Imposter Syndrome in Ophthalmology Trainees: Are we our own Worst Enemies?

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1. Introduction

Imposter syndrome (IS) describes the experience of feeling fraudulent or doubting one's achievements despite evidence to the contrary. IS was first described in 1978 by Clance and Imes who described the characteristics within high achieving women (Bhama et al. 2021). IS has been associated with work cultures that praise precision or results over process, humility, or empathy. The high stakes and evaluative culture within medicine has been argued to correlate to both physicians and surgeons demonstrating more frequent rates of IS characteristics (Chodoff et al. 2023). Female gender and younger age of clinician are evidenced to be associated with higher rates of IS (Joseph et al. 2023).

Although explored in other surgical fields, including general surgery, oral and maxillofacial surgery, and neurosurgery, the prevalence within ophthalmology residents has not previously been investigated (Bhama et al. 2021; Zaed et al. 2022; Deek et al. 2024).

We aim to explore the prevalence and degree of IS within ophthalmology residents and compare our findings with previously published literature.

2. Methods

An online survey was sent to ophthalmology residents from our School. This included the Clance Imposter Phenomenon Survey, a validated IS measure, plus participant demographics and items querying experience of potential compensatory mechanisms for IS based on another prior IS publication.

The CIPS is a positively worded 20 item question which asks the respondents to rate their answers on a Likert scale, from not at all true to very true. The higher the score, the more frequently and seriously imposterism interferes in a person's life. If the total score was 40 or less, the respondent has few imposter characteristics; 41–60, moderate; 61–80 frequent; and greater than 80, intense imposter feelings **(see QR code adjacent).**

Responses were anonymous. Ethical approval was not required but permission was granted by the Head of School. Data was analysed using Excel.

QR code which links to the Clance Imposter Phenomenon Survey (CIPS)

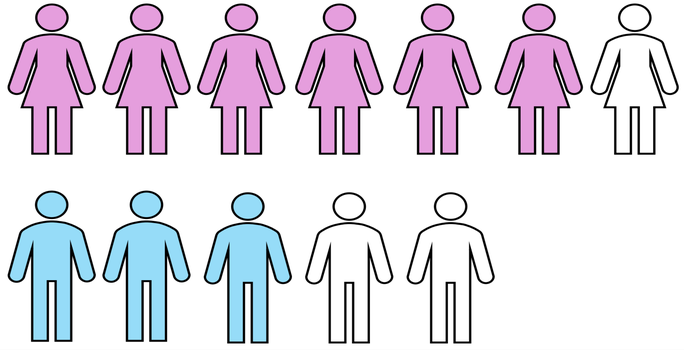


Figure 1: Residents with either moderate or frequent imposter characteristics by gender – female on top row and male on bottom row. Pink and blue filled icons demonstrate those with moderate or frequent IS characteristics and unfilled icons represent those with few IS characteristics.

3. Results

12 of 26 ophthalmology residents within the School completed the survey (46% response rate). All participants identified as either female or male gender. 75% (9/12) of all ophthalmic residents demonstrated either moderate or frequent imposter characteristics. 87.5% (6/7) of female residents demonstrated moderate or frequent characteristics of IS, compared to 60% (3/5) of male residents (Figure 1). 57% (4/7) of female residents demonstrated frequent characteristics compared to 40% (2/5) of male residents. No ophthalmic residents demonstrated intense IS characteristics.

Mean scores per CIPS question for both genders were generally higher for female residents. One question – 'I rarely do a project or task as well as I'd like to do it' - showed a higher mean score for male residents (mean score 2.8 for males compared to 2.0 for females).

There were no demonstrable additional characteristics linked to expression of IS characteristics, including, hours worked per week, journals read per week, or conferences attended per year. Nor was there an association evident between differing age brackets or stage of training with levels of IS characteristics.

4. Discussion

Our results demonstrate that IS is prevalent to a high degree within ophthalmology residents. This correlates with previous literature in other surgical groups. Similarly to other specialties investigated, IS scores are heightened within the female cohort. However, IS remains present within the male cohort.

IS can result in the downplaying of accomplishments and underestimation of abilities, which has been suggested to lead to lower levels of recognition and slower career advancements (Vaa Stelling et al. 2023).

Importantly, IS is an independent predictor for burnout and anxiety, both of which have implications linked to patient outcomes (Joseph et al. 2023).

5. Limitations and Conclusions

The statistical analysis is limited due to a low sample size of ophthalmic residents. However, this pilot study provides evidence suggestive of a high degree of IS characteristics within ophthalmology residents and warrants further research.

Next steps will involve a larger sample size from multiple schools and correlation with qualitative data to further comprehend IS. This would assist in enabling appropriate resources and support to be provided to residents in training with an aim to mitigate its impact on equity of career opportunity and degree of burnout or anxiety.

There is an unmet requirement for surgical educators to understand IS and its' implications upon a residents' clinical and surgical development. The balance of challenges which develop clinical abilities and those which can promote imposterism in surgical training is an unstudied area which could assist trainers in their continued supervision of residents. In addition, further research is required to determine if a degree of imposterism could act as a catalyst for learning and professional growth.

References

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