

## ORIGINAL ARTICLE

# Practices among Israeli ophthalmologists during the rapid rise period of the COVID-19 outbreak

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Coronavirus, COVID-19, pandemic, questionnaire, working routines in ophthalmology

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Received: 12-12-2020

Accepted: 27-12-2020

doi: 10.15713/ins.clever.53

**Abstract**

**Purpose:** Our aim was to examine the new working routines embraced by the ophthalmologists during the COVID-19 pandemic and to use the “wisdom of crowds” to create a new set of practical tools to face the enormous challenges in this new era.

**Materials and Methods:** We have conducted a survey by distributing an anonymous self-reported questionnaire. The questionnaire included 34 questions regarding the practices of ophthalmologists in the era of the COVID-19 pandemic.

**Results:** The questionnaire was answered by 173 ophthalmologists, from all subspecialties. The survey revealed a wide diversity in the way that the participants interpreted and implemented the guidelines published by the Israeli Ophthalmological Society. Various strategies were deployed by the participants to prevent an infection and wide range of tactics was used to examine and to treat patients.

**Conclusion:** Prevention is the most important aspect in our fight against pandemics. Rearrangement of our working routines and tactics, improved precaution measures based on risk assessment, and establishment of evidence-based medicine to support decision-making are mandatory to maximize both our patients and our own safety.

**Introduction**

The COVID-19 pandemic, caused by virus SARS-CoV-2, surprised the entire world, with a proportion not previously experienced in this century. As of July 6, 2020, more than 11.4 million cases of COVID-19 have been reported in more than 188 countries and territories, resulting in more than 535,000 deaths. It quickly became clear that the COVID-19 virus is highly contagious and we need to change our habits to stop the spread of the virus around the world.<sup>[1]</sup> It is mainly transmitted human-to-human through direct contact with secretions from an infected person or through inhalation of droplets containing SARS-CoV-2.<sup>[2]</sup> While no community is unaffected, the prevalence of the disease varies widely throughout the world and even within specific countries. In some areas, mitigation strategies have led to a “flattening of the curve” or a sustained decrease, while other areas are still seeing an increase in the rate of new cases and deaths over time. Mitigation strategies keep changing according and there is a great deal of uncertainty leading to a variety of possible measures taken to prevent disease spreading.

Healthcare-associated infections are one of the most important public health concerns, resulting in an increase in the morbidity, mortality, and additional costs in health-care settings. Once the disease started its spreading, healthcare workers have realized that they were putting themselves, their families, and their patients at high risk.<sup>[3]</sup> A study published on February 2020 indicated that the number of infections in health-care professionals has been increasing since the outbreak of COVID-19.<sup>[4]</sup> There was also a great concern regarding the involvement of the eye in the disease and its spreading through tears and conjunctival secretions.<sup>[5]</sup> It gradually became clear that ophthalmic health-care professionals were at higher risk of contracting the virus. The virtue of their job, which enforces close physical proximity with patients, exposes them to their respiratory tract aerosols.<sup>[6,7]</sup> A study which looked at the incidence of infection and morbidity of COVID-19 among eye professionals in Wuhan during February 2020, showed an overall incidence of 2.52% symptomatic staff across ten hospitals.<sup>[8]</sup>

The health system in Israel is complex and divided into public and private systems, each containing hospitals and outpatient

clinics. The need to protect ophthalmic health-care personnel, as well as their families and patients, required new measures. The various professional medical organizations in the country have issued various guidelines and regulations at that point. However, these regulations were inconsistent, it kept changing and it also did not apply to all ophthalmic health-care personnel in Israel.

The lack of scientific data defining the appropriate protective measures, the lack of consistency in the guidelines and the general confusion have motivated the authors to conduct a questionnaire aimed to examine the new working routines embraced by the Israeli ophthalmology community, and to use the “wisdom of crowds” to create a new set of practical tools to face the enormous challenge.

