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## **APPENDICES**

## APPENDIX 1

### INFORMATION SHEET

#### **To the Respondents,**

My name is Anil Sherchan. I am studying for my Master's degree in the field of Health Systems Development at the College of Public Health, Chulalongkorn University, Bangkok. My thesis topic is "Severity of eye injury and treatment-seeking behavior among adult patients in an eye hospital, Nepal". I would like to ask for your cooperation in completing this questionnaire about your opinion regarding treatment-seeking behavior at the time of eye injury and the factors affecting that behavior. This questionnaire is divided into six sections. It will take about 20 minutes.

Your cooperation at this time will help to understand the problems encountered while seeking treatment and guide us to develop appropriate interventions to solve the problem. However, your participation is voluntary. You are free to refuse to participate, or to withdraw from the research process at any time. You have the rights to disagree to participate and it is guaranteed that you can quit your participation at any time without any penalty even after you have participated in this study. All information and data will be kept securely and will be made available only to the concerned persons. A ID number, and not your name, will store your information. When we present or publish papers from this study, none of you will be identified. If you have any problems with this questionnaire, please do not hesitate to ask for help. Thank you for giving time to answer this questionnaire. I can be reached by phone (520265) at my hospital.

Anil Sherchan

The College of Public Health, Chulalongkorn University

**Informed Consent****ID Number of patient**

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I agreed to participate in this research on "Severity of eye injury and treatment-seeking behavior among adult patients in an eye hospital, Nepal" as a participant. The procedures I agreed are the followings: i) I will be asked few questions by an interviewer about my eye injury treatment-seeking behavior ii) I will be examined by investigator to record the status of eye injury.

I have given this consent voluntarily after I have been fully explained about the confidentiality to protect my privacy and the experimental procedure. I understand the potential benefits of the investigation for myself, the community and for Nepal. Also, I understand that the data obtained in this study will be used in a manner to maintain confidentiality and personal rights.

Finally, I know that I can withdraw my consent and discontinue the participation at any time without any penalty to me.

Participant signature-----

Date:

## APPENDIX 2

The College of Public Health, Chulalongkorn University

Treatment seeking behavior study of eye injury

## Questionnaires

ID Number of patient

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**Part I: Socio-demographic factors**

**Explanation:** Put / check in the box, or fill in the blank for the following question as apply to you.

For researcher

1. Age: \_\_\_\_\_ Years

V1 

2. Sex:

V2  1. Male 2. Female

3. Nationality

V3  1. Nepali 2. Indian 3. Others

4. To which caste/ethnic group do you belong?

V4  1. Brahmin 2. yadav/teli/kurmi 3. Chhetri 4. Newars 5. Magar 6. Tharu 7. Rajbansi 8. Muslim 9. Limbu 10. Sherpa

5. What is your marital status?

V5  1. Unmarried 2. Married 3. Widowed 4. Divorced

6. What is your highest educational status?

V6  1. Never attend school 2. Informal education 3. Primary (1-5 grade) 4. Secondary (6-10 grades) 5. Higher secondary and more

**7. What is your main occupation?**V7 

1. Farmer                       2. Farm laborer  
 3. Manual laborer               4. Factory worker  
 5. Housewife                       6. Government service  
 7. Private/ NGO/INGO       8. Students  
 9. Business                       10. No work  
 11. Other specify.....

**8. What is your monthly family income?**V8 

- 1 Monthly/yearly income     2. No income  
 3. Not stated

**Part II: Knowledge/information about cause, symptoms, protection,  
treatment and complications of eye injury**

**1. What are possible causes of eye injury? (May check more than one)**KI1 

1. fist/ball injury to the eye  
 2. Branch, leaf, sticks injury to the eye  
 3. Injury due to fall or accident  
 4. Fall of acid or alkali to the eye  
 5. Injury due to flying object, spark, heated objects

**2. What are the symptoms of eye injury? (May check more than one)**KI2 

1. Pain in the eye  
 2. Watering of eye  
 3. Irritation of eye  
 4. Visual disturbance

**3. If some foreign body falls in your eye, what would be your immediate protective reaction? (May check more than one)**KI3 

1. Wash your eye with clean water  
 2. Protect your eye from farther harm  
 3. Seek treatment from nearest primary care center/eye hospital



