Preferred Cataract Practice Among Malaysian Ophthalmologists 2021

MALAYSIAN YOUNG OPHTHALMOLOGISTS

This report contains the results of Cataract Surgery Practice Trend among eye doctors in Malaysia which was conducted in April 2021. Delegates took the survey online via Google Form and was participated by all ophthalmologist and medical officers practicing in Malaysia. This survey has been initiated by Malaysian Young Ophthalmologists Special Interest Group.

There were 173 responses. This survey results helps Malaysian Ophthalmologist to understand the current trend of practice among Malaysian eye doctors and the data enhances our understanding on current cataract surgery practice among peers in Malaysia.

This survey has been initiated by:

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Report prepared by

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Refractive Surgeon
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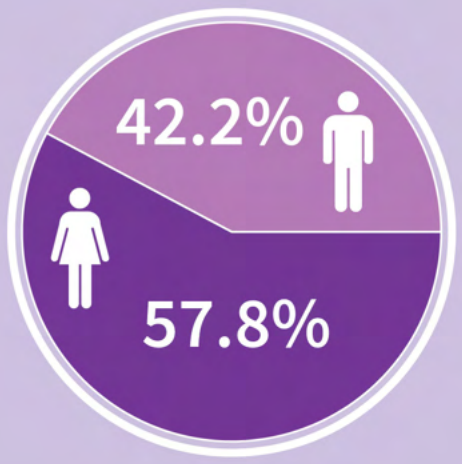
1. Gender

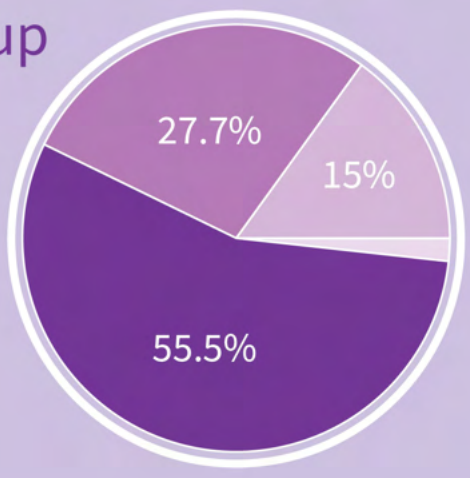


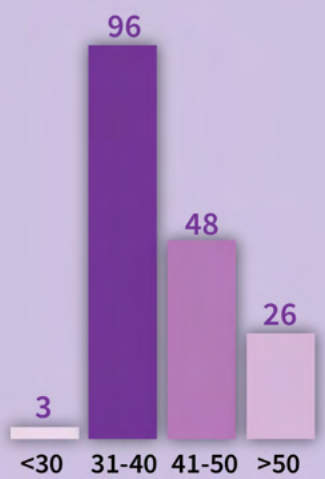
Total No of Responders

173

2. Age Group

- Less than 30
- 31-40
- 41-50
- Above 50





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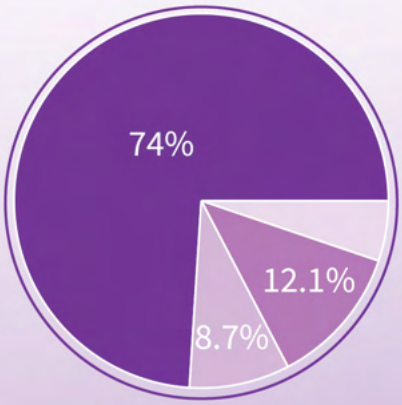
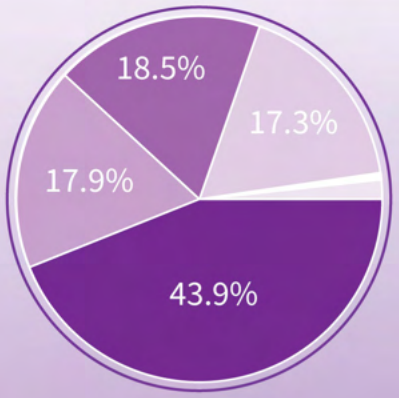
3.Current Position



