

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

Acknowledgements & Disclosures

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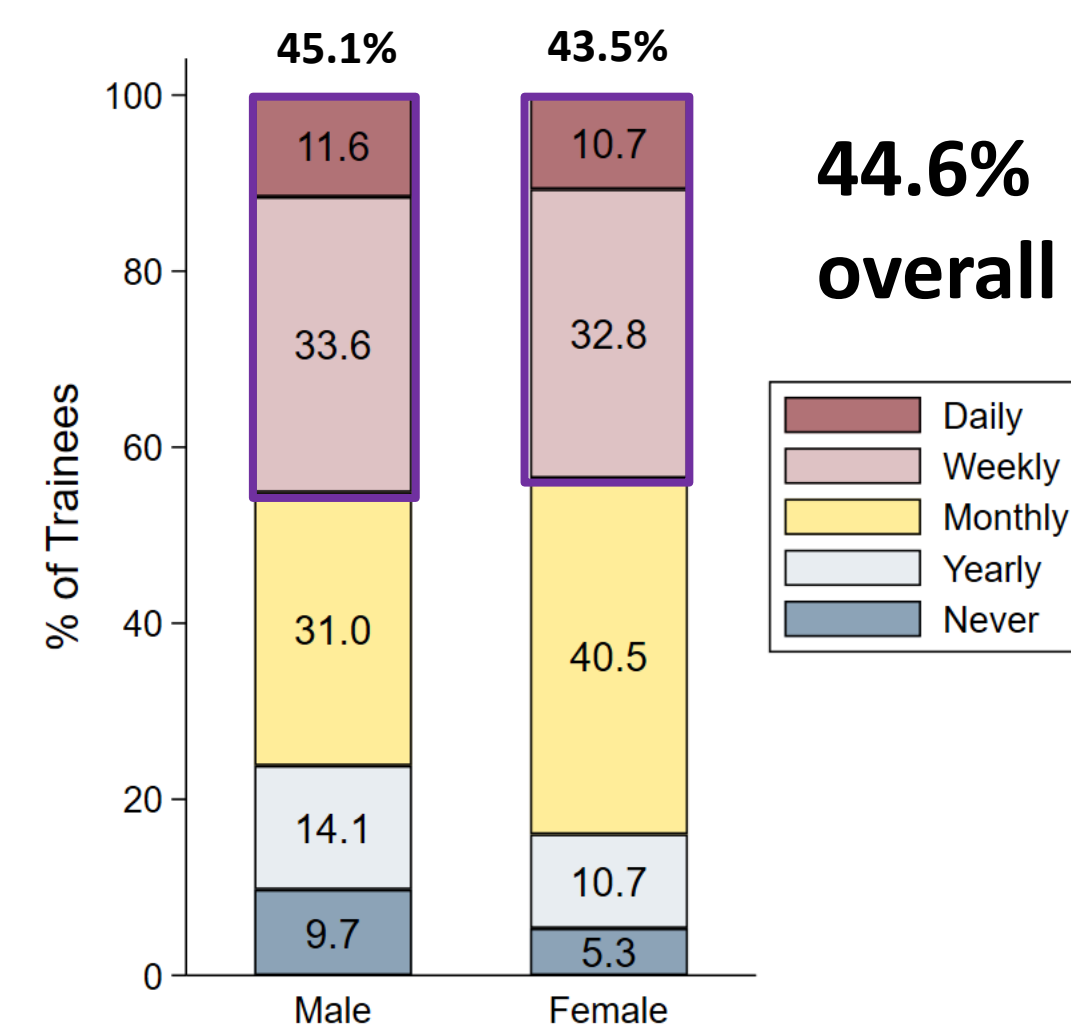
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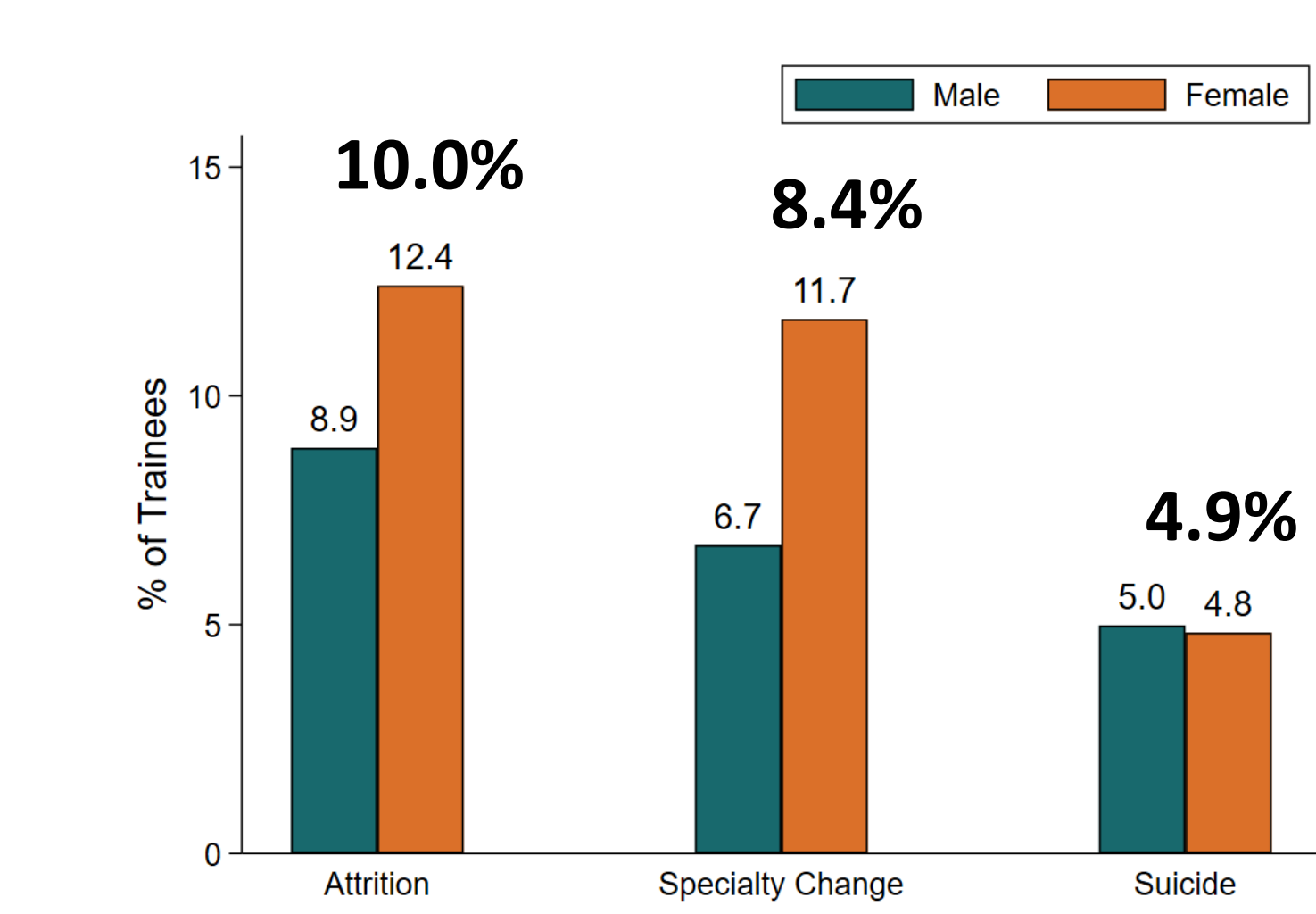
Results

