocular therapeutic effect.



## Background

- Prevalence of TEM use in SSA  $\approx$  33.8% (Ukponmwan & Momoh, 2010).
- TEM contributes to delay in treatment (Gupta et al., 2017).
- In Uganda, wide spread of TEM was reported in Atyak (Nyathirombo, Mwesigye, & Mwaka, 2013)

## Problem statement:

- TEM and Ocular complications:
  - Studies report prevalence of ocular complications occur in 54.8% of TEM users
  - These complications are potentially sight threatening : (Ukponmwan & N. Momoh, 2010).
  - Observation data at MNRH show  $\approx 8.33\%$  used TEM.



## Objectives

- To determine the types of traditional eye medicine used among patients attending MNRH
- To determine ocular manifestations of traditional eye medicine users among patients attending MNRH
- To determine the factors associated with ocular manifestations among TEM users attending the MNRH

# Methods

- ❑ Hospital-based cross-sectional study.
- ❑ June 2021 to August 2021 at MNRH
- ❑ Sample size: **182** participants





# Methods

## ☐ Inclusion criteria

- All patients confirmed to have used TEM, and sign the informed consent or assent buy parents/guardians of children participants

## ☐ Exclusion criteria

- All patients who were unable to respond to the study questions and ocular examination

# Methods

## □ Study procedure

- Consecutive sampling technique.
- A structured questionnaire was then used

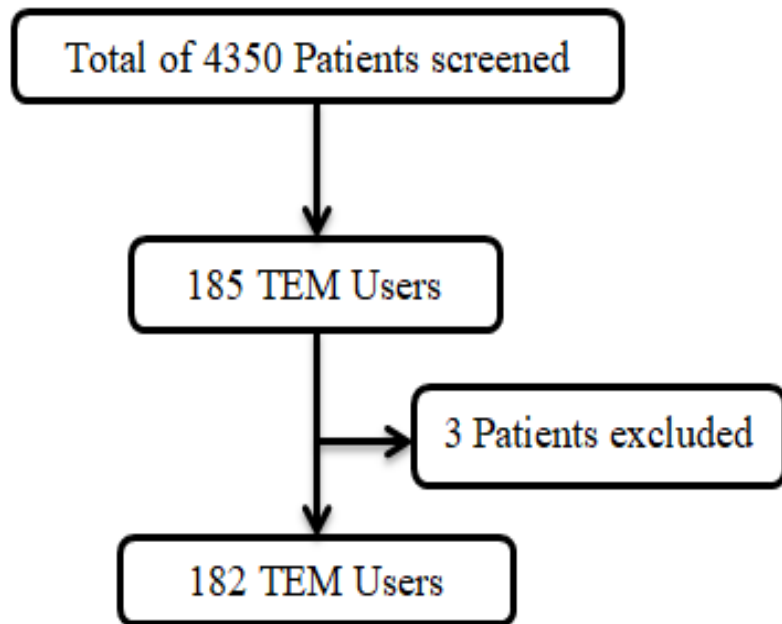
## □ Data management

- Electronic Epi Data version 4.2
- STATA version 15 for analysis.



# Results

Study participants flow chart



## □ Socio-demographic

- (M: 53.3%; F: 46.7%).
- The mean;  $36 \pm 21$  SD years
- 52.2% resided in the rural
- 52.2% primary school
- Traders 29.1% (n=53)
- Farmers 15.4% (n=28)

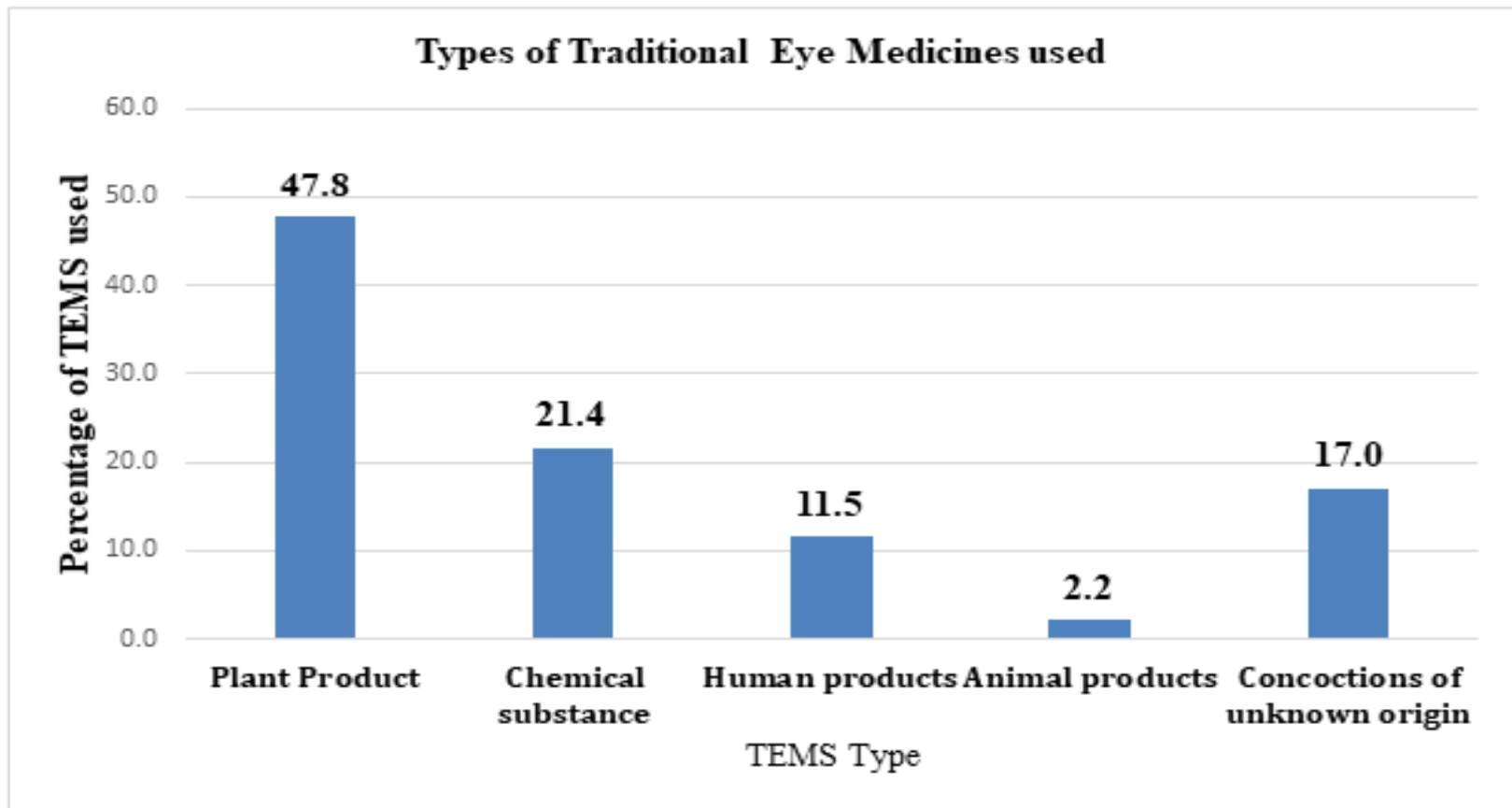
## Ocular clinical reasons for using TEM

