Prevalence and Risk Factors for Burnout in U.S. Vascular Surgery Trainees

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Background

- Vascular surgeons predisposed to more burnout and depression compared to other specialties
- Increasing age, physical pain, and work-home conflict contribute to burnout in practicing surgeons
- Wellness of vascular surgery residents and fellows has not been well-characterized

Research Objectives

- Undertake a national, cross-sectional evaluation of vascular surgery trainees
  - Identify hazards faced in vascular training programs
  - Understand the makeup of the training population to inform interventions

Methods

- Optional, confidential survey administered after the 2020 VSITE examination
- Trainees excluded if not clinically-active

Outcomes:

- Burnout – abbr. Maslach Burnout Inventory
- Thoughts of attrition, thoughts of specialty change, suicidality
- Cluster-adjusted, multivariable logistic regression was used to predict burnout

The SECOND Trial

Results

- Total study population n = 475 of 564 trainees (84.2% response rate)
  - 52% integrated residents (0+5)
  - 48% traditional fellows (5+2)
- Most trainees were male (67.6%) and self-identified as white (54.0%) or of Asian (24.1%) race/ethnicity
- There were few trainees identifying as Black/African American (4.3%) or of Hispanic/Latino (4.7%) race/ethnicity

Limitations

- Possibility for bias by non-response or administration after VSITE
- Small size of vascular training cohort
- Few vascular trainees from under-represented minorities
- Limited survey length

Conclusions

- There is a need to identify ways to improve wellness in vascular surgery training, but interventions require local expertise and understanding of the needs of vascular trainees
- Vascular Surgery Extension to the SECOND Trial is studying these in forty-two vascular surgery programs
- Collaborations between researchers, surgical educators, and professional societies can improve wellness in vascular surgery training

Acknowledgements & Disclosures

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Prevalence of Burnout

- 44.6% overall

Attrition, Specialty Change, Suicide

- 10.0%
- 8.4%
- 4.9%

Mistreatment & Duty Hour Violations Predict Burnout

<table>
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<th></th>
<th>Odds Ratio</th>
<th>95% CI</th>
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<td>1.22</td>
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<td>Mistreatment</td>
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*also adjusted for race/ethnicity, program type, and geography