- Medical Officer
- Masters Student
- Gazetting specialist
- Specialist /Consultant

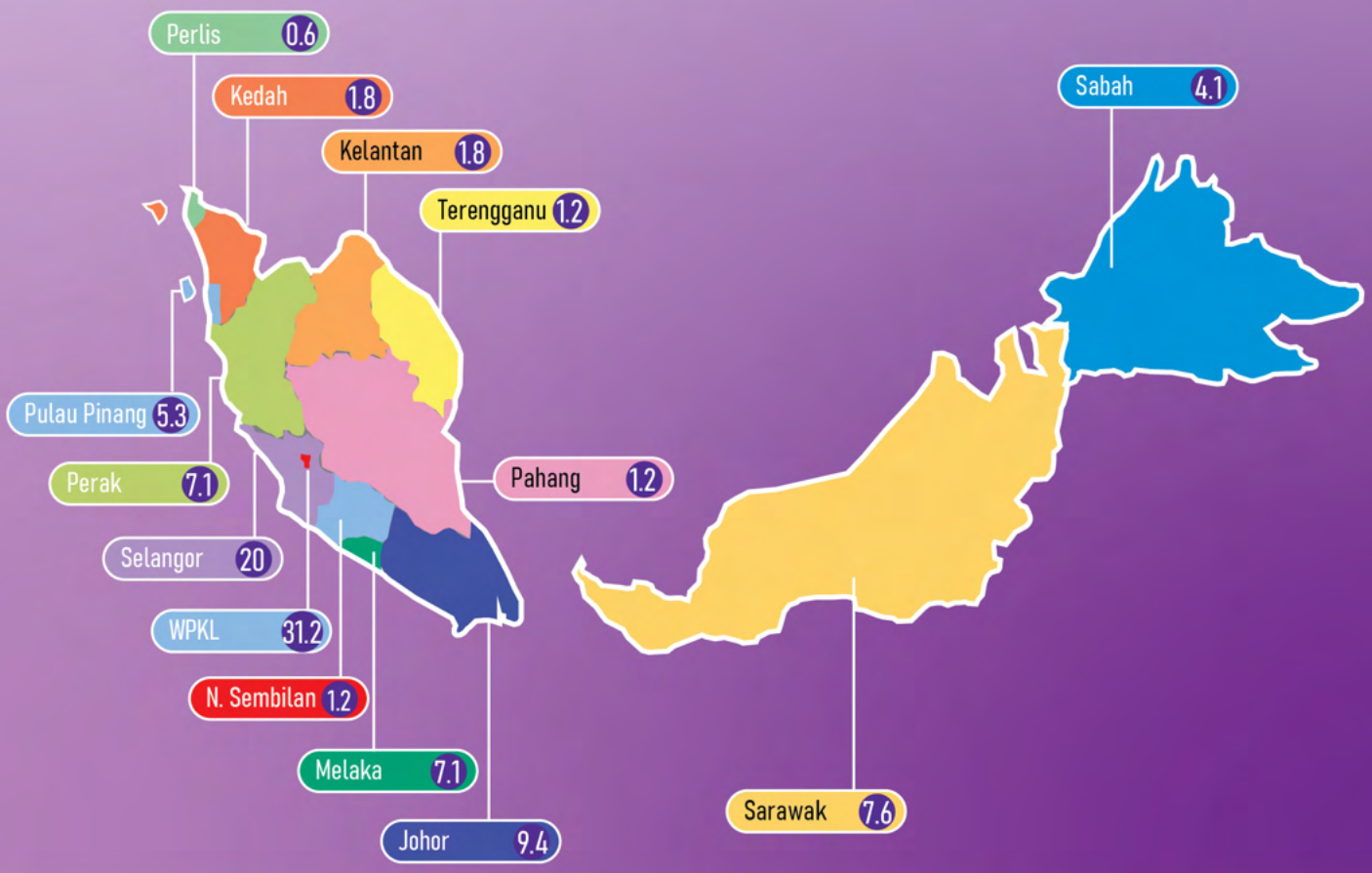
4. Which sector are you in practising in?



