

Ophthalmology in Interns' Eye: The Interactive Online Careers Talk Survey

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ABSTRACT

Purpose: Coronavirus disease 2019 (COVID-19) has brought changes on our daily activities and might affect future interns' on their career aspiration. Our survey aims to detect the current interns' perception toward ophthalmology under the COVID-19 pandemic. **Methods:** Online interactive career talk focusing on ophthalmology was organized through Zoom with interactive polling questions on October 31, 2020. Interested intern participants were consented before they answer the poll anonymously. Single and multiple-choice questions were set according to the context of the questions. **Results:** Twenty-six out of 28 participants replied the poll questions. Most (61.5%) interns found their interest in ophthalmology because of self-satisfaction from helping people to improve vision, whereas 30.8% were attracted by the academic research activities within the field. College of Ophthalmologist of Hong Kong is better known among the interns than Hong Kong Journal of Ophthalmology (HKJO) (76.9% vs. 50.0%) ($P = 0.08$). About 23.1% interns ever joined the Annual Scientific Meeting Hong Kong Ophthalmological Symposium, but none has submitted scientific paper to HKJO. Glaucoma was known by all the responders, and the single most popular desired subspecialty interest of training was cornea and external disease. **Conclusion:** This updated survey concerning the interns born in the COVID-19 era help local ophthalmologists to understand more about our future ophthalmologists-to-be.

Key words: Career choice, COVID-19, eye, Hong Kong, Internship and Residency, ophthalmology

INTRODUCTION

Novel coronavirus, coronavirus disease 2019 (COVID-19), is restricting lots of normal social activities after its pandemic.^[1,2] Social distancing is suggested from different health authorities to prevent infection from close contact^[3,4] and social gathering is no longer deemed medically safe under the COVID-19 era.^[5,6] Concerning the younger generation of our profession, not only regular continuous medical education activities were affected^[7,8] but also part of their career development.^[9,10] Specialty entrance is considered an important lifetime decision to a doctor^[11,12] and career talks are essential counseling channels before these

fresh interns make their own choices.^[13,14] Our survey aims to detect the current interns' perception toward ophthalmology under COVID-19 pandemic.

METHODS

Houseman Career Talk is an annual event organized by The Christian Medical and Dental Fellowship of Hong Kong and Christian Doctor Network every year. This year's one was no longer a physical gathering, but web-based interactive one through Zoom™ (Zoom Video Communications, Inc., San Jose, CA, USA) platform, held on October 31, 2020 from 3 pm to 6 pm. Each specialty got a single virtual room for

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interested participants to interact with an ophthalmologist. Ophthalmology group was filled with poll questions set by the host concerning interns' demographics, history of ophthalmology exposure, reasons for choosing a career in ophthalmology, and basic factual knowledge on Hong Kong's Ophthalmology. Single and multiple-choice questions were both available according to the context of the questions. Participants were all consented before they voluntarily answered the poll questions. Answers were collected through the platform. Statistics were calculated by SPSS version 25 (IBM SPSS Statistics for Windows, IBM Corporation, Armonk, NY).

RESULTS

Ophthalmology platform was joined by 28 participants, and 26 (92.9%) answered the poll. All of them were intern graduates from local universities, without any Licentiate candidates. Twelve (46.2%) were male, while 14 (53.8%) were female. 53.8% and 26.9% first got reach of the event from undergraduate medical schools' related platform and the organizer, respectively. Remaining 19.3% were invited by peers.

Concerning personal history of ophthalmology exposure, and reasons behind an interest to be an ophthalmologist, most responders replied more than one answer. Results were listed out in Tables 1 and 2, respectively. With respect to authority, the College of Ophthalmologist of Hong Kong is far more popular than its official academic journal publication: Hong Kong Journal of Ophthalmology (HKJO) (76.9% vs. 50.0%) among the surveyed interns ($P = 0.08$). More participants have heard of our Annual Scientific Meeting Hong Kong Ophthalmological Symposium (ASMHK) this year than the Congress of Asia-Pacific Academy of Ophthalmology this year (APAO 2020) despite their differences on scale and media promotion. Their percentages were 46.2% versus 34.6%, and statistically insignificant with Fisher's exact test. Interestingly, 6 (23.1%) interns ever joined the ASMHK, no matter which year, before the career talk. However, none (0.0%) has submitted a scientific paper to HKJO.