## Materials and Methods

This study has gotten an exemption from the requirement to obtain informed consent from each study participant by the Institutional Ethics Committee of Rabin Medical Center, Petah Tikva, Israel. It was conducted by distributing an anonymous self-reported questionnaire using “Google Forms.” The questionnaire was accompanied by an information sheet explaining the objectives of the study. The questionnaire included 34 questions regarding the practices of ophthalmologists in the era of the COVID-19 pandemic. The questions were categorized as follows: Characterization of the responders, disease prevention and infection control measures, and ocular management in the COVID-19 era. The questionnaire is presented in Appendix 1. The survey was carried out between April 26 and May 6 2020. The distribution of the questionnaire was conducted through the Israeli Ophthalmological Society (IOS) website, WhatsApp, and Telegram apps, and it was sent to all members of the various ophthalmology societies (sub-specialties) in the country.

## Statistical methods

In this study, the variables were categorical, according to that we summarized all by frequency counts and percentages. To test the association between two variables, the Pearson Chi-squared test was performed, considering  $P < 0.05$  to be statistically significant. Analyses were performed with the SPSS 21.0 (SPSS Inc., Chicago, IL).

## Results

The questionnaire was answered by 173 ophthalmologists from all across the country and from all sub-specialties.

### Characterization of the responders

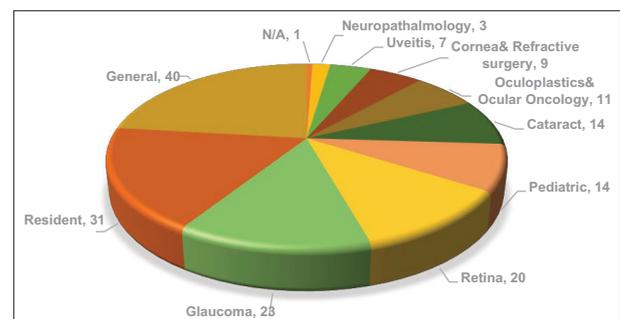
Eighty (46.2%) had a seniority of over 20 years as an ophthalmologist, while 36 (20.8%) had a seniority of <5 years. Forty-six (26.5%) were anterior segment specialists, including 23 glaucoma specialists. Twenty-three (13.3%) were general ophthalmologists, while other respondents split between retina,

uveitis, neuro-ophthalmology, oculoplastic, and pediatric-ophthalmology [Figure 1].

Forty-seven percent of the responders declared that they work in both public and private health systems, with only 7% working solely as private practitioners. Public sector employees worked in capsules at that point, whereas private ophthalmologists worked in various capacities. Nine of the responders (5.6%) stopped working completely during that time. Sixty-two (38.8%) of the responders continued to work using the same manpower in the clinics. Sixty-six (41.3%) deployed various strategies and tactics of reduced staff while 21 (13.1%) redeployed existing staff to “corona activities” such as questioning patients and keeping order in the waiting areas. Only two (1.2%) recruited new employees for that purpose.

### Disease prevention and infection control measures

- Using COVID-19 symptoms screening questionnaire and completion of a travel, occupation, contact, and cluster (TOCC) history sheets: Thirty-eight responders (22.9%) did not perform any inquiring, while the rest did inquire regarding disease symptoms and/or used TOCC history sheets. This was performed either by a telephone screening questionnaire before arrival to the clinic (30.1%), or on arrival to the clinic before performing the physical examination (47%).
- Body temperature measurement: Seventy-two (44.2%) of the responder’s declared measuring body temperature regardless of risk factors or symptoms, whereas 82 (50.3%) reported that they do not measure. Nine (5.5%) measure body temperature only in symptomatic or TOCC positive patients.
- Patients volume: About 56.6% of the responders declared reducing patient’s volume by 30–50%, while 20.5% reduced patient’s volume up to 80% as compared to the average routine volume by rescheduling non-urgent appointments. The others kept seeing the same number of patients as usual.
- Waiting areas: About 78.4% of the responders used limited waiting areas with a limited number of people in it and placed chairs six feet apart. About 8.6% completely canceled these



**Figure 1:** The characterization of the ophthalmologists’ sub-specialties who participated in the survey

areas and the rest did not make any changes in the waiting areas.