- Government hospital
- Private hospital
- Private eye clinic
- Public university
- Private university
- Armed forces

5.Which state are you in?

Preferred practice in cataract surgery (%)



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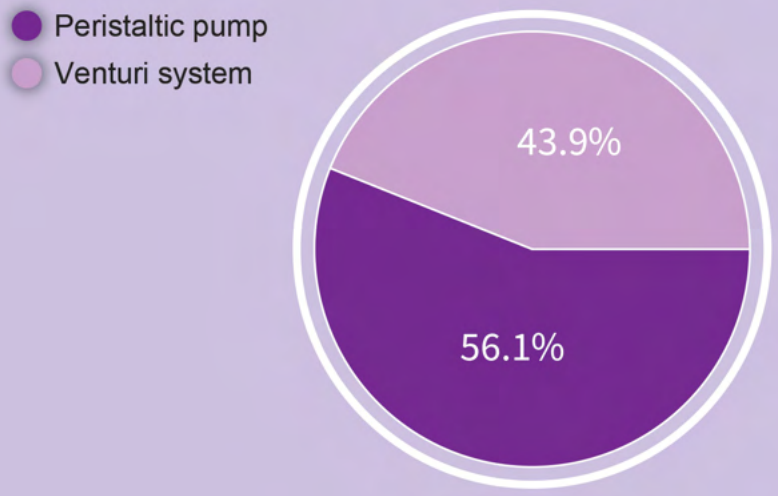
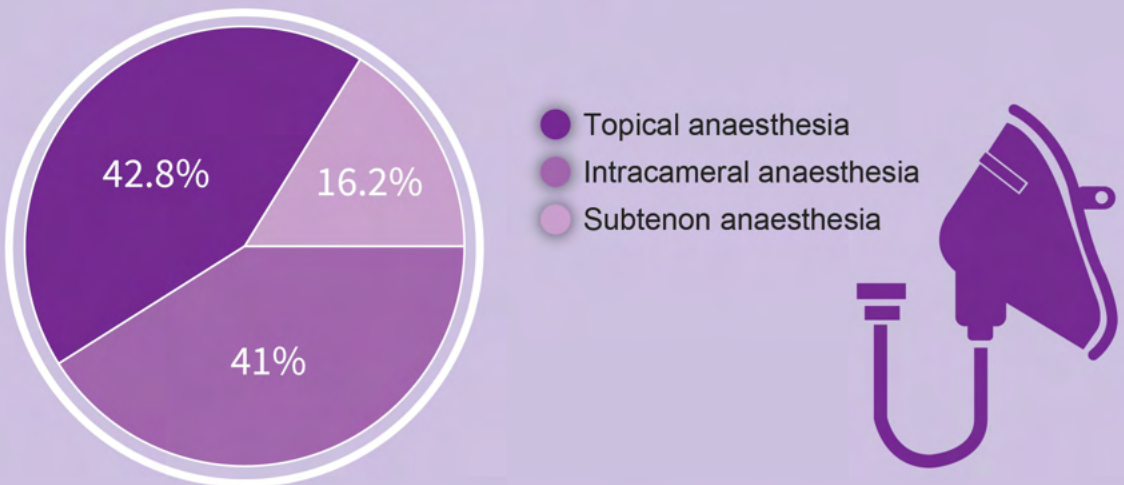
6. Which phacoemulsification machine system do you prefer?



