

## Review Article

### **Impact of lockdown due to COVID-19 on practices on ophthalmology in India.**

#### **Abstract:-**

**Introduction:-** The WHO (World Health Organization) declared COVID-19, a worldwide pandemic caused by a novel variant of the corona virus 2019-nCoV, as a worldwide pandemic in 2020. As a preventative step, the Indian government imposed a countrywide lockout for 21 days, restricting people's movement. During the shutdown, a study was devised and completed to analyze the impact on eye care and patient care in India. Methods: Through various social media platforms, an online survey was sent to the practice of Indian ophthalmologists. We arranged and analyzed all of the validated responses.

**Summary:-** The poll received responses from 1260 ophthalmologists. 61.5 percent of respondents worked in a private clinic, whereas 14.8 percent worked in an eye institute. Due to the lockdown of those who were still evaluating patients at the time of the poll, 72.5 percent of respondents did not perceive any patients, and 82.9 percent (287/347) were only looking at emergency cases, based on their own clinical judgement. The percentage of ophthalmologists who were still examining patients in eye facilities, municipal and government hospitals (49.8%) was significantly higher ( $p < 0.0001$ ) than in private clinics. Other procedures that were still being performed included intravitreal injections, in addition to causes such as trauma, retinal detachment, and endophthalmitis (81.8 percent) (9.1 percent) and cataract surgery (5.9%). Since the lockdown began, around 77.5 percent of respondents have begun telephone, e-mail, video call, or social media application counseling. Furthermore, 59.1% said that when examining patients, ophthalmologists were at a larger risk of getting COVID-19 than other disciplines. When asked when they would resume practice when once restrictions were relaxed 57.8% of respondents said they were unsure when they would resume elective surgery. In addition, 62.8% percent said they were unsure of the preferred screening strategy or precautionary approach before beginning surgery and were awaiting guidelines.

**Conclusion:** According to our research, most ophthalmologists in India were unable to assess patients during the COVID-19 lockdown, and many of them had to undergo elective surgery. 27.5 percent of those who responded to the emergency room were ophthalmologists. To aid patients, ophthalmologists had shifted to telephonic guidance or other forms of telemedicine. Whether the COVID-19 reduced regulations, most responding ophthalmologists were unsure when and how to resume operations. Regulatory agencies should be aware of this and give appropriate guidelines.

**Keywords:** COVID-19, lockdown, ophthalmologist, surgeries

**Comment [ON01]:** This heading can be modified to read "Impact of COVID 19 lockdown on ophthalmic practices in India"

**Comment [ON02]:** The Indian government's lockdown period should be stated.

**Comment [ON03]:** How was the online survey distributed?

**Comment [ON04]:** This should be the results.

**Comment [ON05]:** This should be re written as "One thousand two hundred and sixty thousand ophthalmologist responded to the online survey"

**Comment [ON06]:** What does this mean?

**Comment [ON07]:** This is quite confusing. Please write in simple terms.

**Comment [ON08]:** "Correct the spelling"

**Comment [ON09]:** Which of the percentages apply to the specific diseases

**Comment [ON10]:** What does this mean? Did the Ophthalmologists undergo elective surgery?

### Introduction :-

In late 2019, a large number of pneumonia-like cases were reported in Wuhan, China, and genomic sequencing revealed that the cause was a virus known as the Corona virus (severe acute respiratory syndrome) (SARS CoV). (1). The World Health Organization (WHO) declared an outbreak of the disease COVID-19 as a novel variant of the corona virus 2019-nCoV in early 2020. (2) percent India, the first case of COVID 19 was reported on January 30, 2020 in Kerala. As a precaution, the Indian government imposed a statewide lockdown, restricting people's movement and severing the transmission chain.

Comment [ON011]: What does this mean?

The virus was dangerous because it not only caused a flu-like illness with fever, sore throat, and weariness in huge numbers, but it also causes ARDS, septic shock, and multiple organ failure in elderly and immunological populations. Because there is no vaccine, this disease is more hazardous than others. (3) Human-to-human transmission occurs mostly by droplets, touch, and fomites.