- 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

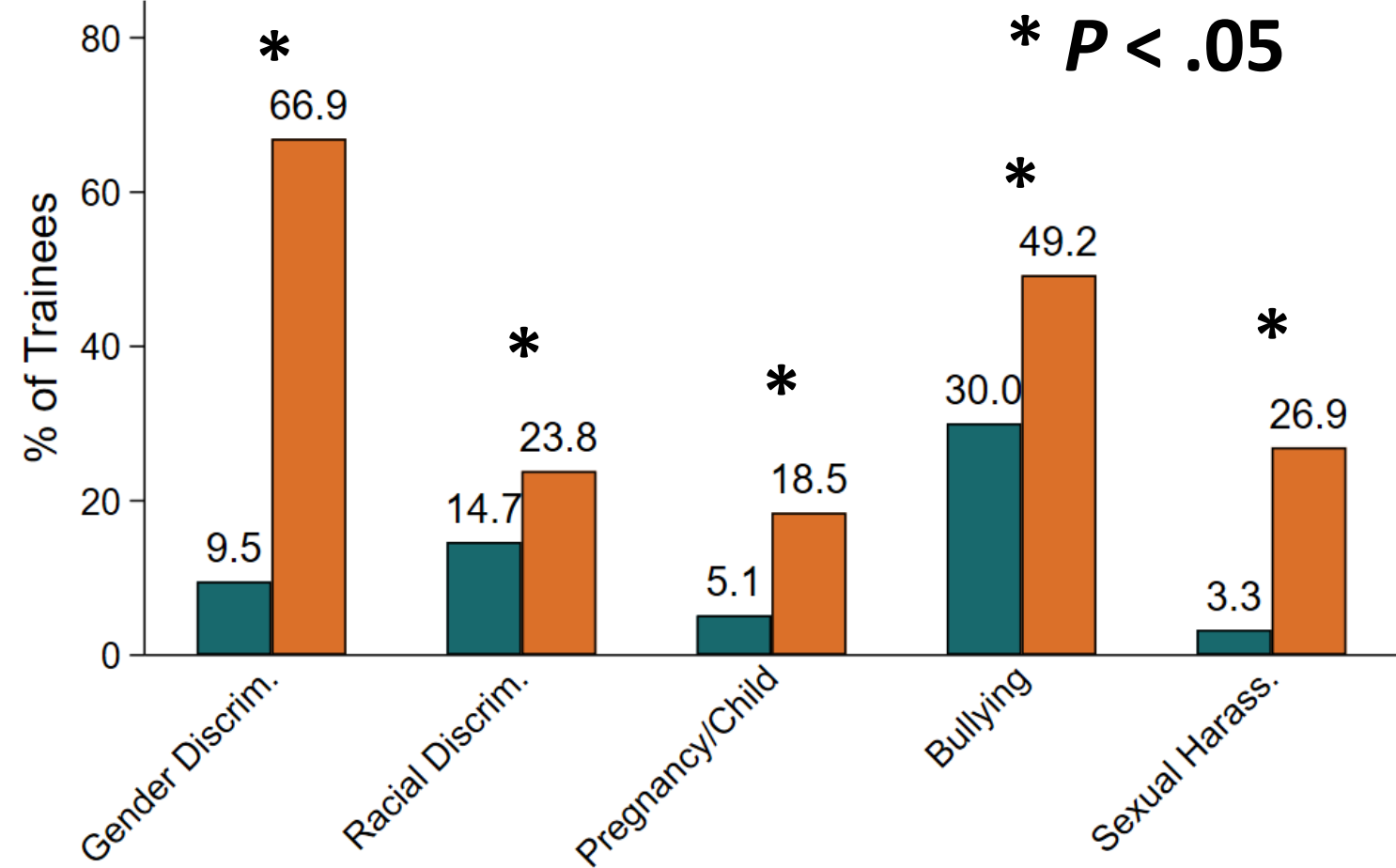
Prevalence of Burnout



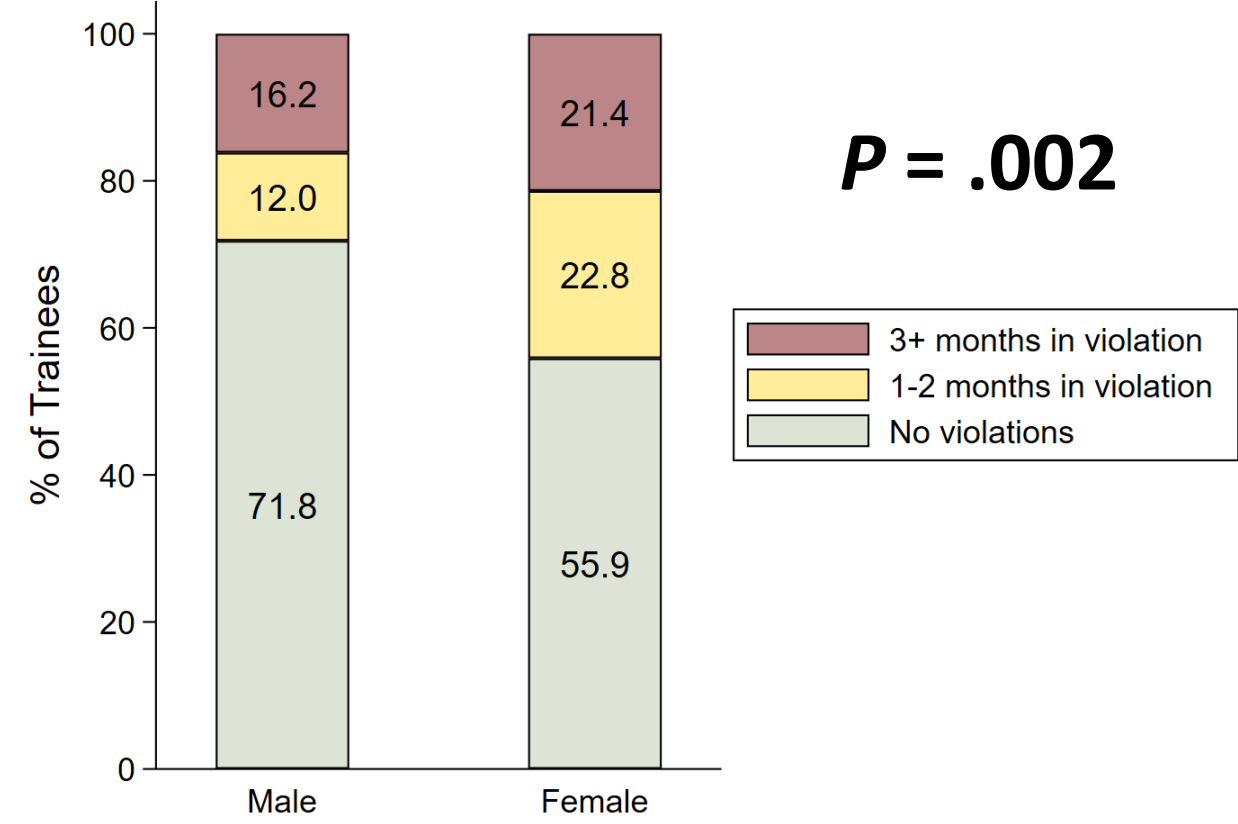
Attrition, Specialty Change, Suicide



Mistreatment



Duty Hour Violations



Mistreatment & Duty Hour Violations Predict Burnout

	Odds Ratio	95% CI	P
Gender			
Male	1.00 (ref)		
Female	0.49	(0.28 - 0.86)	.01
PGY			
1	0.92	(0.40 - 2.12)	.84
2/3	1.56	(0.75 - 3.21)	.23
4/5	1.22	(0.65 - 2.31)	.54
6/7	1.00 (ref)		
Mistreatment			
None	1.00 (ref)		
A few times / year	1.71	(0.92 - 3.18)	.09
Monthly or more	3.09	(1.78 - 5.39)	< .001
Months in violation of duty-hours			
None	1.00 (ref)		
1-2 months in violation	2.09	(1.17 - 3.73)	.01
3+ months in violation	3.95	(2.24 - 6.97)	< .001

**also adjusted for race/ethnicity, program type, and geography*

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