7. Do you apply povidone iodine in the conjunctival sac?

8. Which is your preferred / commonly used local anaesthesia?



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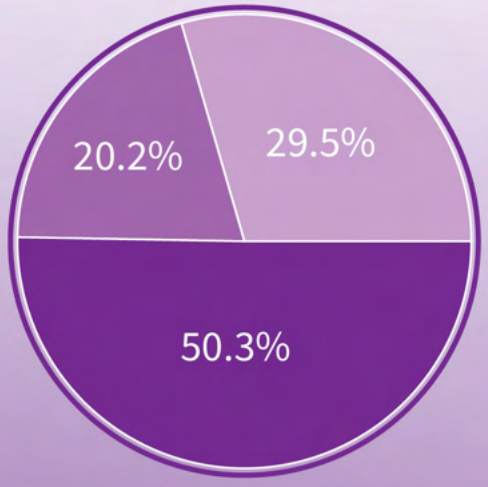
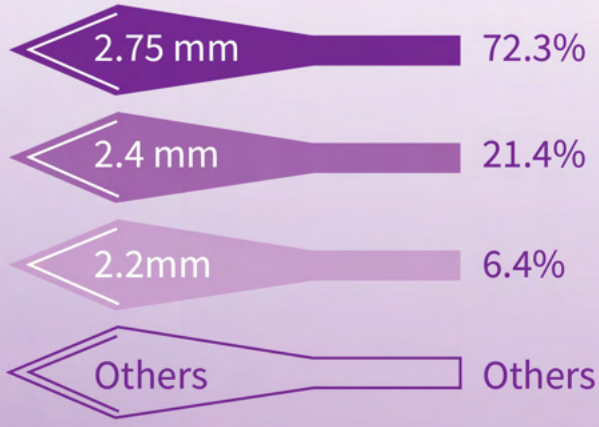
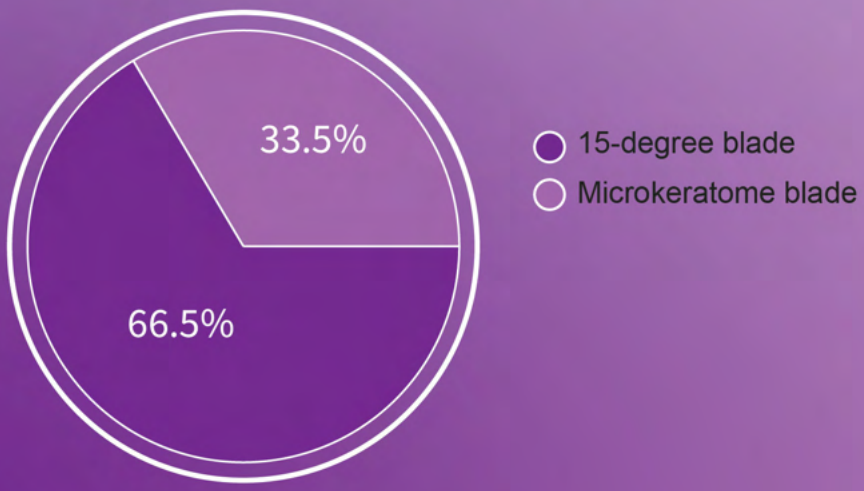
9. Where do you place your main incision?