Comment [ON012]: ???

The healthcare workers who continued their work were at high risk for getting infected by COVID-19. Daily outpatient department hospitals and clinics in India remained closed and advised to for surgery was postponed, but emergency health care was advised to be performed with full precaution. Ophthalmologists were considered at high risk due to their examination procedures. So it was-were considered ophthalmologists to be at a higher risk due to their examination procedures. Hence it was important to assess their awareness regarding the infection, its spread and required precaution. During the lockdown, the author created and performed a survey to analyze the impact on ophthalmic practice on patients.

With a population of over 1.3 billion people, the Indian government announced a thorough statewide lockdown as part of its fortifications to combat the pandemic, which has so far resulted in 519 confirmed cases and COVID- in the first month. Due to 2 g, 19 pec ed On March 24, 2020, at 12 a.m., the prohibition went into effect. (4)

Comment [ON013]: I am not sure what this means.

This was also due to the fact that while some COVID-19 patients developed conjunctivitis, they were all positive for SARS-Cov-2 nucleic acid in their conjunctivitis sac swabs. Some individuals did not have conjunctivitis but had SARS-CoV-2 nucleic acids detected in their conjunctival sac swabs. It was also thought that the enters would tear through droplets, allowing the droplets to flow through, which can then pass through the nasolacrimal duct and then into the respiratory tract. (5)

The "All India Ophthalmological Society" (AIOS) and the "American Academy of Ophthalmology" (AAO) (AISO) had asked to stop the routine surgical and clinical duties. (6,7) The AISO recommended postponing all regular consultations and elective surgery for up to four weeks. All ophthalmologists were advised to only provide emergency care and to reschedule all elective procedures. This was suggested in order to ensure that emergency care is not compromised the risk of disease spreading during epidemic and lockdown periods was kept to a minimum (6-8).

Author planned the study and conducted a survey to assess the impact of due to COVID-19 lockdown on ophthalmologist and patient care in India. The survey assessed perceptions about risks among ophthalmologists, screening protocols and clinical exams and surgery-related prevention strategies after resuming their practices. This online survey was broadcast among Indian ophthalmologists 5 days after the lockdown was implemented. The invitation to participate was sent out over multiple social media groups, including Facebook, WhatsApp, and Telegram, and was open for 24 hours. All of the questions had to be answered, and there was no way to identify yourself in the survey.

**Comment [ON014]:** The survey questions should have been provided.

**Comment [ON015]:** This should be the results.

## **DISCUSSION:**

By midnight on March 31, 2020, received 1260 responses. 61.5 percent (775/1260) of the participants were from the private sector, whereas 14.8 percent (187/1260) were linked with the Eye Institute. A total of 9.4% (118/1260) worked in a multi specialty hospital. Government hospitals accounted for 5.2 percent (626/1260), while freelance surgeons accounted for 2.2 percent (28/1260).

**Comment [ON016]:** Which is Eye Institute is this and what does this mean?

When asked if they were still operating patients during lockdown, 72.5 percent (913/1260) said they had fully stopped down all clinical activities.

They were asked to describe the types of instances they were looking for right now. The most common case examined (51.9%), one of which was considered an emergency (82.9%), and all patients were seen (13.5 percent).

When it came to surgical procedures, 81.8 percent said they only did them in emergencies including trauma, retinal detachment, and endophthalmitis. 9.1% of the people had intravitreal injections, and 5.7 percent had cataract surgery. 4.9 percent (17/347) of ophthalmologists were also involved in other procedures, such as tumor/retinoblastoma care, while 12.1 percent (42/347) were just examining patients in emergencies, but no operation.