- e. Non-patient visitors: About 32.3% did not allow any companion into the examination room other than the patient himself, 59.9% allowed a single companion, 4.2% allowed two companions, and 3.6% reported no limit of companions.
- f. Ventilation: About 81% kept an open door or an open window for air circulation in the clinic with or without using the air-conditioning system, while 19% worked in a closed room using an air-conditioning system only.
- g. Slit-lamp sterilization: About 95% reported that the slit lamp was meticulously disinfected between use and special barriers were installed, whereas 5% reported meticulous disinfection of the slit lamp only when encountering infected or suspected patient.
- h. Hand hygiene: About 54% reported installing hand disinfection area but only 21% demand hand disinfection before entering the examination room.
- i. Gloves: About 59.4% exchanged disposable gloves between patients, of them 50.3% also performed hand disinfection while 40.6% of the responders performed only hand disinfection between patients.
- j. Masks: About 52.7% used a surgical mask, 31.7% used a N95 mask, and 15.6% used a surgical mask most of the time and replaced it with a N95 mask only while examining suspected patients. About 40% of the ophthalmologists with more than 20 years of seniority used N95 exclusively, as compared to 29% with 10–20 and 21% with <10 years of seniority (Pearson Chi-squared test,  $P = 0.002$ ). It is interesting to note that 30.7% of the responders removed the mask during the examination to prevent the accumulation of steam on the examination lenses, whereas 69.3% did not remove the face mask while with patients. About 63.3% replaced the mask on a daily basis, 22.3% replaced the mask at least twice a day, and 14.5% used the same mask for more than 1 day.

Higher seniority was found to be related to using more extreme preventing measures, such as N95 mask wearing, usage of COVID-19 symptoms screening questionnaire and completion of a TOCC history sheets (Pearson Chi-squared test,  $P = 0.008$ ), cancellation of waiting areas, and limitation of companions surprisingly, body temperature measurement rates, on the other hand, dropped with seniority.

### Examination and management of patients

- a. Intraocular pressure (IOP) measurement: The results of IOP measurements performed by glaucoma specialists and of all other ophthalmologists are presented in Table 1. Interestingly, the results of IOP measurements among glaucoma experts were similar to that of all other ophthalmologists. IOP was measured using a reusable Goldman tonometer by 77% of the responders while the rest used pneumotonometers or a device with a disposable tip (Tonopen with single-use protective sleeves or iCare with single-use disposable probes).

**Table 1:** The results of IOP measurements performed by glaucoma specialists and all other ophthalmologists

	All ophthalmologists (%)	Glaucoma experts (%)
Measuring IOP as usual	52.1	56.5
Measuring IOP only in glaucoma or OHT* patients	27.1	21.7
Measuring IOP only when very high IOP was suspected	18.1	21.7
Not measuring IOP at all during that time	2.8	0

