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Introduction

The prevalence of physician burnout, estimated to be near or exceeding 50%, is much greater than the general working population even after adjusting for work hours.¹⁻⁴ It is associated with negative consequences personally and professionally, from reduced quality of patient care to higher rates of physician suicide. The symptoms of this work-related syndrome are emotional exhaustion, depersonalization, and a reduced sense of personal efficacy or accomplishment. While gender is not a consistently independent predictor of physician burnout, some studies indicate that women appear to have a higher incidence of depersonalization and emotional exhaustion compared to men which could result in the loss of women from the physician workforce.^{1,4,5} With the number of women becoming physicians increasing, burnout in this population warrants further investigation as there is limited existing literature on this.

Physical activity has been associated with a reduced risk of employee and medical student burnout.⁶⁻⁸ By investigating burnout in a physically active sample of women physicians, we are better able to assess contributors to burnout despite healthy exercise habits. Two of the most common tactics by physicians to address burnout are self-care behaviors and work-life integration.⁶ As such, we included these themes in our investigation.

Our objective was to determine which factors, from demographics to work-life integration, were associated with burnout among self-declared physically active women physician mothers in the United States. We hypothesized that poor work-life balance would contribute to burnout.

Methods

Objectives

- Primary: determine prevalence of burnout symptoms & describe physical activity practices of this cohort of physician mothers.
- Secondary: evaluate associations of demographics & work-life integration with burnout.

Design

This cross-sectional study consisted of an electronic survey comprising 60 questions about exercise, demographics, finances, and domestic responsibilities. To evaluate work satisfaction and burnout, questions from the American Medical Association's Mini-Z Burnout Survey (MZBS) were included. Anonymous survey responses were collected over a three week period in February and March 2020. Included respondents were women attending physicians in the US.

