A Report

Webinar on ‘Hospital infection control practice during COVID 19 pandemic’

VISION 2020: The Right to Sight INDIA
D-21, Corporate Park, 2nd floor,
Near Dwarka Sector-8 Metro Station,
Dwarka Sector-21, New Delhi-110077
Introduction:

Coronavirus disease 2019 (COVID-19) was declared a global pandemic by the World Health Organization (WHO) on 11 March 2020. With a variable incubation period, multiple suspected routes of person-to-person transmission and perhaps most challengingly, the presence of asymptomatic carriers, COVID-19 can only be combated if both individual and system-level vigilance are practiced. Ophthalmology is a practice that relies heavily on physical examination at close proximity thereby increasing the risk significantly for healthcare workers, patients and attendees.

Objective of the webinar:

The objective of this webinar was to provide a multi-pronged approach that can be adopted during the COVID 19 pandemic to reduce possible sources of infections and ensure environmental disinfection to disrupt the chain of infection. The focus of this webinar was to review infection control guidelines and prevention strategies employed against COVID-19 from various health authorities and ophthalmological bodies. Various protocols of infection control in the outpatient area, patient waiting areas and operating room in relation to eye hospitals shared. This will guide quality systems to be in place and also contribute to patient satisfaction.

Participation:

Total numbers of participants were 89. This program was mainly intended for ophthalmologists, ophthalmic assistants, operating room staff, hospital infection control committee members, Optometrists, Administrators and Operations team. However, all interested staff can also participate.

Resource person

Panelists:
Dr. RD Ravindran; Dr.Uday Gajiwala; Dr Kamala

Speakers:
Dr.Chandrasekhar, Dr.Umang Mathur, Dr.Haripriya Aravind, Dr.Lalitha Prajna

Programme:

The session started with a welcome address by Mr Phanindra Babu Nukella, CEO, VISION 2020 INDIA. He also set the objectives of the webinar and introduced the panelists and speakers.

The first talk was on the “Introduction on Hospital Infection Control and COVID-19” by Dr.Chandrasekhar,
He presented the global and National data of COVID-19 and talked about the “Hierarchy of infection control” as per CDC and the method of approaching it. He also explained the types of PPE and that the PPE is only as effective as its correct use in the event of an exposure. This relies on us as individuals using it correctly. He emphasized that even when used correctly, no form of PPE is 100% effective. The virus is easier to decontaminate and destroy with Sodium hypochlorite, Hydrogen Peroxide, Chlorhexidine, Povidone Iodine, Alcohol and UVC rays. He also gave details about the types of tests required if a person has symptoms. And the ways of the infection prevention and control guidelines that are helping the hospitals.

He presented the standard precautions during COVID 19 times should be:-

1. To consider all people potentially infectious.
2. Assume all persons and air around potentially infectious.
3. Assume all used surfaces around to be similarly contaminated.

The hospitals should have a Hospital Infection Control/COVID 19 Task Force or have a smaller task force. Even after the end of pandemic there is need to follow early detection of unusual events, establish and monitor severe respiratory infections, monitor vulnerable groups and detection of antigenic or genetic changes in circulating viruses.

After Dr. Chandrasekhar concluded, Dr. RD Ravindran thanked him and invited Dr Kamala to give her comments. She said that, in the present scenario hospitals plays an important role and it is important to make sure that the infections are not transmitted, keeping in mind all the protocols in place.

The second talk on “Protocols for OP and Pre-op evaluation” was presented by Dr. Umang Mathur. He introduced the ‘Operational guidelines for Hospital Management during COVID 19 Outbreak’ developed by Dr Shroff’s charity Eye Hospitals. He explained that the changes implemented during COVID 19 times like handwashing/hand sanitizing stations were placed, Face masks made mandatory for staff, patients and attendants, Thermal scanning, Strict one attendant with 1 patient only policy, Aarogya setu app. Staff members were trained.

When a red eye patient visits they are seen without waiting to a separate designated doctor, preferably given a prescription at the gate only. In case an examination on slit lamp is needed, there is a separate red eye clinic and patients are tele-consulted. For social distancing seating spaces and OPD were modified.

During pre-admission
• Patient continues to wear a mask during surgery
• Spacing between surgeries to maintain social distancing in the pre-op area
• Disinfect BP apparatus, stethoscope after every patient with alcohol swab/disinfectant spray.
• COVID 19 test

If a patient or staff is detected with COVID, contact tracing is done, home quarantine and further course of action is being done as per government orders. Each day there is a team that is in charge and if there is any detect cases the team gets active. There are challenges like, availability of PPE kits, lack of staffs and communications.

He said that Dr. Shroff’s eye hospital reduced the number of employees coming to the hospital that improved efficiency and reduced waste.

The following measures were implemented:-

1. Pre registration screening
2. Clinic starting at 7:00am, reduced waiting/crowding
3. Employees to go home when work finishes
4. OR-reduced no of Ors
   • Surgeons divided in AM/PM shift with same staff
5. Cafeteria closed
   • Staff goes home to eat or brings from home. Even patients are asked to bring food from home
6. Removed chairs from tea room.

Other measures

• Encouraged reporting
• Quarantine team
• Quality monitors
• Weekly nodal team meeting
• Emergency room/isolation room

After Dr. Umang Mathur concluded, Dr. RD Ravindran thanked him and invited Dr. Uday to give his comments, he said that when staff wears a N95 or surgical masks it makes breathing difficult and staff forgets to wear it properly, they should be taught to wear the PPE properly, therefore training them again is very mandatory to stop the transmission.