Characteristics	Frequency	Percentage
Itching	92	50.5
Tearing	114	62.6
Red eyes	52	28.6
Eye discharge	52	28.6
Photophobia	81	44.5
Corneal opacity	33	18.1
Blurred vision	68	37.4
Lens opacity	14	7.7
Eye injury	20	11.0

## Social reasons for using TEM

Characteristics	Frequency	Percentages
Poverty	71	39.0
Ignorance of toxic effect	92	<b>50.5</b>
Limited access to health facilities	93	<b>51.1</b>
Limited access to eye care professionals	79	43.4
Poor quality of Healthcare	23	12.6
Cultural belief in TEM	82	<b>45.0</b>
Ease and availability of TEM	103	<b>56.6</b>

# Types of TEM used



## Ocular manifestations

Ocular manifestations	Frequency	Percentage
Anterior staphyloma	8	4.4
Blepharitis	6	3.3
Conjunctivitis	<b>98</b>	<b>53.9</b>
Corneal perforation	6	3.3
Corneal ulcer	<b>51</b>	<b>28.0</b>
Endophthalmitis	<b>10</b>	<b>5.5</b>
Descemetocoele	3	1.7

## Ocular manifestations



# Associated factors

	cPR (95% CI)	p value	aPR (95% CI)	p-value
<b>Sex</b>				
Male	<sup>1</sup>		<sup>1</sup>	
Female	0.83 (0.68-1.01)	0.067	0.85 (0.71 - 1.03)	0.094
<b>Residence</b>				
Rural	<sup>1</sup>		<sup>1</sup>	
Urban	1.5 (1.14-1.98)	0.004	<b>1.46 (1.12 - 1.91)</b>	<b>0.006</b>
<b>Availability of TEM</b>				
No	<sup>1</sup>		<sup>1</sup>	
Yes	1.52 (1.22-1.89)	<0.001	<b>1.53 (1.23 - 1.92)</b>	<b>&lt;0.001</b>
<b>Itching</b>				
No	<sup>1</sup>		<sup>1</sup>	
Yes	0.98 (0.81-1.19)	0.858	0.88 (0.71 - 1.11)	0.278
<b>Tearing</b>				
No	<sup>1</sup>		<sup>1</sup>	
Yes	1.03 (0.85-1.26)	0.737	1.09 (0.87 - 1.37)	0.436
<b>Health facility</b>				
No	<sup>1</sup>		<sup>1</sup>	
Yes	1.15 (0.95-1.40)	0.141	1.13 (0.93 - 1.37)	0.235
<b>Culture</b>				
No	<sup>1</sup>		<sup>1</sup>	
Yes	1.15 (0.95-1.38)	0.155	1.12 (0.92 - 1.36)	0.269



# Discussion

- ❑ The commonly used TEM was plant products
  - Y. Jaya, 2014; S. Nwosu 2011; Ukpomwan, 2010
- ❑ 70% had ocular manifestations:
  - 54.5% by (Nwosu & Obidiozor, 2011)
  - 58.6% by (Jaya & Masanganise, 2014)
- ❑ Urban dweller were -likely to have ocular manifestations

## Conclusions

- Plant-based products were the most frequently used types of TEM and were often prescribed by non-traditional healers.
- A large proportion of the TEM users were found with potentially sight-threatening ocular manifestations
- Urban dwellers and ease of availability of TEM were strongly associated with an ocular manifestation.



**END**

**THANK YOU**