10. Which microkeratome blade do you commonly use?



11. Which blade do you use to make paracentesis?



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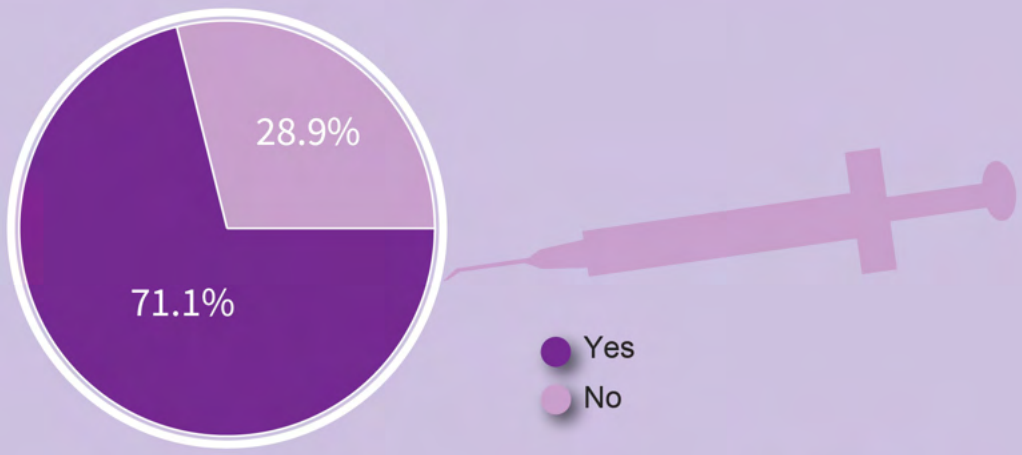
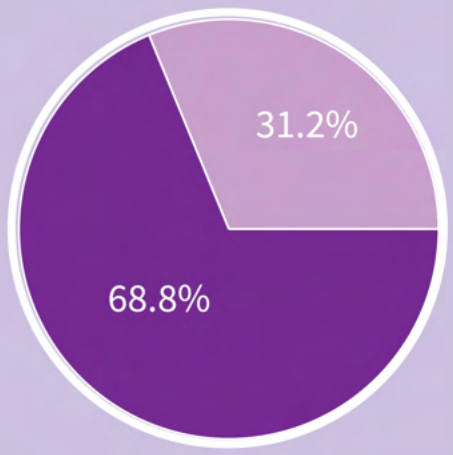
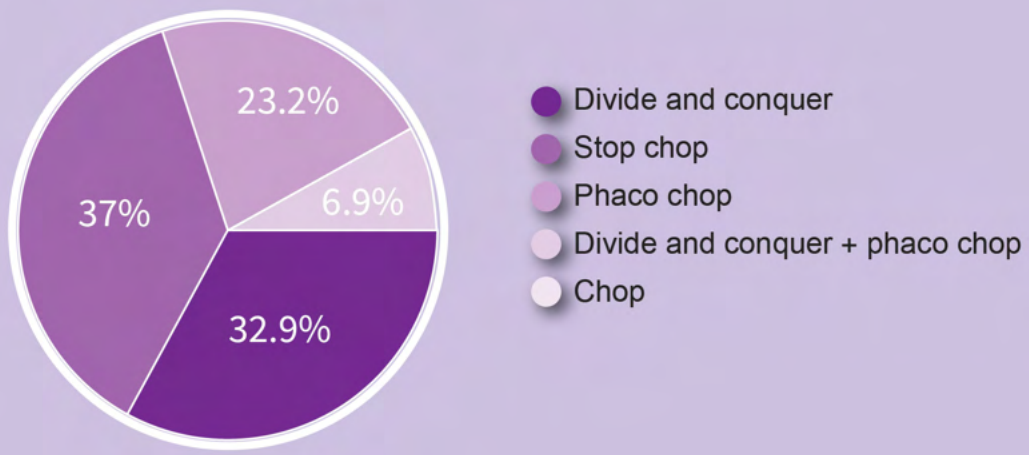
12. Do you commonly use vision blue?