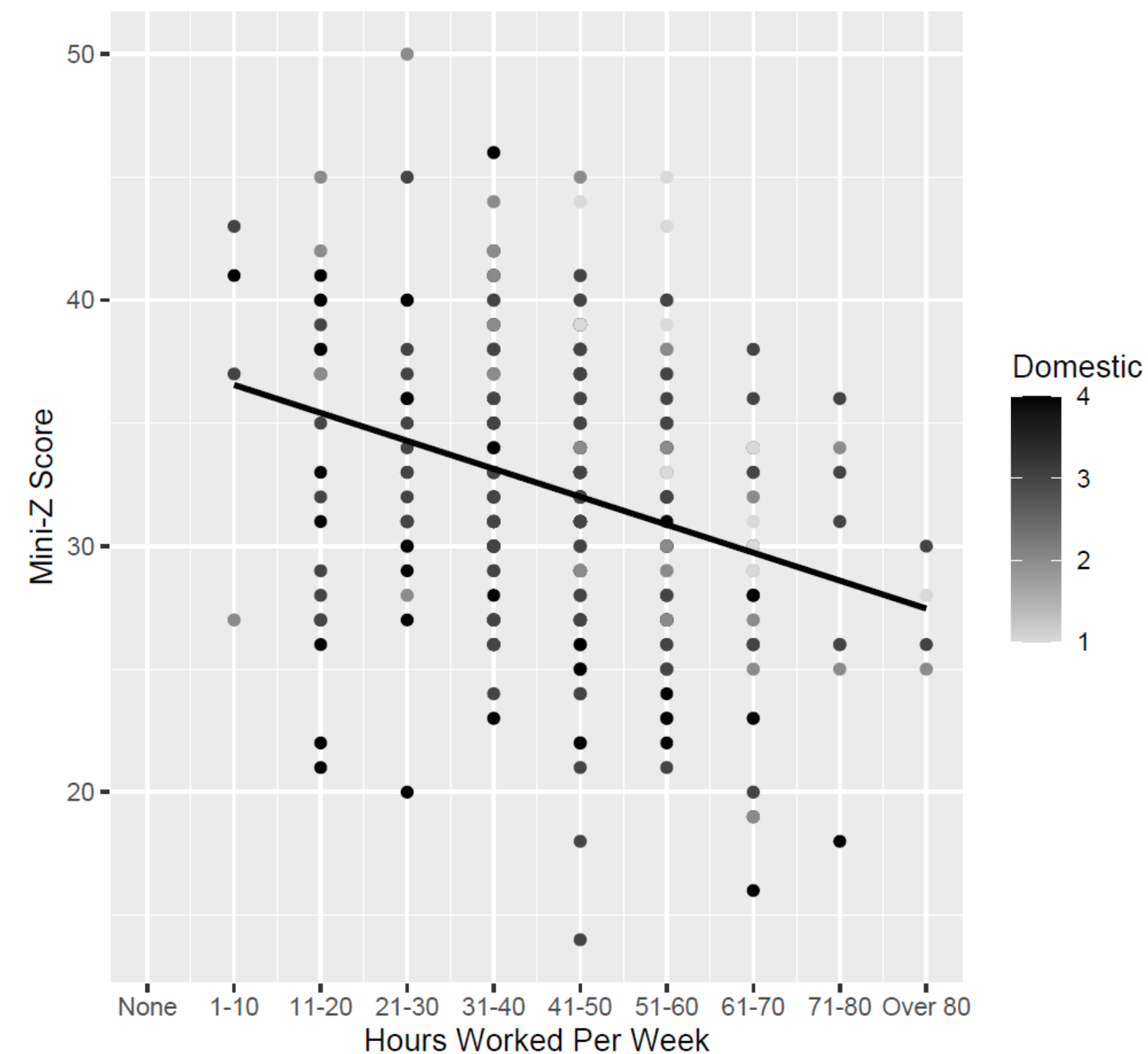


Figure 1. Trend of MZBS score with weekly hours worked and percentage of domestic responsibility. MZBS scores decreased, indicating a greater degree of burnout, with increasing hours worked and increasing percentage of domestic duties performed.

References



Results

- 382 (38.2%) of the 1,000 actively engaged social media group members completed the survey with 369 meeting inclusion criteria.
- Most were ≥ 6 years out from training (85.9%), with 74.5% respondents identifying as White, 13.8% Asian, 6.8% Hispanic, 2.4% multiple races, and 0.8% Black.
- **Burnout symptoms were reported in 42.1% of respondents.**
- The median time spent exercising per week was 5-6 hours with the majority (69%) being aerobic exercise. One-hundred and eighty-one (60.1%) of the 301 respondents reporting step counts achieved at least 10,000 steps daily.*
- Only 29.5% reported having adequate time for work activities while 58.6% have enough time for their personal and family life. Approximately 41% had reduced work hours to offset home responsibilities.
- Significant associations were found between:
 - Higher MZBS scores (indicating **less burnout**) and **agreement that one's work schedule left adequate time for personal and family life** ($p < 0.0001$).
 - **Increased burnout** with **working more hours** per week and being responsible for a **greater percentage of domestic duties** ($p < 0.0001$ and $p = 0.003$, respectively). Both factors remained significant in a multivariable model ($p < 0.0001$) (Table 1).

1a

Univariate Results	
Factor	p-value
Hours Worked per Week	<0.00001
Percent of Domestic Duties	0.0003

1b

Multivariable Model				
Factor	p-value	Coefficient	95% CI	
			2.5%	97.5%
Intercept	<0.00001	43.9	40.7	47.1
Hours Worked per Week	<0.00001	-1.39	-1.79	-1.00
Percent of Domestic Duties	<0.00001	-1.78	-2.50	-1.07

Table 1. Factors associated with burnout in univariate (1a) and multivariable (1b) testing.

Conclusions

Increased burnout was significantly associated with greater occupational hours and domestic responsibility. These findings in women physician runners suggest that exercise alone is not sufficient to control burnout symptoms, and components of work-life integration deserve attention potentially offering a target for burnout prevention strategies.

*For more information on the health behavior of this cohort, please visit the poster titled [Investigation of Health Behavior on Burnout Symptoms in Women Physician Runners: A Cross-Sectional Survey Study](#) or scan here:

