National Evaluation of the Association Between Resident Labor Union Participation and Surgical Trainee Well-being

Brian C Brajcich, MD MS[1]; Jeanette W Chung, PhD[1]; Douglas E Wood, MD[2]; Karen D Horvath, MD[2]; Philip D Tolley, MD[2]; Elizabeth F Yates, MD[3]; Chandrakanath Are, MD MBA[4]; Ryan J Ellis, MD MS[1]; Yue-Yung Hu, MD MPH[1]; Karl Y Bilimoria, MD MS[1]

[1] Surgical Outcomes and Quality Improvement Center (SOQIC), Department of Surgery, Northwestern Medicine, Chicago, IL; [2] Department of Surgery, UW Medicine, Seattle, WA; [3] Department of Surgery, Brigham Health, Boston, MA; [4] Department of Surgery, University of Nebraska Medical Center, Omaha, NE

The SECOND Trial: Surgical Education Culture Optimization through targeted interventions based on National Comparative Data (SECOND) Trial

Surgical Outcomes & Quality Improvement Center SOQIC Northwestern University

BACKGROUND

- Burnout is common among healthcare workers, particularly surgical residents.[1]
- Labor unions have been advocated as a means of improving resident well-being through advocacy and collective bargaining.[2,3]
- Data regarding the impact of unionization on resident outcomes is lacking.

OBJECTIVES

- Evaluate the association of resident unions with burnout, suicidality, job satisfaction, duty hour violations, mistreatment, educational environment, salary, and benefits

METHODS

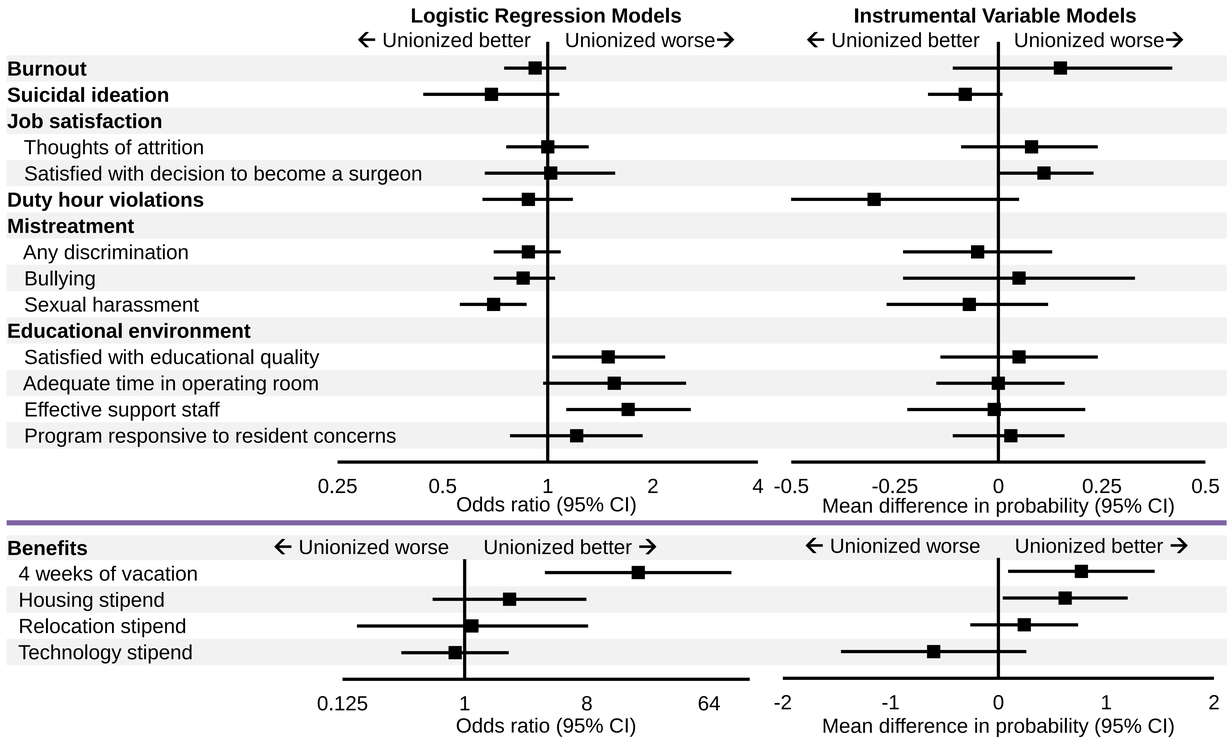
- Residents at ACGME-accredited US general surgery training programs were surveyed following the 2019 ABSITE
- Program union status was ascertained from survey of program directors
- Association of the presence of a resident union with burnout, suicidality, job satisfaction, duty hour violations, mistreatment, educational environment, salary, and benefits was assessed using multivariable logistic regression.
- To account for unmeasured confounders and reverse causality, instrumental variable (IV) techniques were employed, using the regional rate of public sector unionization among non-healthcare employees as an instrument for the presence of a resident union.

Table 1. Selected Characteristics of Surgical Residents and Training Programs

Resident Characteristics	Unionized (n = 690)	Non-Unionized (n = 5011)
Gender, No. (%)		
Male	383 (55.5)	2836 (56.6)
Female	270 (39.1)	2069 (41.3)
Race		
White, No. (%)	356 (51.6)	3423 (68.3)
Black, No. (%)	50 (7.3)	233 (4.7)
Asian, No. (%)	161 (23.3)	847 (16.9)
Other, No. (%)	109 (15.8)	468 (9.3)
Prefer not to say, No. (%)	40 (5.8)	241 (4.8)
Hispanic ethnicity, No. (%)		
Yes	79 (11.5)	370 (7.4)
No	553 (80.1)	4333 (86.5)
Prefer not to say	58 (8.4)	308 (6.2)

Program Characteristics	Unionized (n = 30)	Non-Unionized (n = 255)
Program type, No. (%)		
Academic	16 (53)	117 (46)
Community	14 (47)	138 (54)
Program size, examinees, median (IQR)	34.5 (20-49)	25 (17-39)
Census region, No. (%)		
Northeast	18 (60)	67 (26)
South	2 (7)	85 (33)
Midwest	1 (3)	72 (28)
West	9 (30)	31 (12)
Urban-rural classification, No. (%)		
Large metropolitan core	25 (83)	117 (46)
Large metropolitan fringe	3 (10)	37 (15)
Small/medium metropolitan or micropolitan	2 (7)	101 (40)

Figure 1. Association between Program Unionization Status and Outcomes



RESULTS

- Total of 5701 residents at 285 programs (30 unionized, 255 non-unionized) included.
- Weekly burnout symptoms reported by 43.0% of residents at unionized programs vs. 43.4% at non-unionized programs (OR, 0.92; 95% CI, 0.75-1.13; IV difference in probability, 0.15; 95% CI, -0.11 to 0.42)
- No significant differences in suicidality, job satisfaction, duty hour violations, mistreatment, educational environment, or salary
- Unionized programs more frequently offered 4 weeks of vacation (93% vs 31%; OR 19.18; 95% CI, 3.92-93.81; IV difference in probability, 0.77; 95% CI, 0.09-1.45) and housing stipends (39% vs 16%; OR 2.15; 95% CI 0.58-7.95; IV difference in probability, 0.62; 95% CI 0.04-1.20).

CONCLUSIONS

- Unionized programs offered improved vacation and housing stipend benefits
- Resident unions were not associated with improved burnout, suicidality, job satisfaction, duty hour violations, mistreatment, educational environment, or salary.

LIMITATIONS

- The use of a regional instrumental variable decreases study power, and results may not be generalizable outside of a surgical population.

REFERENCES

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