13. Which technique do you prefer loosen and separate the cataract to facilitate its removal?



14. Which technique do you use for phacoemulsification?



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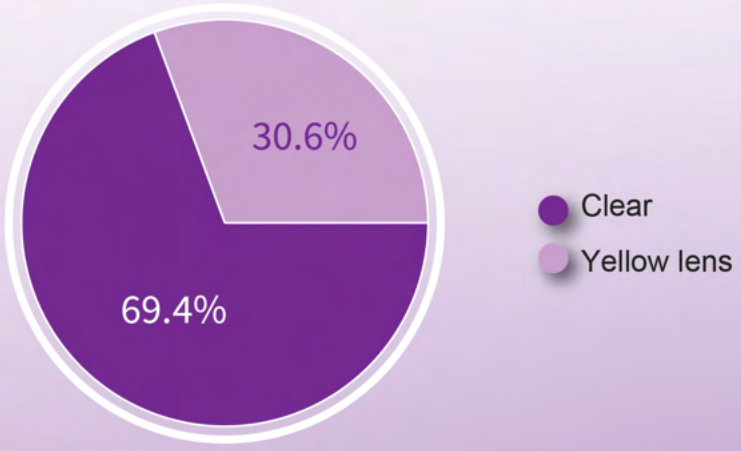
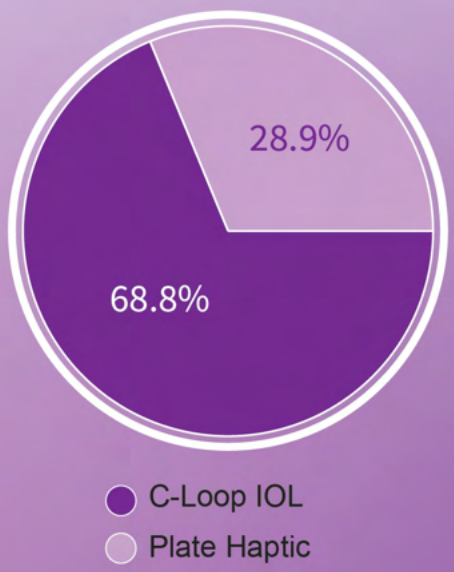
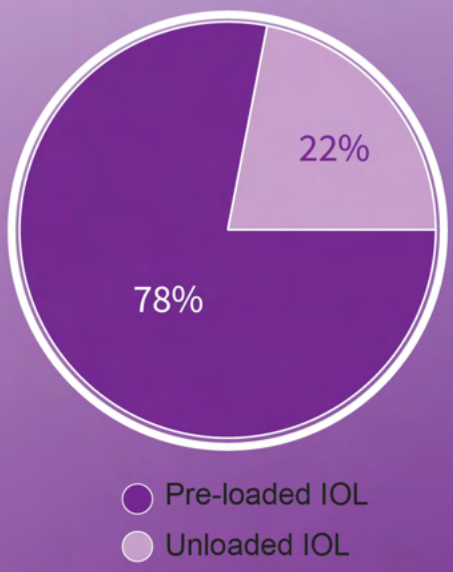
15. Which type of lens do you routinely implant?



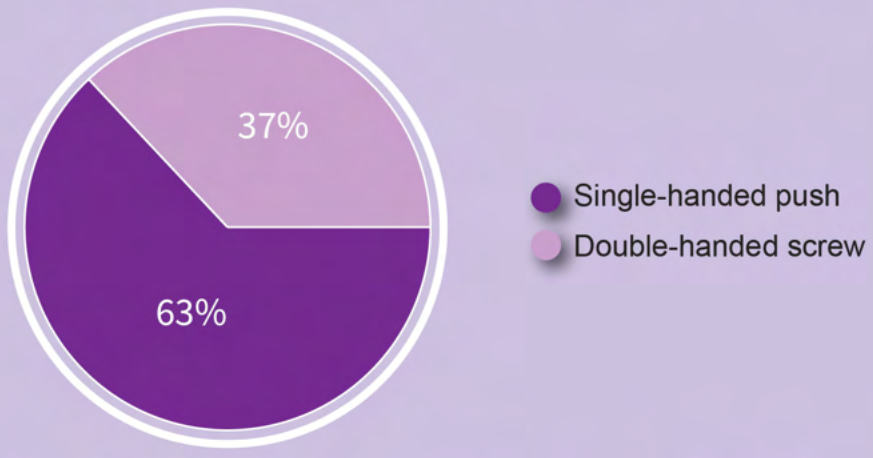
16. Which type of lens design do you prefer?



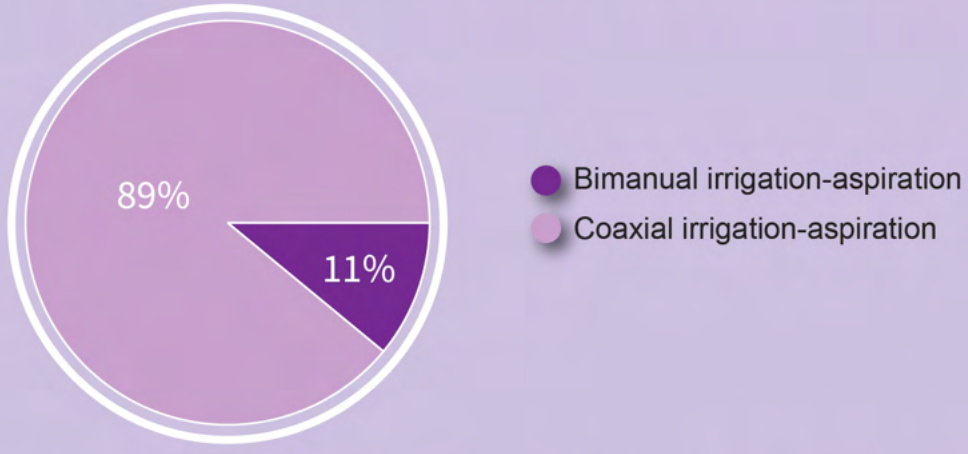
17. Which type of lens do you prefer?



