# COVID-19: Adaptations and Changes of Eye Care Management at Chittagong Eye Infirmary & Training Complex (CEITC), Bangladesh

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#### Introduction

The COVID-19 pandemic has brought enormous challenges and its repercussions have been felt around the globe, including in eye care. Novel coronavirus disease 2019 (COVID-19) is the clinical disease caused by SARS-CoV-2, the virus first discovered in Wuhan, China. Millions of people have been infected with the SARS-CoV-2 virus and many have become seriously ill, threatening to overwhelm the ability of health systems to cope. The World Health Organization (WHO) declared the COVID-19 outbreak a Public Health Emergency of International Concern on 30 January 2020<sup>1</sup>. It has since spread worldwide and by mid-August 2020 had infected over 21.7 million people, resulting in over 770,000 deaths<sup>2</sup>.

In Bangladesh, first COVID-19 patient was detected on 8<sup>th</sup> March and first death was recorded on 18<sup>th</sup> March 2020. On 26<sup>th</sup> March 2020, the Government of Bangladesh announced a country-wide-lockdown. Till last week of August 2020, there have been 302,147 people affected and 4,082 people dead. Among the affected, around 4,402 were doctors and other health care workers and 77 doctors died<sup>3</sup>.

#### **CEITC Initiatives**

Like other health care sectors, eye care services must be reconfigured during an epidemic or pandemic, such as the one we are now living through. This includes deciding who to see and

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which appointments should be postponed. Our task is to balance our patients' long-term and short-term eye health needs against the risk of them suffering health- and life-threatening complications from COVID-19. Keeping in consideration of all the factors regarding safety and well-being for health care professionals and the patients, our hospital, Chittagong Eye Infirmary & Training Complex (CEITC) closed its routine out-patient department, specialty services, elective surgery and community outreach activities during lock-down period. Otherwise this renowned tertiary eye care center's out-patient department (OPD) provides services to around 1200 to 1300 people and Operation theatre and its attached Central Sterilization Service Department (CSSD) usually accommodate around 100-110 surgeries per day. During the lockdown period, the hospital emergency services to the patients who suffer from ocular injuries, cases having acute red eyes or acutely painful eyes, chemical burns, cases with sudden loss of vision, Chemotherapy for retinoblastoma, LASER therapy for retinopathy of pre-maturity (ROP) etc. The hospital served around 1700 patients and performed 117 surgeries during the lockdown period.

In our country, the government are making decisions and producing national guidelines to follow in providing health care; it is important that we adhere to these while doing our best to limit the negative consequences for our patients. The hospital authority also started to meet regularly to come up with standard and new protocols as and when the situation demands.

• The patient with the attendant shall enter the main gate, and then divided into two rows and they shall fill up the entrance form.

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If all the records are okay, the paramedic shall check the body temperature using an infrared thermometer. Patients with a high temperature and/or any history of cough or sore throat are treated as suspected COVID-19 cases. .



Picture-01: Patients entering through the main gate of the hospital

• Hand sanitizers, water, and soap are available at all entrances so people could wash their hands before entering to the hospital.



Picture-02: Patients are washing hand before entering to the hospital

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- Alcohol disinfectants are used to clean surfaces and equipment in consulting rooms and in clinical and administrative areas. Slit lamps are disinfected at regular interval.
- All doctors and other health care personnel involved in patient care received face masks, eye protection (goggles) and gloves. Attending physicians and nurses are using face shields and protective wear, for example, using adapted theatre gowns as personal protective equipment (PPE) when attending patients.



Picture-03: Doctor assessing patient wearing PPE

- Intraocular pressure assessment was performed with applanation tonometer when essential and disinfected after each patient.
- Clinicians are encouraged to minimize procedures that require close contact with patients such as direct ophthalmoscopy and sac test; these tests are restricted in order to control the infection.
- Staff members are encouraged and supported to practice social distancing, i.e., stay 1-2 metres away from each other.
- Patients requiring non-urgent follow-up were given extended appointments (i.e., they could come back at a future date).
- The waiting area of out patient department (OPD) were re-organized so that the patients maintain physical distance of minimum 1 meter between them while waiting for their turn.
- Appointments for patients with stable chronic conditions such as glaucoma or refractive errors are postponed.
- Elective surgeries are postponed until further notice.
- Clinic consultations were restricted to patients with urgent and emergent conditions only, including recent surgery, retinoblastoma, retinopathy of prematurity, unexplained red eye, trauma, and sudden vision loss during lock-down period.
- We started to offer some of our training and teaching activities by webinar, which has been very well received.

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Going forward at CEITC after lockdown involves a gradual return to reasonable services; starting with around 40% of the normal consultations and offering staggered appointment times. Stringent measures are being introduced to reduce the number of people in the waiting area, e.g., by allowing patients to be accompanied by no more than one supporting family member, if needed.



Picture-04: OPD waiting area for the patients

Everyone in the clinic is expected to practice social distancing, wash and disinfect their hands, and wear face masks.

Eye health providers, along with other sectors have reshaped how services are to be provided while responding to a constantly evolving situation, full of uncertainties. So, we must take whatever measures are needed to protect everyone in the eye care team from COVID-19, including non-clinical or non-medical workers such as security guards, porters, and cleaners, whose work is vital for safe eye care delivery and yet often invisible.

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