Stress and Cataract Surgery: A Nationwide Survey Evaluating Surgeon Burnout

Abdus Samad Ansari [1,2], Annie See Wah Tung [3], Patrick Watts [3], Gwyn Samuel Williams [1]

[1] Singleton Eye unit, Sketty Lane, Swansea SA2 8QA
[2] Kings College London, London WC2R 2LS
[3] University Hospital Wales, Cardiff, CF14 4XW

GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board

GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Caerdydd a'r Fro Cardiff and Vale University Health Board

Aim

Phacoemulsification is one of the most common and successful surgical procedures performed worldwide. Improvements in surgical techniques, innovations in healthcare advancement and external environmental factors have brought with it a new age of personal, social and psychological demands on surgeons[1]. We aimed to evaluate the nationwide prevalence of stress-induced burnout among cataract surgeons by exploring key demographic and personal factors. We believe that knowledge of these factors can help formulate a solution to this underreported problem.

Methods

A three-part nationwide cross-sectional survey was disseminated via the Royal College of Ophthalmologists (RCOphth) between December 2019 - February 2020. All consultants, trainees and speciality and associate specialists (SAS) were invited to participate. We evaluated burnout using the Maslach Burnout Inventory (MBI) which comprises of three dimensions of burnout; emotional exhaustion (EE), depersonalisation (DP) and personal accomplishment (PA)[2]. Regression modelling was completed to look at factors linked to high-level burnout in the specific domains

Part 1

- Current position stratified by year of training or time spent as consultant,
- How many cataract operations completed
- Current deanery/geographical location
- Age
- Number of cataract lists undertaken each week,
- Subspecialty of interest
- Average hours slept prior to surgery.

Part 2

- (Modified) MBI questionnaire
- 22 questions that are scored through a seven-point Likert scale that ranges from 0 to 6
- Three sections A (EE), B (DP) and C (PA)
- Each sub-section is subsequently summed and categorised as high, moderate or low

Part 3A/3B

- 3A: Clinician were paid the same amount for a job plan that did not involve undertaking cataract surgery would they be willing to accept this?
- 3B: Currently supervise trainees?
- if supervising trainee surgeons is more stressful?
- If given the choice would the preference be to operate without trainees?

Results

A total of 406 respondents completed our survey representing all 20 UK deaneries. The prevalence of burnout associated with cataract surgery was estimated at 3.45%. The total high-level burnout rate was 1.65% in trainees and 4.21% in consultants/SAS. The highest burnout rate (38%) was in the personal accomplishment domain (Section C of the MBI).

Conclusion:

The prevalence of stress induced burnout by cataract surgery appears to be low overall but significant amongst certain groups.

There has been an unfortunate reduction in the feeling of personal achievement within the discipline.

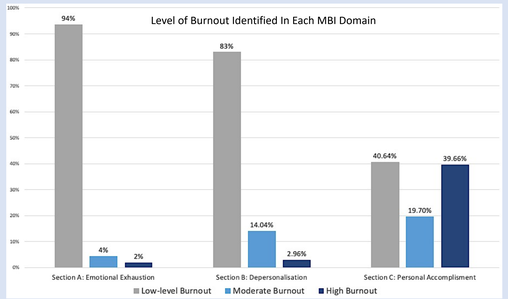
A significant proportion of ophthalmologists appear to be willing to give up surgical responsibilities

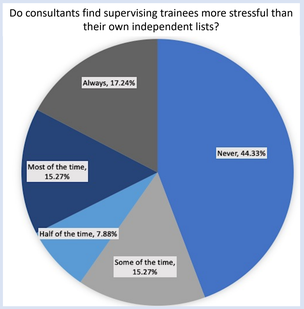
What can we do?

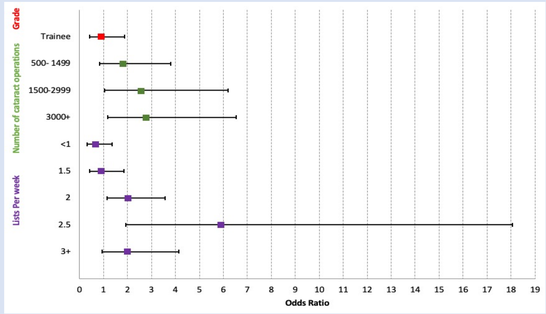
- ***Identify those at risk***
- Mindfulness Based Exercises
- Selfcare Workshops
- Encouragement to exercise/improve work-life balance
- Regular recognition should be given to those who have continued to serve and dedicate their skills to the profession and society

Regression analysis found multiple factors to be associated with enhanced risk of burnout within this domain: increasing lists, 2 per week: Odds Ratio, OR 2.03, 95% Confidence Interval, CI 1.16-3.56, p=0.01, 2.5 per week: OR 5.89 95% CI 1.92-18.04, p=0.002 and an increasing number of cataracts performed: 1500-2999: OR 2.55, 95%CI1.05-6.19, p=0.04, 3000+: OR 2.77, 95% CI 1.17-6.54, p=0.02). In contrast, an optimal sleep time of 8 hours was identified as protective of burnout OR 0.53, 95%CI 0.29-0.96, p=0.037).

17% of respondents indicated they would give up cataract surgery if given a choice. Out of the 285 consultants that participated 55% of these consultants indicated that they find supervising trainees stressful to varying degrees and 44% (n=99) indicating that they would prefer to operate without trainees on their list.







Logistic regression evaluating burnout in Section C of the MBI questionnaire. Results adjusted for grade, number of operations completed, lists per week and number of hours slept. With increasing depersonalization seen with increasing number of cataracts performed and lists per week

Poster Reference

[1] TUNG, S. W., WATTS, P., HO, D. K.-H. & WILLIAMS, G. S. 2019. How stressful is cataract surgery for consultants and ophthalmic trainees? Phacoemulsification is a stressful experience for young consultants. *Eye,* 33, 1354-1355.

[2] MASLACH, C., JACKSON, S. E., LEITER, M. P., SCHAUFELI, W. B. & SCHWAB, R. L. 1986. *Maslach burnout inventory,* Consulting psychologists press Palo Alto, CA.