**Comment [ON017]:** This is an elective surgery. Why was it done?

Alternative methods of concussion included telephonic consultations, following email and social media as the most common ways to reach the patient. WhatsApp and Telegram are two examples (48 percent). 9.9% of the ophthalmologists polled said they used video calls for consulting. At the start of the lockdown, 77.5 percent (976/1260) of ophthalmologists had started using some sort of telemedicine; 129 percent (163/1260) do not now treat patients remotely but aim to do so in the future. In contrast, 9.6% of physicians (121/1260) said they had no plans to start providing telephonic or electronic counseling.

**Comment [ON018]:** Do you mean consultation.

Currently, 90.7 percent of telemedicine participants (886/976) do not charge any fees. Patients' professional fees; 5.8% (57/976) said personal fees were cheaper than professional fees for ophthalmologists. A small minority was charging 2.9% (5/976) more than usual.

When examining patients, 59.1 percent of clinicians believed that ophthalmologists had a larger chance of getting COVID 19 than other disciplines.

The final section focused on options for resuming routine clinical work after the lockdown period. 11.8 percent (148/1260) indicated they would resume elective surgeries right away, while 30.4 percent (383/1260) stated they would wait at least one week before doing so. 72.9 percent (729/1260) said they were unsure.

Respondents were questioned about the preventive strategies they would include regarding preoperative screening after resuming clinical duties. 62.8% were unsure, 16.6% said they would use additional personal protection, 9.9% would test for COVID 19 stomach 10.7% said they would include PE for all surgeries

The survey proved that most ophthalmologists in India were completely closed. While physicians may be available, the lack of administrative, nursing, and other support staff in the current health facility during the lockdown period may pose a strategic and operational issue. The majority of ophthalmologists (126/253; 49.8%) were still seeing patients in institutions and government hospitals. Because the major hospital provides inpatient staff, protective supplies, medicines, and isolation facilities, this is the case. The majority of solo private practitioners (601 out of 775, 77.5%) had stopped practicing and were no longer involved in direct patient care.

### **CRITIQUE:-**

COVID-19 has led to numerous changes in lifestyle and attitude of the public in India. How has it changed the perspective of healthcare workers is important for us to control the spread and normalize the further clinical practice. A number of studies critically reviewed the effects of Covid-19 and lockdown (9-15). This study is one of the pioneer studies in the field. A new disease is always challenging to deal with, and any such as statistics as provided by the study we removed is extremely valuable. The study suggested newer modes of practice such as tele-medicine

This article provides statistics about how examination and treatment care was affected in our country early COVID-19 related lockdown. It also helped to identify various problems faced by ophthalmologist during lockdown. This article gives brief idea about their fear and practices among the information this can prove of great value to help chalk out plans to reduce their fears and make the patient care more efficient, while still insuring safety of the healthcare workers. The survey brought forward absence of clarity in the clinic about how to work when routine services are resumed after the lockdown period is over. (16-18)

Few drawbacks of the study include that it is cross section study so no follow up was kept regarding how what change came as the lockdown progressed and the status when include stages started. No question regarding awareness level of ophthalmic surgeon on this pandemic included in this study. Details of the type of process performed were not included in the study. The survey was not created with those precise features in mind. There were a total of 1260 responses; while this is a high number, we recognize that it does not reflect the entire Indian eye. The respondents' geography and geographic information, among other things, would provide further insight into places where emergency eye care was not available. (19-27)

**Comment [ON019]:** Do you mean procedure?

### **CONCLUSION :**

CORONA virus-related mass illnesses will continue to spread for some time, and it is critical that all health-care workers (HCWS) learn to live with the virus. The concept of social separation and the wearing of masks at all times has become the new normal for the general public. PPES, sterilization/disinfection, and telemedicine are the new normal for HCWs. Norms and guidelines are updated every day and it is the responsibility of the HCW to keep himself updated with the latest updates and guidelines in his area of work. Last but not the least, maintaining utmost vigil constantly and strict complying with the rules will ensure that

there is some disruption to chain of spread due to the pandemic, and health services are restored to full operation as soon as practicable.

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