

देवेन्द्र कुमार सिंह, भा.प्र.से.  
महासचिव

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मानव अधिकार भवन, सी-ब्लॉक,  
जीपीओ कम्पलेक्स आईएनए, नई दिल्ली-110 023 भारत  
**NATIONAL HUMAN RIGHTS COMMISSION**  
Manav Adhikar Bhawan, C-Block,  
GPO Complex, INA, New Delhi-110023 India

**D.O. No. R-15/4/2020-PRPP (RU-3)**

**Dated 11 October 2022**

**Subject : Advisory to Prevent, Minimize and Mitigate Ocular Trauma**

*Dear Sir/Madam*

The National Human Rights Commission (NHRC) is mandated by the Protection of Human rights Act, 1993, to protect and promote the human rights of all the citizens in the country.

2. Towards the fulfillment of the above mandate, the Commission, in consultation with the domain experts, the Commission noted that eye Injuries are a preventable cause of blindness, yet it remains a significant disabling health problem that affects all age groups. Injuries may occur in the home, in the workplace, during recreational activities or as a result of road crashes. The Commission also noted that losing one's vision through an eye injury can lead to substantial long-term costs, and impact on an individual and their family & community.

3. On the basis of detailed analysis on the subject, the Commission hereby issues this advisory to "Prevent, Minimize and Mitigate Ocular Trauma". A copy of the same is enclosed for necessary follow up action.

4. All concerned authorities are advised to implement the recommendations given in the said advisory and send an 'Action taken Report' (ATR) on the same within three months for information of the Commission.

*Best wishes.*

**(Devendra Kumar Singh)**

**Encl.: As above.**

**To :**

1. **The Secretary** (of all Union Ministries, Government of India)
2. **The Chief Secretary** (of all States/UTs)





## NATIONAL HUMAN RIGHTS COMMISSION

NHRC/Adv./04/2022-23

Dated 11<sup>th</sup> October, 2022

### **Advisory to Prevent, Minimise and Mitigate Ocular Trauma**

Eyes are an important part of our health. We rely on our eyes to see and appreciate the world around us. Eighty percent of what we perceive comes through our sense of sight. Eye injury (Ocular Trauma) constitutes 7% of all bodily injuries and 10% to 15% of all eye diseases. Ocular trauma is responsible for about 5% of irreversible or permanent blindness. Eye injury commonly affects the young male population during their most productive age (55% of victims are below 25 years of age) and hence can have a significant socio-economic impact on the family of the victims and the country. Eye injury is recognized as one of the major causes of disabilities in India. However, the most important and reassuring fact is that the eye injury is preventable cause of blindness. Major contributors of eye injury are road accidents (34%), sports (29%) and occupations (21%). However, the most important and reassuring fact is that eye injury is a preventable cause of blindness.

With a view to prevent and minimize the impact of ocular trauma and to ensure appropriate standardized treatment and rehabilitation of victims of ocular trauma, the Commission issues this Advisory:-

#### **I. In Re.: Creation of a Database (Registry) Platform on Ocular Trauma**

1. Union Government should:

- (i) establish an online (web-based) portal or make provision in any existing portal, to record details of each case of ocular trauma; the details should include the mechanism, circumstances and objects causing the ocular trauma and the outcome of treatment;
- (ii) make every case of ocular trauma a notifiable event across the country by making appropriate rule/regulation/guidelines to make it mandatory for each hospital or medical practitioner to upload details of each case of ocular trauma dealt by them;
- (iii) involve Integrated Child Development Scheme (ICDS) workers and school teachers to identify the victims of ocular trauma, counsel such victims to avail treatment and upload details of such victims on the online portal;
- (iv) create awareness about the online portal among Ophthalmologists and other health profession involved in eye care or any other health care by organization of seminars, workshops, meetings, etc.; and
- (v) work closely with Ocular Trauma Society of India (OTSI) and All India Ophthalmological Society of India on generating data and analysing data and periodically present the data/ statistics related to eye trauma to the NHRC and appropriate government offices/ministries.