\*OHT: Ocular hypertension, IOP: Intraocular pressure

- b. Gonioscopy: The majority of the responders (75%) performed gonioscopy to a limited extent as compared to their usual gonioscopy performance rates; whereas (16.3%) performed it as usual, and the rest (8.7%) reported that they do not perform gonioscopy at all during that time.
- c. Fundus examination: About 54.9% of the responders performed routine fundus examination. However, 43.9% of the responders reduced the frequency or did not perform fundus examination at all. Two doctors replaced routine fundus examinations with non-mydriatic fundus cameras.
- d. Referral to ancillary tests: About 39.1% declared referring patients for visual field examination as usual as compared to 43.5% who referred only in urgent cases or not at all (17.4%) during that time. About 67.9% referred patients to perform Optical Coherence Tomography (OCT) as usual, compared to 21.7% who refer only in urgent cases while the rest did not refer at all.
- e. Cataract surgeries: About 33.8% continued to recommend/perform cataract surgeries as usual, 26.9% recommend/perform cataract surgeries only on urgent conditions such as phacomorphic/phacolytic cataract, 14.5% declares they operate only in advance cataract cases, 2.8% state they perform cataract surgery only in young patients, and 22.1% answered that they do not recommend/perform cataract surgeries at this time.
- f. Glaucoma surgeries: About 57.2% continued to recommend/perform glaucoma surgeries almost as usual, as compared to 42.8% who suggested to postpone glaucoma surgeries. Of those who referred for glaucoma surgery, 80% continued to select the type of glaucoma procedure regardless of the pandemic, and the rest reported selecting away from trabeculectomy toward procedures with less intensive post-operative care, such as minimally invasive glaucoma surgery and or tube-shunts. Post-operative follow-up was performed and was kept unchanged by the majority of the surgeons.
- g. Telemedicine: When asked about the choice of using telemedicine in the case of infrastructure that allows it, third stated that they will use it extensively, a third in moderate frequency, and a third said they will use it a little. In the current infrastructure only 10% declare to use telemedicine in 50% or more of their patients, 55.7% use it merely in a small number

of patients and 34.2% say they do not use telemedicine at all. Among the ophthalmologists who use telemedicine, 26.5% use phone calls, 8.3% messaging by email or WhatsApp, 2.3% video calls, and 62.9% combine between the different media options.

## Discussion

On December 30, 2019, Wuhan CDC issued an emergency warning to local hospitals about several mysterious pneumonia cases discovered in the city, which later turned out to be caused by COVID-19.

The first case of COVID-19 in Israel was confirmed on February 21, 2020, and the pandemic has gradually changed our personal and professional lives ever since. This change reached its first climax on March 22, when the Israeli Ministry of Health announced the cessation of ambulatory activities in public hospitals, to prevent the spread of the virus and to maintain a reserve of manpower and medical equipment. The ambulatory services were partially shifted to the public community medical centers and to some of the private medical centers. The early stage was characterized by a great deal of uncertainty, and the issue of face masks was one of symbols of the confusion. At first, the Israeli Ministry of Health followed the World Health Organization (WHO), and stated that face masks were not proven to be effective in protecting against COVID-19 and recommended to avoid its use. This recommendation changed shortly after when the WHO announced that masks are mandatory, along with maximum compliance with other infection prevention and control measures, including hand hygiene and social distancing. The Israeli “social distancing program” was launched; prohibiting gatherings of any size outside households and nose-and-mouth mask wearing duty were enforced by law. Maintenance of 2-m social distancing and hands hygiene were also recommended.<sup>[2]</sup>

It was soon realized that ophthalmologists were potentially at high-risk of exposure to COVID-19 as they work in close proximity to patients.<sup>[5,7,9]</sup> Their outpatient and emergency clinics have a high patient volume, with overcrowded waiting rooms, especially with high risk elderly patients.<sup>[10]</sup> On March 23, the IOS issued a position paper, basically adopting the American Academy of Ophthalmology guidelines. This was followed by an update, issued on April 30.<sup>[11]</sup> The instructions were to reduce frontal meetings and keep only urgent examinations or non-deferrable surgical procedures or treatments.<sup>[12]</sup> They also declared that patients should be checked for body temperature, wear face, and nose masks and be asked about symptoms and contacts. Work should be done in well ventilated rooms while wearing single use gloves, and equipment must be repeatedly disinfected. Ophthalmologists were instructed to wear a surgical mask in most encounters, whereas a N95 mask should be used only in suspected or confirmed corona patients.

However, the implementation of those guidelines was challenging and confusing. The uncertainty was a consequence of both the fact that the recommendations left many unaddressed issues, and the lack of data regarding the new virus to guide clinical decision-making. The absence of evidence-based medicine (EBM) contradicts the basis of our usual decision-making process. To overcome this challenge, we have decided to examine the variety of working methods embraced by the Israeli ophthalmologists, and to use the “wisdom of crowds” to create a new set of practical tools until EBM will be available. This was achieved by a questionnaire which included questions regarding the various aspects of ophthalmology practice during the pandemic era. The questionnaire was answered by 173 ophthalmologists, which accounts for 26% of the IOS. We found great variability in practice, and there were doctors who eased or stringent with the official IOS and WHO guidelines. The diversity in the choices made by the responders may be explained by the fact that some of the doctors already adopted new working methods before publication of the official guidelines. The diversity may also be related to the complex reality of the Israeli health system, which includes both public and private systems. The vast majority of the physicians in the country work in both systems. Although all are subjected to the Israeli Ministry of Health, there was still a great deal of inconsistency in the recommendations in between the private and the public health systems and also between various institutions within each system, who executed somewhat differently the general recommendations of the Israeli ministry of health. We have found a great deal of inconsistency between responders regarding ocular examination and management during that time. However, in general, many ophthalmologists limited the volume of patents in their clinics, performed less examination procedures, including restricted rates of gonioscopy, and funduscopy, referral to ancillary tests such as OCT and visual field tests, and even performed less IOP measurements, and medical and surgical treatment were therefore delayed. The long-term impact of these measures will surely be investigated in the future.

At first, the state of Israel successfully flattened the curve. The numbers of infections and severe patients were reduced probably thanks to the rapid preventive steps that were taken. Indeed the responses in our study reflected the obedience to the social distancing policy and most applied disease prevention and infection control measures. Higher seniority was found in our study to be related to taking more strict prevention measures, such as higher prevalence of N95 mask wearing, usage of COVID-19 symptoms screening questionnaire and TOCC history sheets, cancellation of waiting areas, and limitation of companions. This is probably explained by the fact that it was already known that the risk for severe illness increases with age and naturally, older personnel embraced more extreme preventive measures.

Unfortunately, a third wave of the COVID-19 outbreak is currently washing over Israel. The numbers of critically ill and of

deaths keep rising. Although the Israeli health ministry started to vaccinate health system workers and elderly people, it is still the beginning of the campaign. Hospitals are being ordered to reduce activity in some outpatient clinics and surgical departments and to “bridge the gap” in treatments by offering medical advice online, this has been executed in a limited scale in ophthalmology clinics. We believe that this is related to the underdeveloped infrastructure supporting the online ophthalmology (Tele-Ophthalmology) services. Such infrastructure requires equipment, including high resolution ophthalmic cameras, mobile applications for eye tests, and computer terminals with network capabilities.<sup>[13]</sup> It should also include skilled health professionals that will follow health information exchange standards, data security, regulation of liability issues, and most importantly resources. Tele-ophthalmology service must be developed and promoted, so in the future, we will have the possibility of providing better treatment even in times of crisis.

Fortunately, during the last few weeks, the distribution of COVID-19 vaccines has started worldwide and hopefully in a few months this pandemic might become a chapter in our history. As for now, prevention is still the most important aspect in our fight against the virus, it is crucial to rearrange our routines to maximize both our patients and our own safety. Deferring the elective activity and providing assistance for only sight or life-threatening conditions were used at the beginning of the pandemic, but not anymore. The ophthalmology community will have to learn how to cope with future pandemics, to establish EBM to support decision-making, to improve tele-ophthalmology services, and to improve precautions based on risk assessment and facts.

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**How to cite this article:** Levy I, Gabbay IE, Zahavi A, gatton D, Bahar I, Geffen N. Practices among Israeli ophthalmologists during the rapid rise period of the COVID-19 outbreak. *Clin Exp Vis Eye Res J* 2020;3(2):35-42.

