# The association between burnout and working with vulnerable populations

YALDA JABBARPOUR, MD

MEDICAL DIRECTOR

ROBERT GRAHAM CENTER

ASSISTANT PROFESSOR

DEPARTMENT OF FAMILY MEDICINE

GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE



# Special Thanks

Aimee R. Eden, PhD, MPH

Megan Coffman, MS

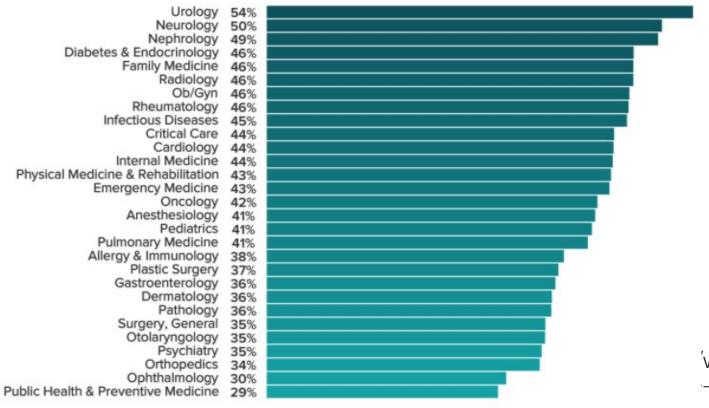
Melina Taylor, PhD. MPH

Zachary Morgan, MS





#### Which Physicians Are Most Burned Out?



Medscape
National
Physician

Physician
Burnout &
Suicide

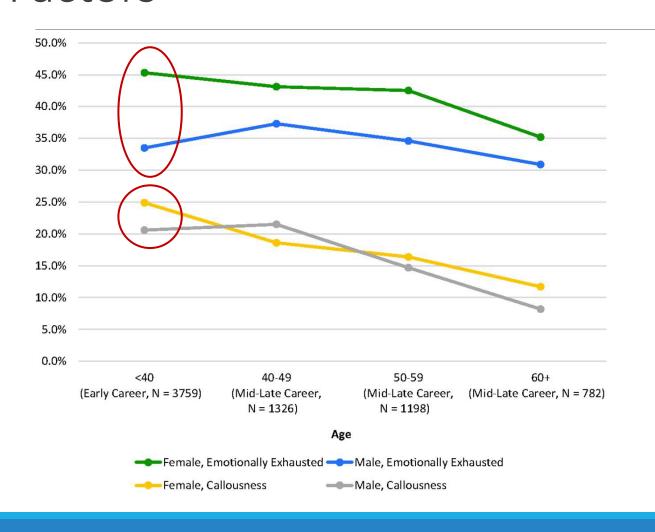
Report 2020

THE GENERATIONAL DIVIDE

'www.medscape.com/slideshow/2020-burnout-6012460?faf=1#1



# Burnout in Family Physicians-Individual Level Factors<sup>1</sup>



Female family physicians were more likely to report emotional exhaustion in all age groups.

Gap was widest for young family physicians

Difference in reported callousness was significant for younger family physicians

Eden AR, Jabbarpour Y, Morgan ZJ, Wilkinson E, Peterson LE. Burnout Among Family Physicians by Gender and Age. *J Am Board Fam Med*. 2020;33(3):355. doi:10.3122/jabfm.2020.03.190319



# Burnout in Family Physicians-Practice Level Factors

Family physicians who work in "efficient teams" report less burnout (Willard-Grace R, et al. Team Structure and Culture Are Associated With Lower Burnout in Primary Care. *J Am Board Fam Med*. 2014;27(2):229-238)

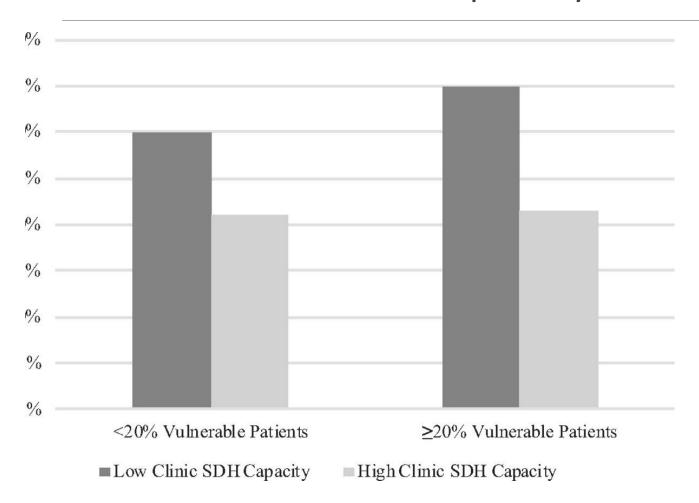
Physician who work in smaller practices report less burnout

(Blechter B, et al. Correlates of Burnout in Small Independent Primary Care Practices in an Urban Setting. J Am Board Fam Med. 2018;31(4):529.)