**4. Can you protect yourself from eye injury?**

1. Yes             2.No

**5. What are the eye protective devices? (May check more than one)**KI4 

1. Goggles  
 2. Eyeglass  
 3. Face shield plastic  
 4. Facemask or face wrap

**6. If you sustain a eye injury where would you go for treatment?**KI5 

1. Traditional healer  
 2. Eye hospital/Primary care facility

**7. In your opinion, can eye injuries be prevented?**KI6 

- Yes             No

**8. Is prevention of eye injury better than cure?**KI7 

- Yes             No

**9. Can a complication of eye injury lead to a visual loss/blindness?**KI8 

- Yes             No

**Part III: Treatment seeking behavior of eye injury patient****1. From whom did you first seek treatment after sustaining eye injury?**B1 

1. Traditional healer  
 2. Near by pharmacy shop  
 3. Primary care facilities including primary eye care center  
 4. Private practitioners (general doctor/ophthalmologist)  
 5. Eye hospital

**2. Within what duration did you consult for treatment in the eye hospital?**B2 

- Duration in hour's             days

**Part IV: Risk Perceptions about likelihood estimates and severity estimates of eye injury**

**Indicators of Risk Perception statement**

<i>Statement</i>	Yes (1)	Do not know (2)	No (3)	Coding
a. Minor eye injury is not a serious matter, it is most of the time self recovered				RPa <input type="checkbox"/>
b. Everybody is at risk of acquiring eye injury				RPb <input type="checkbox"/>
c. Farmers, farm/factory laborer are more susceptible to eye injury				RPc <input type="checkbox"/>
d. Eye injury is a serious condition and one must give attention to it				RPd <input type="checkbox"/>
e. Eye injury causes pain, suffering and depression				RPe <input type="checkbox"/>
f. Eye injury can become severe if it is not treated in time				RPf <input type="checkbox"/>
g. Proper measures if undertaken can control the eye injury				RPg <input type="checkbox"/>
h. Complications of eye injury does not lead to visual loss and blindness				RPh <input type="checkbox"/>
i. Visual disability cause loss of jobs and socio-economic deprivation				RPi <input type="checkbox"/>

**Part V: Source of information about eye care providers and eye hospital  
through which patient decides where to seek treatment**

**1. What were the sources of information that helped you to visit eye hospital?** SI1

- |                                                     |                                                       |
|-----------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> 1. Television              | <input type="checkbox"/> 2. Radio                     |
| <input type="checkbox"/> 3. Former patient          | <input type="checkbox"/> 4. Friends                   |
| <input type="checkbox"/> 5. Family member's         | <input type="checkbox"/> 6. Pharmacy                  |
| <input type="checkbox"/> 7. Traditional healer's    | <input type="checkbox"/> 8. Private practitioner      |
| <input type="checkbox"/> 9. Primary care facilities | <input type="checkbox"/> 10. . Others (specify) _____ |

**2. Did you come to hospital by yourself or any of the first care providers refer you here?** SI2

- |                                                |                                                           |
|------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> 1. Self               | <input type="checkbox"/> 2. Pharmacy/private practitioner |
| <input type="checkbox"/> 3. Former patient     | <input type="checkbox"/> 4. Family members                |
| <input type="checkbox"/> 5. Traditional healer | <input type="checkbox"/> 6. Primary care facility         |

**Part VI: Accessibility to the eye hospital**

**1. How did you travel from home to the eye hospital?** A1

- |                                      |                                                    |
|--------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> 1. On foot  | <input type="checkbox"/> 2. Own vehicle            |
| <input type="checkbox"/> 3. Bus      | <input type="checkbox"/> 4. Bicycles               |
| <input type="checkbox"/> 5. Rickshaw | <input type="checkbox"/> 6. Others (specify) _____ |

**2. How far is the eye hospital from your home? \_\_\_\_\_ km** A2

**3. How long is the travel from your home to eye hospital (one way)?** A3   
\_\_\_\_\_ hrs \_\_\_\_\_ day

**4. How much you pay for traveling cost? \_\_\_\_\_ NRs** A4

### APPENDIX 3

#### Eye Injury Report Form

**Instruction:**

Following are the instruction on how to carry out general information inquiry, clinical examination and treatment of eye injury patients. Please adhere to it.

- (1) In the case of true emergency (e.g. chemical burn, thermal burn) start immediate treatment. General information and clinical examination should be assessed after the treatment.
- (2) If the patient needs immediate surgery (e.g. perforating injuries, corneal rupture, scleral rupture), first of all perform brisk clinical examination and post him/her directly to the operation theater. General information should be assessed after the surgery.
- (3) In the mild and moderate cases of injuries, whenever applicable record the visual acuity of both eye (RE), (LE), and then initiate the treatment followed by inquiry of general information.
- (4) Whenever applicable all injury cases must undergo slit lamp examination of the anterior segment of the eye.
- (5) If the posterior segment pathology is suspected (e.g. macular/retinal damage, vitreous pathology) assess the visual acuity without and with pinhole then dilate both eye with weak dilating agent for examination by indirect ophthalmoscopy.