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## APPENDIX

### Appendix 1: Questionnaire

#### I. Characterization of the responders

1. In which health system do you practice ophthalmology?
  - A. Public
  - B. Private
  - C. Public and private
2. How many years have you been working as an ophthalmologist?
  - A. <5
  - B. 5–10
  - C. 10–20
  - D. >20
3. Do you have a subspecialty?
  - A. I'm still a resident
  - B. General ophthalmologist
  - C. Glaucoma
  - D. Cataract
  - E. Cornea
  - F. Retina
  - G. Pediatrics
  - H. Uveitis
  - I. Neuro-ophthalmology
  - J. Oculoplastic

#### II. Disease prevention and infection control measures

4. Did you re-organize the staff at your clinic?
  - A. I keep working in the same format without change
  - B. I have reduced the amount of staff in the clinic
  - C. I have increased manpower (I added an usher/employee for questioning)
  - D. I changed the division of staff in the clinic
5. Do you use a Coronavirus COVID-19 screening questionnaire?
  - A. I don't perform any questioning regarding COVID-19 symptoms
  - B. I ask patients about symptoms during reminder calls
  - C. I ask patients about symptoms and exposures upon arrival at the clinic via a questionnaire or a staff member
  - D. I ask patients about symptoms and exposures in my examination room
6. Is body temperature measured at your clinic?
  - A. No
  - B. Temperature is measured only in suspected cases
  - C. Measured for every visitor
7. Have you changed the number of invited patients?
  - A. There is no reduction in the number of patients invited to the clinic
  - B. I slightly reduced the number of invitees (up to 30%)
  - C. I moderately reduced the number of invitees (up to 50%)
  - D. I greatly reduced the number of invitees (up to 80%)
  - E. I do not receive patients at this time at the clinic
8. Were any changes made in the waiting area?
  - A. The waiting area remained unchanged
  - B. I slightly reduced the number of people allowed in the waiting area
  - C. I have reduced the number of people allowed in the waiting area to a great extent
  - D. The waiting area was canceled
9. Are companions allowed into the examination room (when the patient is not a minor)?
  - A. I do not limit the number of companions
  - B. Up to two companions
  - C. Only one companion is allowed
  - D. No companions are allowed
10. How do you ventilate the examination room (specify when using a combination of options)?
  - A. Air conditioner only
  - B. I leave a door and/or a window open without air conditioning
  - C. I leave a door and/or a window open with air conditioner
  - D. Other \_\_\_\_\_
11. How do you disinfect the slit lamp?
  - A. I use disposable chin papers and disinfects the rest of the device only in selected cases
  - B. I use disposable chin papers and disinfects the rest of the device between all patients
  - C. I do not use disposable chin papers and disinfects the rest of the device only in selected cases
  - D. I do not use disposable chin papers and disinfects the rest of the device between all patients
12. Hand hygiene of the visitors
  - A. There is no hand hygiene facility at the waiting area/patients' rooms
  - B. There is a hand hygiene facility at the waiting area/patients' rooms and patients are free to use it
  - C. There is a hand hygiene facility at the waiting area/patients' rooms and patients are requested to use it before entering the examination room
13. How do you maintain your own hand hygiene?
  - A. I use disposable gloves and replace it in-between patients only
  - B. I wash hands with soap and water and/or alcohol disinfectant solution in-between patients only
  - C. I use disposable gloves and wash hands with soap and water and/or alcohol disinfectant solution in-between patients
14. What mask do you use?
  - A. Cotton mask
  - B. Surgical mask
  - C. Regularly Surgical mask and N95 mask only in suspicious cases
  - D. N95 mask
15. Mask using duration
  - A. I do not wear a mask most of the time