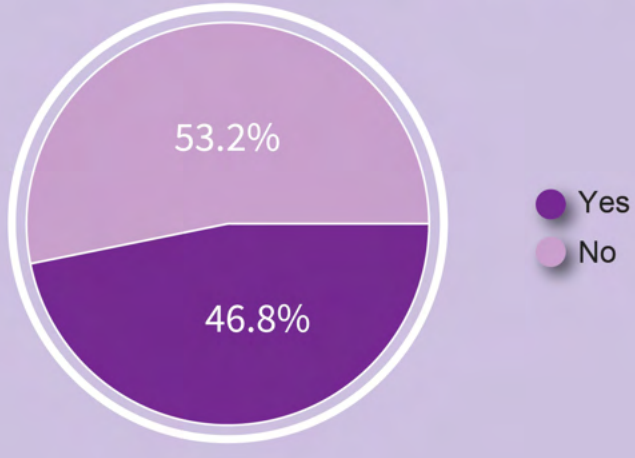
18. Which type pre-loaded lens system do you prefer?



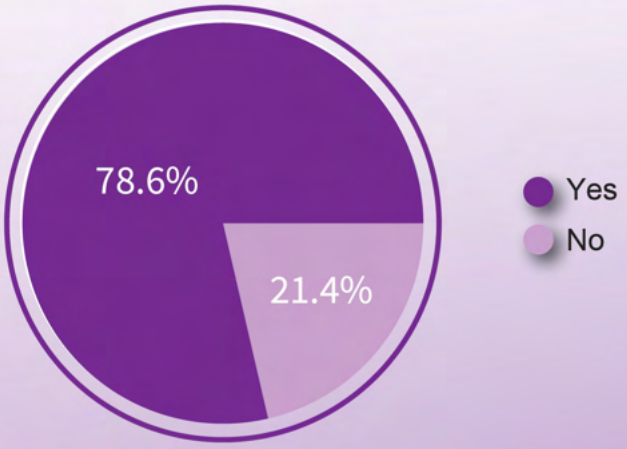
19. How do you perform cortical matter aspiration?



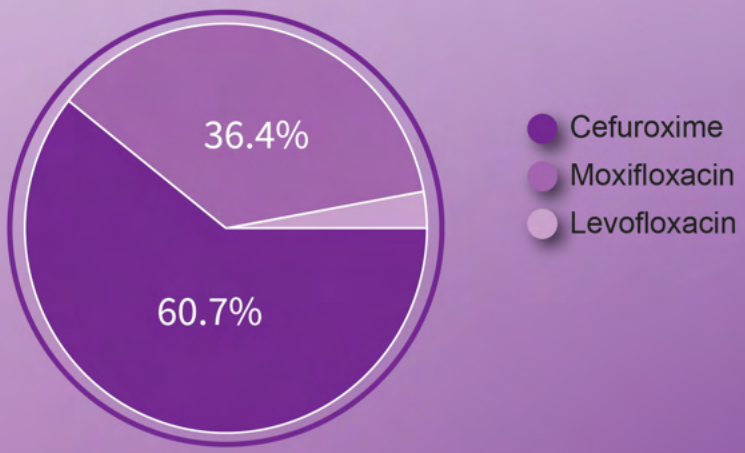
20. Do you routinely polish the capsular bag?



21.Do you routinely use Miostat (Carbachol)?



22. Which type of intracameral antibiotics do you use?



First and foremost, I would like to congratulate The Young Ophthalmologist Special Interest Group of MSO for this novel survey initiative. Obtaining data from an online survey, especially on the practice pattern, is a challenge mainly to achieve an acceptable percentage of response that is representative. It is also best if we could correlate the responses to capture any significant statistical associations and get a more accurate picture.