Eight (30.8%) participants had knowledge on all the major ophthalmology subspecialty interests^[15,16] and Glaucoma was known by all (100.0%) the responders [Table 3]. The single most popular desired subspecialty interest of training was cornea and external disease [Table 3]. Regarding territory wide local ophthalmology service in Hong Kong, most interns did not get any clues on them. However, hyperbaric oxygen therapy service for central retinal artery occlusion was slightly better (34.6%) known to participants than Hong Kong Eye Bank service (30.8%),^[17] despite both were known to less than half of the repliers.

Table 1: Categorized participants' history of ophthalmology exposure (excluding basic medical curriculum)

| (Multiple choice questions) | n | (%) |
|---|----|------|
| Academic project (intercalated year, conference, undergraduate degree, etc.) | 20 | 76.9 |
| Clinical attachment (hospital authority, private clinic, overseas center, etc.) | 15 | 57.7 |
| Community service (eye screening/ educational program, NGO activities, etc.) | 12 | 46.2 |
| Personal eye disease being treated by ophthalmologist | 2 | 7.7 |
| None | 3 | 11.5 |

Table 2: Reasons behind participants' interest to be an ophthalmologist

| (Multiple choice questions) | n | (%) |
|--|----|------|
| Self-satisfaction from helping people to improve vision | 16 | 61.5 |
| Inspired by undergraduate teaching | 11 | 42.3 |
| Community service and primary care | 10 | 38.5 |
| Interest in optical and electronic machines | 9 | 24.6 |
| Working hours and clinic based workload | 8 | 30.8 |
| Academic research activities | 8 | 30.8 |
| Future private sector opportunities | 3 | 11.5 |
| Family or peer influence | 3 | 11.5 |
| Social status of ophthalmology across other specialties in Hong Kong | 1 | 3.8 |

DISCUSSION

Interns, who have aspiration in ophthalmology, are the major important source for the continuous training of ophthalmologist in Hong Kong. Being a highly urbanized city, our local practice of ophthalmology is a lot different from others. Primary care, clinic-based consultations, and community service is part of our local ophthalmology service model. With the influence of COVID-19, clinical exposure was reduced,^[18,19] when ophthalmology was not an exception. With the minimized clinical ophthalmology exposure throughout the undergraduate teaching in COVID era, interns' perception of our specialty is important for future strategy plans to sustain our profession with the new blood.

Our survey got a high response rate of 92.9%, despite the small total number of participants ($n = 26$). Statistical analysis was difficult with such a small number of subjects,

Table 3: Participants' impression toward different subspecialty interests in Ophthalmology

| Subspecialties | Knowledge on subdivisions in ophthalmology (multiple choices) (%) | Preferred subspecialty interest for training if recruited as resident (single choice) (%) |
|--------------------------|---|---|
| Cornea and external eye | 88.5 | 42.3 |
| Vitreo Retina | 65.4 | 15.4 |
| Oculoplastic | 46.2 | 15.4 |
| Neuro-ophthalmology | 57.7 | 11.5 |
| Glaucoma | 100.0 | 7.7 |
| Paediatric ophthalmology | 73.1 | 7.7 |
| | All of the above: 30.8 | Total: 100 |

and interpretation needs to be cautious.^[20,21] However, this number is not suboptimal when counting its proportion toward the annual vacancy available for ophthalmology resident recruitment. Our online survey takes the advantage of anonymous polling in contrast to traditional face to face career talk,^[22,23] thus personal impression could be eliminated for giving genuine responses. Limited by the online platform settings, questions were set with a maximal of 10 choices each. Extra options could not be catered although every candidate got his/her unique reason in joining our ophthalmology family. The 10 options were tailored to local practice and experience, as well as referencing to recent years' international publications on similar topic searched through PubMed.^[24-27] Eventually, options shown in Tables 1 and 2 were used in the poll.

In fact, this interactive online career talk was just an event out of the numerous career talks available. Besides, it was not held by a professional representative body in the medical field. Therefore, selection bias definitely existed. Although this survey is unique being the first of its kind conducted through an online interactive career talk on ophthalmology in Hong Kong, there was no previous year's survey of similar theme for comparison. Trend analysis becomes impossible, and future follow-up surveys of similar kind would be useful to monitor the paradigm shift with time through the post-COVID era.^[28,29]

CONCLUSION

Our survey outlined the current year's interns' impression toward ophthalmology. 2019–2020 was a special year when all of us were lived under the COVID-19 influence. Updated survey would help local ophthalmologists to understand more about our future ophthalmologists-to-be.

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