**Please fill this form after taking care of the eye injury patients.**

Injured patient information                                  ID Number of patient.....

1. Name \_\_\_\_\_ VA (Visual acuity) ) OD..... OS.....

2. Sex \_\_\_\_\_ Male \_\_\_\_\_ Female                  Age \_\_\_\_\_ years

3. Date of injury (day/mo/year)                  \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

4. Time of injury                  \_\_\_\_\_

5. Nationality                  \_\_\_\_\_

6. Occupation                  \_\_\_\_\_

## 7. Part of injured (Check all that apply)

- Eyeball, one eye                       other tissue around eye  
 Eyeball, both eyes                       Bone, eye socket  
 Eyelid                                               other

## 8. Source of injury

- Chemicals and chemical product (includes wet/dry cement)  
 Furniture and fixtures (includes wall/floor/window coverings)  
 Machinery  
 Persons, plants, animals  
 Tools, instrument and equipments  
 Vehicles  
 other sources

9. At the time of the injury was the subject wearing any of the following items; prescription, contact lenses, sunglasses, or safety eye and face protection (e.g. safety glasses, goggles, face shield, welding helmet)

- Yes                       No                       Unknown

## 10. Grading of severity of eye injury (please mark the following description)

- (i) Open globe injury                                      (ii) Closed globe injury

Mild	Moderate	Severe
Ecchymosis	Lid laceration	Corneal ulcer
Sub-conjunctival hemorrhage	Traumatic cataract	Penetrating foreign body
Superficial foreign body	Iridodialysis	Corneal rupture
Conjunctival tear	Corneal foreign body	Iris prolapse
Excoriation/abrasion of lid	Traumatic uveitis	Dislocated lens
	Corneal abrasion	Scleral rupture
		Macular/retinal damage
		Orbital fracture

Ocular burns (Thermal) (Chemical burns)

Mild

- haziness of cornea
- injection of conjunctiva and cornea
- intraocular pressure normal

Moderate

- corneal opacity
- blurring of iris details
- minimal ischemic necrosis of conjunctiva and cornea (partial blanching)
- intraocular pressure may be elevated

Severe

- marked corneal edema and haze
- blurring of papillary outline
- blanching of conjunctiva and sclera (marked whitening of the external eye)
- intraocular pressure may be elevated

**Thank you for your assistance in helping prevent eye injuries.**

### Timeline for developing research proposal and thesis

Activities/ Months	Nov			Dec				Jan			Feb				Mar			Apr				M
Review information	✓	✓	✓	✓	✓	✓																
Meeting with advisor	✓	✓	✓	✓	✓	✓	✓	✓	✓						✓	✓	✓	✓	✓	✓	✓	
Writing Proposal	✓	✓	✓	✓	✓	✓																
Submit and Exam proposal									✓													
Correction and resubmit the proposal									✓	✓												
Data collection											✓	✓	✓	✓	✓	✓						
Data entry /analysis															✓	✓						
Report writing																✓	✓					
Submit draft report																	✓					
Develop final draft and submit																	✓					
Defend the thesis																		✓				
Develop final thesis report																		✓	✓	✓	✓	

## Budget for research

Activities	Cost (Rupees)
1. Questionnaires typing	1,000
2. Photocopying of questionnaires, report form, information sheet, informed consent	4,000
3. Training of interviewers and data entry assistants	5,000
4. Data Management (Programming, data entry, coding, recording)	12,000
5. Transportation	5,000
6. Stationery	1,000
3. Thesis preparation	10,000
<b>Total</b>	<b>32,500</b>



### Map of the study site



**CURRICULUM VITAE**

Name: Dr. Anil Sherchan

Date of birth: 17.02.1960

Professional qualification: M.B.B.S.  
University of Novisad,  
Yugoslavia (1982-1889)  
PG D.O.  
Tamilnad Dr. MGR Medical University  
Aravind Eye Hospital and Post-Graduate  
Institute of Ophthalmology, Madurai,  
India (1997-2000)  
Completed the Requirements for the MPH  
degree at Chulalongkorn University in April,  
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Current position: Outreach Director  
Shree Rana-Ambika Shah Eye Hospital,  
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