

Original Article

THE IMPACT OF CORONA VIRUS DISEASE (COVID-19) FROM AN OPHTHALMOLOGIST PROSPECTIVE

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ABSTRACT:

Objective: To know the impact of corona virus disease (COVID-19) on personal and professional life aspects of working ophthalmologists

Study Design: A descriptive cross-sectional qualitative survey

Place and Duration of Study: Akhter Saeed medical and dental college, Lahore. The duration of the study was two months, from April 1 2020 to June 30 2020.

Material and Methods: A survey questionnaire was formed and sent to different ophthalmologists both in the public and private sectors. Qualitative data was analyzed by the analyst.

Results: The questionnaire was sent to over three hundred (300) ophthalmologists, and feedback was received from two hundred and twenty (220) ophthalmologists. All were practicing consultant ophthalmologists, doing private practice for more than 5 years, working in government or private sector.

Conclusion: The COVID-19 pandemic has complex and multifactorial effects. The medical field, like Ophthalmology, where most surgeries are elective, has faced devastating financial effects in terms of the reduced number of patients and routine surgical procedures coupled with the overwhelming psychosocial impact on ophthalmologists. We need to explore workable and sound strategies to cope with fear and depression in such pandemic conditions in the future.

Key Words: COVID-19, Ophthalmologist, Pandemic

INTRODUCTION:

The emergence of corona virus pandemic has added to the sufferings of the world. Within days, the epidemic arising from a small area of China, Wuhan^{1,2} outspread throughout the world and became a pandemic. Although the viral infections are known to humans since old times, however, this, “influenza like” disease affected masses at a larger scale irrespective of age, race, gender and international boundaries. The history of viral flu like disease, which affected one-third population on globe dates to the era of the first world war 1914-1918 when Spanish flu killed 50 million people.^{3,4}

SARS-CoV-2 is not the first virus to cause outbreaks of respiratory tract infections in humans, there are six more strains, all from animal origin.^{5,6}

The virus responsible for the current COVID-19 pandemic in the world was first isolated in China on January 7 and the genome was shared on January 12 2020.⁷ This is not a new virus for humans. The famous SARS (severe acute respiratory syndrome) reported in 2002 and MERS (middle east respiratory syndrome) reported in 2012 are also caused by viruses belonging to Corona family, which caused many casualties in China territory and Saudi Arabia respectively.⁸⁻¹⁰

WHO has reported globally 10357662 cases and 508055 COVID-19 related deaths in health reports in the month of July 2020.¹¹ The doctors as front-line human defense against pandemic were one of the categories who are overblown by it. Their admirable services are many folds including sacrificing their lives in this battle.¹²⁻¹⁴

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Every aspect of human life, ranging from emotional to economic, suffered from the Corona pandemic. This little word, “Corona”, has changed our lifestyle and way of thinking. The motive of private practice varies from person to person. For most doctors, including ophthalmologists, it is necessary to maintain the living standard, and to fulfill the basic financial requirements is greatly affected by Corona disease. The number of patients in the outpatient department and routine cataract surgeries have been markedly decreased, being non-emergency elective procedures. This has resulted in a gross financial loss for eye specialists. The situation is depressing because of news about the deaths of colleagues, relatives which has spread quickly because of social media.

MATERIAL AND METHODS:

A questionnaire was formed keeping in view problems of ophthalmologists, working in Pakistan. It consists of twenty-five (25) questions that were sent to consultant Ophthalmologists. The results were analyzed by an analyst.

RESULTS:

The questionnaire was sent to over three hundred (300) ophthalmologists, and feedback was received from two hundred and twenty (220) ophthalmologists. All were consultant ophthalmologists, doing private practice for at least last 5 years, working in government or private sector. Out of these, 166 (75.45%) were males, and 54 (24.55%) were females. The Government Hospitals were workplace for 120 (54.54%), and 100 (45.45%) were in the private sector. About 89% had family members ranging from two to six. Around 190 (85%) were doing private practice for more than two years and 30 (15%) above ten years. The internet was the main source of information about the pandemic in 124(56%) and television, and other media contributed to 96(44%). 86% were of opinion that their private practice has been affected 30 to 50%, and 14% didn't (probably these were those ophthalmologists

who were not involved in regular practice). Around 190(86%) had opted to limit practice hours voluntarily. According to 68% eye specialist, patients agreed for the Corona Laboratory test when advised. More than 50% ophthalmologists, 196(89%) were not satisfied with government policies for Corona; unfortunately, but 24 (11%) were satisfied. (Table-1).