The third talk on “Operating Room protocols” was presented by Dr. Haripriya. She started her presentation with the standard protocols during the counseling of patient undergoing surgery, COVID 19 screening/testing.
She explained on the day of surgery, the goal is to reduce overall time in the hospital and Operation theatre. The process follows:-

<table>
<thead>
<tr>
<th>1. Screening on entry</th>
<th>2. Receiving of the patient</th>
<th>3. Dilation and Vitals</th>
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<tbody>
<tr>
<td>• Separate entrance for in patient.</td>
<td>• COVID history of fever/contact form.</td>
<td>• In patient dilation drops applied.</td>
</tr>
<tr>
<td>• Thermal screening &amp; hand sanitizer.</td>
<td>• Covid Consent form filled.</td>
<td>• Patient hold lower lid.</td>
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<td></td>
<td>• Case sheet verification.</td>
<td>• Case sheet checking BP, Pulse and pulse oxymetry.</td>
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<tbody>
<tr>
<td>• Patient to dispose mask.</td>
<td>• Case record checking</td>
<td>• BP and pulse oxymetry monitoring.</td>
</tr>
<tr>
<td>• Before entering into block room face,</td>
<td>• Confirm eye marking, dilation checking,</td>
<td>• To continue wearing the mask in OT as well.</td>
</tr>
<tr>
<td>hands and legs to be washed.</td>
<td>topical anesthetic drop, 5% povidone</td>
<td>• Make sure drapes are well secured with adhesive sticking.</td>
</tr>
<tr>
<td>• New mask to be worn by the patient</td>
<td>iodine eye drops</td>
<td></td>
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<tr>
<td>• Hand rub applied.</td>
<td>10% PI for periocular cleaning.</td>
<td></td>
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<tr>
<td>• To put on cap, shoe cover and OT gown on</td>
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<td></td>
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<tr>
<td>patient.</td>
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<tr>
<th>7. During surgery</th>
<th>8. IN Between cases</th>
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<tbody>
<tr>
<td>• Only one patient at a time.</td>
<td>a) OT cleaning</td>
<td></td>
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<td>• Complete sterile set for each case.</td>
<td>• Floor</td>
<td></td>
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<tr>
<td>• All sterile items and consumables should</td>
<td>• Patient table</td>
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<tr>
<td>be shifted into OT before surgery is</td>
<td>• All surfaces</td>
<td></td>
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<tr>
<td>started.</td>
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<tr>
<td>• Minimal staff in OT</td>
<td>b) Surgeons and staff to change the outer</td>
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<td></td>
<td>glove, taking care not to touch the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inner glove.</td>
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<td></td>
<td>c) BMW to be removed as per SOP.</td>
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She later explained the PPE and level of protection as per risk profile. And changed OT protocols which are:-

<table>
<thead>
<tr>
<th>PRE-COVID</th>
<th>Current Practices</th>
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<td>• Patients were shifted to OT in their own clothes</td>
<td>• OT scrub gowns or disposable scrub gowns are being worn by patients over their clothes before shifting them into OT</td>
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<td>• Two patients in OT at a time</td>
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<td>• 2 trolleys were prepared for one OT</td>
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After Dr. Haripriya concluded, Dr. RD Ravindran thanked her and added that to avoid aerosols inbuilt UV lights are installed in Aravind and installed air purifiers in air conditioners. He invited Dr. Umang to add his comments, he said that by following general guidelines is a must and small measures need to be taken for both the staff and patients.

The fourth talk on "Cleaning and Disinfection simplified" was presented by Dr. Lalitha. She started her presentation with the COVID-19 and its spread, the literature review on the knowledge of COVID spread.

The goal of cleaning and disinfectant protocol is to keep the staff and patient safe during the stay in the hospital and during any procedure. She explained the difference between cleaning and disinfecting and the types of disinfecting agents which are sodium hypochlorite, Benzyalkonium chloride (Lysol), Isopropyl alcohol, Hydrogen Peroxide & Silver nitrate and Dettol. She emphasized on the disinfection solution, preparation of recommendation, concentration and usage. And explained the operation theatre cleaning protocols which are:

1. Furniture and other fixtures to be cleaned as per defined protocol
2. Used instruments/BMW to be removed out of OT immediately
3. Fumigation if needed (frequency to be decided by the committee)
4. A gap of 15-20 mins to be kept before starting the next surgery to allow time for cleaning.

She concluded saying that the most important is to be aware of the changing guidelines and recommendations in these changing times.

After Dr. Lalitha concluded, Dr. RD Ravindran thanked her to emphasize on the cleaning part. He invited Dr. Kamala to add her comments, to which she said that to every hospital must keep in mind that the instruments are completely dried of the chemicals used for cleaning before the operation.

Subsequent to the presentation from the resource persons, delegates asked their questions which were answered by both the panelists and resource persons.

Dr Phanindra Babu Nukella wrapped up the webinar with vote of thanks.
Webinar recording:

The entire webinar was recorded. Below is the link given into the email to download the entire recording of the webinar:

https://vimeo.com/462422472/92e07ad74e

Gratitude:

- **VISION 2020 INIDIA** is sincerely thankful to the panelists, Dr. R D Ravindran, Dr. Uday Gajiwala, Dr. Kamala. And thankful to the speakers Dr. Chandrasekhar, Dr. Umang Mathur, Dr. Haripriya Aravind, and Dr. Lalitha Prajna for their valuable time and kind support for the cause.
- Sincere thanks to Aravind Eye Hospital, Divyajyoti Trust, Dr. Shroff’s Charity Eye Hospital and Sankara Eye Hospital, and Cybersight / Orbis India team. Mr. Gangadhar from Cybersight, Australia for their support in conducting the webinar through Cybersight platform.
- Our sincere thanks to all the delegates, participated in the webinar and thanks for their encouraging response.
- We are extremely thankful to each and every one who supported us to make this webinar a grand success.