## **II. In Re.: Prevention and Minimization of Ocular Trauma**

1. Union and State Governments should make efforts to prevent and minimize ocular trauma. These efforts may *inter-alia* include:
  - (i) creating public awareness on major causes of ocular trauma and the care and precautions to be taken to address these causes, by:
    - (a) launching publicity campaign in print, electronic and social media;
    - (b) installing posters and hoardings at hospitals, dispensaries, schools, colleges, stadiums, gymnasiums, industries/establishments prone to ocular trauma and other prominent places;



- (c) including a chapter on ocular trauma in curriculum of schools and Industrial Training Institutes (ITIs) for the trades having potential to cause ocular trauma;
  - (d) mandatorily printing a warning about dangers on items/products having potential to cause ocular trauma;
  - (e) regularly organizing seminars, workshops and meetings on ocular trauma for high risk persons such as lathe and other machine tool operators, welders, carpenters, persons handling hazardous chemicals/alkalis, farmers involved in spray and handling of insecticides/ pesticides *etc.*;
  - (f) observing trauma awareness week/fortnight once in a year; and
  - (g) creating eye injury awareness videos and dissemination of these videos through news channel or television networks by working closely with Ministry of Information & Broadcasting.
- (ii) identifying the fire-crackers which have the potential to cause eye trauma and impose a ban on use of such fire-crackers:
- (a) in public places;
  - (b) by children below twelve years of age, except under direct supervision of an adult; and
  - (c) close spaces and large public gatherings.
- (iii) imposing ban/restriction on sale of bows, arrows, pellet guns, toys having sharp edges, and such other toys having potential to cause eye injuries to children below twelve years of age;
- (iv) critically examining existing laws providing for mandatory use of safety eye protection by workers engaged in activities having potential to cause eye injuries and initiating appropriate measures to plug gaps in these laws to ensure that appropriate safety eye protection are used by all

workers engaged in such activities. Working with British Standards Institute to update and align eye protection standards with ISO and communicate with employers to ensure that their employees are using eye protection that complies with these standards;

- (v) sponsoring projects for development of low cost indigenous safety eye protection for persons engaged in activities prone to eye injuries;
- (vi) installing display boards and hoardings containing name, address, and contact details of nearby eye care and treatment facilities in the places where activities having potential to cause eye injuries are carried out;
- (vii) making it mandatory to ensure availability of first-aid box containing medicines, bandages and reagents to neutralize chemicals which may cause ocular trauma at all places where activities having potential to cause ocular trauma are carried out;
- (viii) organizing eye check-up camps in schools, colleges, slums, industrial clusters and rural areas to detect cases of untreated ocular trauma and also the cases of lazy eye (Amblyopia);
- (ix) promoting clean fuel and well ventilated kitchen to prevent eye damage to persons engaged in cooking at homes, restaurants and community kitchens;
- (x) regulating chemicals identified as hazardous by dual packaging, restriction on sale to children and proper disposal of used chemicals and containers;
- (xi) prohibiting sale of lime powder in thin plastic sachets;
- (xii) making it mandatory that all chemicals for domestic use should be packed in safe containers and all such containers should be marked with caution symbols;
- (xiii) reducing in ocular trauma due to road accidents, by:



- (a) making eye check-up mandatory for grant and renewal of driving license;
- (b) identifying single eyed drivers;
- (c) mandating safety standard certification in addition to the driving license;
- (d) organizing regular health/eye check-up for commercial drivers;
- (e) providing spectacles to commercial drivers having vision impairment;
- (f) using technology to prevent erratic driving and over speeding. These technologies may *inter-alia* include:
  - i. installing a tamper proof governor in each commercial vehicle;
  - ii. installing a vehicle location tracking device in each vehicle to detect over-speeding;
  - iii. installing speed camera at regular intervals along highways for detection and auto-generation of challan for over-speeding;
  - iv. installing automated driving test tracks to assess driving skills before grant and renewal of driving license;
  - v. making provisions in the motor vehicle design rules for safety requirements including of toughened laminated or any other type of safety glass in windshields and windows of all vehicles , seat belts and airbags to help prevent splinter injuries to eyes in case of road accidents; and
  - vi. piloting a legislation to govern the use of full face helmets on two wheel vehicles

- (xiv) creating appropriate structures such as underground shelters to prevent human death and injuries, including eye injuries, during wars and armed conflicts.