Table-1: Showing data of subjects (n=220)

Gender	Male	Female
	166 (75.45%)	54 (24.55%)
Working sector	Govt	Private
	120 (54.54%)	100 (45.45%)
Number of Family members	1-6	Above 6
	196 (89.09%)	24 (10.91%)
Years of private Practice	2-10	Above 10 years
	190 (85.2%)	30 (14.8%)
Information source about Corona	Internet	Tv and others
	124 (56%)	96 (44%)
Private practice affected	Yes	No
	190 (86.36%)	30 (13.64%)
Extent of decrease Practice	0-30%, 31-50%	Above 50%
	94 (17.4%, 25%)/42.73%	126 (57.27%)
Opted to limit the practice	Yes	No
	190 (86.36%)	30 (13.64%)
Did the number of elective surgical procedures decrease	Yes	No
	214 (97.23%)	6 (2.73%)
Extent of decrease	Upto50%	Above 50%
	23 (30%)	77 (70%)
Routinely advice corona test before eye surgery	Yes	No
	160 (72.73%)	90 (27.27%)
Did patients agree for corona test, if advised	Yes	No
	150 (68.18%)	70 (31.82%)
Did patients observe Corona SOPs	Yes	No
	176 (80%)	60 (20%)
Any known person affected from Corona	Yes	No
	196 (89.09%)	24 (10.91%)
Satisfied with govt policies on Corona	Yes	No
	168 (76.36%)	52 (23.64%)

According to 33 (15%) ophthalmologists, their social lives were affected, 17 (8%) said psychological aspect suffered, 10 (5%) had economic aspects affected, whereas 155 (70%) had the opinion that all three aspects were affected. (Figure-1)

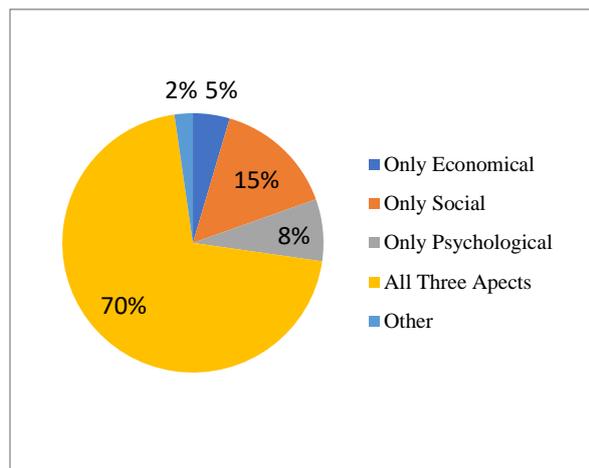


Figure-1: Life aspects affected by COVID-19

DISCUSSION:

The disease affects a person physically and psychologically. The image of the medically advanced world of 20th century has been shattered by COVID-19 even in developed countries like Europe and the United States. Pakistan being a developing country still trying to cope with the detrimental effects of disease burden and its complications where 80 million population is already living below the poverty line.¹⁵ The non-uniformity of disease patterns has further complicated the issues.

Emergency and intensive care units are overburdened by COVID-19 infections, whereas electives like ophthalmology have shown a marked decrease in the number of patients and surgeries as it was withheld in an effort to control the disease.^{16,17} The probable contributing factors can be day to day changing policies of the government, lockdown and poor access to the ophthalmologist for common complaints, non-availability of separate operation theater, compulsory COVID-19 test before surgery that is additional financial constrain on the patient, misinformation among the general population, myths regarding Corona, and false news in the air about the ailment, etc.

The spectrum of COVID-19 related psychological effects is broad. Everyone is facing “insecurity” nowadays. The educational activities of junior

ophthalmologists and residents are affected badly in the outpatient department (OPD) as well in the operation theater. Due to close contacts with patients, health professionals are at greater risk of acquiring infections even from asymptomatic carriers.^{18,19} The commonest route of infection transmission is respiratory tract via droplet and aerosol^{20,21} so eye specialists are slightly alarmed while performing an ocular examination of patients, which can sometimes be the cause of misdiagnosis. The anxiety levels among ophthalmic residents are markedly increased as pointed by Brogan et al in United Kingdom.²²

The person who first pointed towards some association between viral conjunctivitis and pneumonia was Dr. Li Wenliangan, A young ophthalmologist in Wuhan, China, who unfortunately also died of corona infection in Wuhan on February 7, 2020. It was very sad that he was accused of making false claims and misleading public, but later, his reservations proved to be true. He got an infection from a glaucoma patient who was COVID-19 positive with symptoms.⁸ The viral conjunctivitis is a common presentation of COVID-19 patients. Being ophthalmologist, during the ocular examination, distance maintenance is problematic, especially performing funduscopy and examining children. We need special shields during OPD and surgery. COVID-19 testing is also mandatory before any surgery, as per hospital rules, so it has added to the cost of treatment for poor patients.

The ophthalmologists are also anxious, apprehensive, and financially insecure like other health professionals of the country.^{23,24} As pandemic has caught the attention of unprepared medical world, anxiety, and depression are not unusual.²⁵ There is a need for future strategies in order to minimize unwanted, unforeseen, unexpected, and undesirable disease impacts.

CONCLUSION:

The COVID-19 pandemic has complex and multifactorial effects. The medical field, like

Ophthalmology, where most surgeries are elective, has faced devastating financial effects in terms of the reduced number of patients and routine surgical procedures coupled with the overwhelming psychosocial impact on ophthalmologists. We need to explore workable and sound strategies to cope with fear and depression in such pandemic conditions in the future.

AUTHOR'S CONTRIBUTION:

SR: Conception of idea and study design

MTK: Conception of idea and supervision

MM: Drafting the article

ZA: Data collection

SA: Data Analysis

IM: Study Design

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