- B. I wear a mask in the presence of patients in my room but remove it from my nose if vapors are formed during the examination
- C. I only wear a mask in the presence of patients and do not remove it during their presence
- D. I wear a mask all the time, without removing it and make sure not to touch it
16. Mask changing frequency
- A. I use the same mask for more than 1 day
- B. I use 1 new mask every day
- C. I change my mask 1–2 times a day
- D. I change my mask >2 times a day
17. Do you use a face shield in addition to mask wearing?
- A. No
- B. Only in suspicious cases
- C. All the time
18. Have you changed the way bottles of eyedrops are handled?
- A. I replace bottles according to the regular frequency
- B. I replace bottles more frequently than usual
- III. Ophthalmic patients' examination and management in the COVID-19 era**
19. Intraocular pressure (IOP) measurement
- A. I measure IOP as usual
- B. I measure IOP in the majority of my patients
- C. I measure IOP only in a minority of my patients (only when very high IOP is suspected)
- D. I do not measure IOP at all during this period
20. If you are measuring IOP, which device are you using?
- A. Goldman tonometer using a standard re-usable tip
- B. Goldman tonometer using a disposable tip
- C. Tonopen
- D. iCare tonometer
- E. Air puff tonometer
- F. Pneumatonometer
- G. Digital measurement
21. If you use a standard re-usable Goldman tip, how do you disinfect it between patients?
- A. Wipe with disinfectant
- B. Soak the tip in disinfectant (alcohols, hydrogen peroxide, sodium and hypochlorite [bleach])
22. Gonioscopy
- A. Currently I am not performing gonioscopy
- B. I am performing gonioscopy in reduced frequency
- C. I am performing gonioscopy as usual
23. If you are performing gonioscopy, which lens are you currently using?
- A. A Multi-time lens disinfected/disinfecting wipes between patients
- B. A Multi-time lens disinfected by soaking in a disinfecting solution between patients
- C. Uses a disposable lens
- D. N/A (not performing)
24. Disinfection of fundus lenses
- A. Do not disinfect
- B. Disinfect lenses only in patients suspected for COVID-19/eye infection
- C. Regularly disinfect lenses with disinfecting wipes between patients
- D. Regularly disinfect the lenses by soaking in a disinfecting solution between patients
25. Fundus examination during COVID-19 era
- A. Performs pupils dilation and fundus examination as usual
- B. Performs pupils dilation and fundus examination less frequently than usual
- C. Send for fundus photography with narrow pupil
- D. Currently I do not perform fundus examinations
26. Performing visual field examination
- A. Refer to visual field examination as usual
- B. Referring to visual field examination less frequently than usual
- C. Referring to visual field examination only very urgent cases
- D. Currently do not refer patients to visual field examination
27. Referring to optical coherence tomography (OCT) examination
- A. Refer to OCT examination as usual
- B. Referring to OCT examination less frequently than usual
- C. Referring to OCT examination only very urgent cases
- D. Currently do not refer patients to OCT
28. Scheduling appointments
- A. Scheduling appointments as usual
- B. Scheduling appointments a little less than usual
- C. Scheduling much less than usual (only urgent appointments)
- D. Providing only telemedicine appointments
29. If you use telemedicine (remote medicine) services, which services do you use?
- A. Phone calls only
- B. Messages by email or WhatsApp.
- C. Video-Audio calls
- D. Store-and-forward: Electronic transmission of health care data
- E. Combines the different media options
30. If you had an infrastructure for telemedicine (remote medicine) services, would you use it for your patients?
- A. Very likely
- B. To a medium extent
- C. To a lesser extent
- D. I don't find a real benefit in telemedicine in the field of ophthalmology
31. Cataract surgery
- A. Recommends/performs surgeries as usual
- B. Recommends/performs surgeries in selected cases only (advanced cataract, young patients, etc.)
- C. Recommends/performs surgeries only in cases of urgent visual impairment (eg phacomorphic/phacolytic cataract)
- D. I do not recommend/perform cataract surgeries at this time

32. Glaucoma surgery
- A. Recommends/performs surgeries as usual
  - B. Recommends postponing glaucoma surgeries in a small number of cases
  - C. Recommends postponing glaucoma surgeries in a large number of cases
  - D. I currently do not recommend/perform glaucoma surgery
33. If you do recommend/perform glaucoma surgeries, which surgery will you currently choose?
- A. Recommends/performs surgeries as usual
  - B. Recommends/performs surgeries that requires less frequent follow-up (e.g., MIGS such as Xen or GDD like Ahmed Glaucoma Valve)
  - C. Recommends/performs only cyclophotocoagulation
34. If you do recommend/perform glaucoma surgeries, what is currently your preferred follow-up protocol after glaucoma surgery
- A. Follows the usual protocol
  - B. Modifies follow-up protocols with reduced visits frequency