### **III. In Re.: Treatment of Ocular Trauma**

1. The Union and the State Governments should endeavor to upgrade and expand the facilities for treatment of ocular trauma, by:
  - (i) developing ocular trauma as a separate sub-specialty in Ophthalmology in addition to the existing eye specialists;
  - (ii) ensuring availability of adequate number of Ophthalmologists in the country by increasing the number of post graduate seats in Ophthalmology with specialized sub-specialty fellowship in ocular trauma;
  - (iii) providing adequate number of equipment and other facilities in Government Run Eye Care Centres and Ophthalmology and Trauma Wards of other government run hospitals. And creating Standard Operating Procedures (SOPs) for management of patients with eye injuries/ ocular trauma;
  - (iv) creating a post of Ophthalmologist in each Community Health Centre and increasing the number of posts of Ophthalmologists in District Hospitals, Medical Colleges, All India Institute of Medical Sciences (AIIMS) and other Specialty Health Care Centres. Each of the ophthalmologist in community health centre and district hospitals should have a mandatory three month training in the field of ocular trauma;
  - (v) sponsoring research in the field of ocular trauma to facilitate development of low cost eye care technologies. To encourage major eye centres across the countries to take up ocular trauma as master's research thesis topic



and also have PhD programs on ocular trauma with special emphasis on eye injury prevention; and

(vi) establishing and upgrading eye/cornea banks by:

- (a) creating awareness about eye donation;
- (b) creation and up-gradation of physical infrastructure for safe storage of the donated eye/cornea; and
- (c) creation of an online portal to register voluntary pledge for eye donation on death of the donor.

#### **IV. In Re.: Development of Integrated ophthalmic trauma units:**

1. The Union and the State Governments should endeavor to set-up integrated ophthalmic trauma care units across the entire country with the following objectives:

- (i) streamlining the care of patients with ophthalmic trauma by:
  - (a) providing for emergency attendance and management of patients with ophthalmic trauma conditions with other departments like neurology, plastic surgery *etc.*;
  - (b) sharing/reducing the work-load of other sub-specialty colleagues; and
  - (c) improving the quality management of trauma patients.
- (ii) creating database for research, which will subsequently propose guidelines for prevention of ocular trauma to reduce the incidence of preventable ophthalmic trauma;
- (iii) imparting training and fellowship to young ophthalmologists;
- (iv) conducting public forum / CME for awareness about ophthalmic trauma;
- (v) fostering collaboration and ties in field of ocular trauma with international organizations; and



- (vi) A model structure of a standard trauma centre at a tertiary level eye care centre, as suggested by the Ocular Trauma Society of India (OTSI), is at **Annexure I.**

**V. In Re.: Rehabilitation of Victims of Ocular Trauma**

1. The Union and the State Governments should endeavour to rehabilitate victims of ocular trauma, by:
  - (i) organizing adjustment training for victims of ocular trauma, including the low vision persons, through coordinated efforts by different Government institutions;
  - (ii) linking online portal to be established for registration of victims of ocular trauma with the Unique Disability ID (UDID) Portal for persons with disabilities for expeditious issue of UDID to victims of ocular trauma who meet benchmark disability norms;
  - (iii) establishing district level rehabilitation centres for visually impaired persons;
  - (iv) establishing a special fund to provide financial assistance to victims of ocular trauma; and
  - (v) identifying the industries having high potential of ocular trauma and other industrial accidents and making it mandatory for owners of all such industries employing minimum fifty (50) workers to purchase personal accident cover of minimum Rs. 15 lakh for each workers engaged by them.

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## Annexure- I

### Sketch of Proposed Ocular trauma Unit