Demographically, more than half of the respondents were 31-40 years old, 2/3 were specialists/consultants, almost half were working in the Government Hospital, and half were practicing in Selangor/KL. These generally translated to young and energetic phaco surgeons working in centres, most of them furnished with well-maintained high-end machines and with less dense cataracts to operate on. (Population and hospital data have shown that patients presented earlier for cataract surgery in the country's Central Region, including Selangor and Kuala Lumpur, compared to other regions probably due to abundant resources and access).

However, the two most glaring responses, which I believe were not consistent with the demographic profile of the survey, are the high percentages of vision blue usage and the routine use of miostat. Both can give complications when not used sparingly. It is absolutely unnecessary to stain the capsule when it is visible, and there is no need to inject miostat when there is no iris prolapse at the end of surgery. The reason for injecting miostat at the end of surgery is beyond the survey. The young surgeons might routinely use it to constrict the pupil to stop the intraocular lens (IOL) from prolapsing out of the capsular bag. They might not realize that in prolapsing IOL, they are supposed to address the wound rather than the pupil. These practices probably have been passed down along the training line all these years without proper justification/explanation. If they go unchecked, they will, unfortunately, become an endorsed mainstream practice of the nation.

Thank you

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Thank you to MYOSIG for this initiative and for your kind invitation to comment on the results of this survey. This is an important and necessary step to have this Practice Pattern survey so the ophthalmology community can all see what local practices are like and where we can collectively improve on.

The demographics of the survey respondents indicate majority representation from the YO (31-40 year old) group of Specialist Consultants in the Government sector, hence, the opinions expressed may be biased to that practice setting.

It's reassuring to note that the vast majority of us do use povidone iodine for endophthalmitis prophylaxis but I would urge the remaining 8.7% who don't use it to do so as it has been proven to be the single most important step cataract surgeons can take to prevent this dreaded complication! The survey also covers the use of intracameral antibiotics and it will be good to know what proportion of surgeons are using this. Cefuroxime is the most commonly used antibiotic and it will also be interesting to know how these drugs are prepared for injection.

A large proportion of surgeons use intracameral anaesthesia and it would be good to know if this is used in isolation or in combination with other forms of anaesthesia. If used in isolation, this may be the first step towards 'dropless' cataract surgery which may be a strategy to increase efficiency and lower costs.

The majority of surgeons prefer a fixed superior incision with the least popular being a fixed temporal incision. If there is a move towards improved predictability of refractive outcomes with advanced technology IOLs (particularly for astigmatic correction), then a smaller (<2.4mm), consistently placed temporal incision will provide the lowest centroid induced astigmatism.

The preference for preloaded IOLs is in line with global trends as reduced handling of the IOL would further lower the risk of infection and IOL damage.

The use of Vision Blue and Miostat is quite high and this seems surprising to me. These important add-ons are vital for selected cases but should not be used routinely as they are not without their problems and would also incur unnecessary costs.

Thank you once again.

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President of Malaysian Society of Cataract and Refractive Surgery
Medical Director of Lee Eye Centre, Ipoh

Malaysia Cataract Surgery Survey 2021 revealed that majority of the respondents were specialists and aged more than 40 years old. The subsequent findings in the survey reflects the collective training and the exposure that they underwent throughout the years. It is interesting to note the variety of surgical techniques used by the respondents, from the choice of anaesthesia, the placement and size of incisions to the techniques of phacoemulsification. From this survey, it has been well-established that most of the surgeons complied with the standard chemoprophylaxis guidelines to reduce the risk of endophthalmitis by incorporating instillation of povidone-iodine in the conjunctival sac perioperatively and injection of intracameral antibiotic at the end of surgery. The choice of IOL designs and deliveries are expected to be divided differently depending on the preferences of individual surgeons. However, it is surprising to learn that more than half of the respondents chose not to polish the capsular bag. The findings in this survey are useful to both practicing ophthalmologists and Ophthalmology residents/trainees to benchmark and observe the common cataract surgery practices in Malaysia.

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