Studies have shown increased stress and dissatisfaction of physicians in safety net settings (Hayashi AS, et al. J Health Care Poor Underserved. 2009 Aug;20(3):597-604)



## Burnout and clinic capacity to meet social needs



Perceived clinical capacity to meet social need was inversely associated with burnout

This association was true regardless of the percent vulnerable population served



## Objective:

- 1) To explore whether burnout rates differed for family physicians working in vulnerable populations
- 2) To explore whether the perception of having sufficient clinical resources modified these rates
- 3) To explore whether there were gendered differences in burnout rate based on the perception of having sufficient resources



#### Data

Sustaining Women in Medicine Project

Online survey of family physicians in Illinois and California

- 40 Item Instrument
- 2 Validated Maslach Burnout Inventory Items
- Questions on physician demographics and office-based characteristics
- Questions about potential contributors to stress and burnout



#### Data

#### Questions of Interest

- To address patients' social needs, my clinic has the resources and tools, such as dedicated staff and linkages to community programs.
  - Strongly Agree- Strongly Disagree
- What percentage of your patient population in your principal practice site is part of a vulnerable group (i.e., uninsured, Medicaid, homeless, low income, non-English speaking, racial/ethnic minority, or otherwise traditionally underserved group)?
  - <10%; 10-49%; >50%
- Two Item MBI



## Methods

#### Bivariate analysis of burnout and:

- Gender
- Clinical resources
- Working with vulnerable population

#### Multivariate Analysis stratified by gender

Burnout rates and sufficient resources for physicians with 10-49% vulnerable pop and >50% vulnerable population

#### Logistic Regression

- Controls for gender, age, race, practice site
- Outcome:

Interaction between sufficient resources and vulnerable patient population



# Crosstabulation of Personal/Practice Characteristics with Burnout

		Burr	Total			
	Yes		No			
	N	Column Percent	N	Column Percent	N	Column Percent
Total	927	100.0%	799	100.0%	1,726	100.0%
Gender						
Male	363	39.2%	355	44.4%	718	41.6%
Female	564	60.8%	444	55.6%	1,008	58.4%
Vulnerable Population						
<10%	272	29.3%	233	29.2%	505	29.3%
10-49%	339	36.6%	274	34.3%	613	35.5%
>50%	316	34.1%	292	36.5%	608	35.2%
Sufficient Resources						
Disagree	511	55.1%	350	43.8%	861	49.9%
Agree	416	44.9%	449	56.2%	865	50.1%

#### Results

1,726 total respondents (13.8% response rate)

More females in sample

Females reported higher rates of burnout

Working with vulnerable populations nearly even

Having sufficient resources nearly even

Burnout higher in those who disagree that they have sufficient clinical resources



Table 1: Burnout rate by vulnerable group % (Male, Female, All)

	Male		Female		Total	
		Burnout		Burnout		Burnout
	N	Rate	N	Rate	N	Rate
Total	718	50.6%	1008	56.0%	1726	53.7%
Percent of Patient Pop						
Vulnerable						
<10%	216	50.0%	289	56.7%	505	53.9%
10-49%	286	51.7%	327	58.4%	613	55.3%
>50%	216	49.5%	392	53.3%	608	52.0%



Table 2: Interaction Between Sufficient Resources and Burnout for Physicians with <10% Vulnerable Pop

	Male		Female		Total	
		Burnout		Burnout		Burnout
	N	Rate	N	Rate	N	Rate
Total						
	216	50.0%	289	56.7%	505	53.9%
<b>Sufficient Resources</b>						
Disagree						
Disagree	117	53.0%	164	59.8%	281	56.9%
Agree						
	99	46.5%	125	52.8%	224	50.0%



Table 3: Interaction Between Sufficient Resources and Burnout for Physicians with 10-49% Vulnerable Population

	Male		Fem	ale	Total	
		Burnout		Burnout		Burnout
	N	Rate	N	Rate	N	Rate
Total						
	286	51.7%	327	58.4%	613	55.3%
<b>Sufficient Resources</b>						
Disagree	131	58.0%	180	62.2%	311	60.5%
Agree						
	155	46.5%	147	53.7%	302	50.0%

# Table 4: Interaction Between Sufficient Resources and Burnout for Physicians with >50% Vulnerable Pop

	Male		Female		Total	
	N	Burnout Rate	N	Burnout Rate	N	Burnout Rate
Total	216	49.5%	392	53.3%	608	52.0%
<b>Sufficient Resources</b>						
Disagree	86	69.8%	183	56.3%	269	60.6%
Agree	130	36.2%	209	50.7%	339	45.1%

Figure 1: Odds of Burnout based on % vulnerable population (Pop <10% reference)

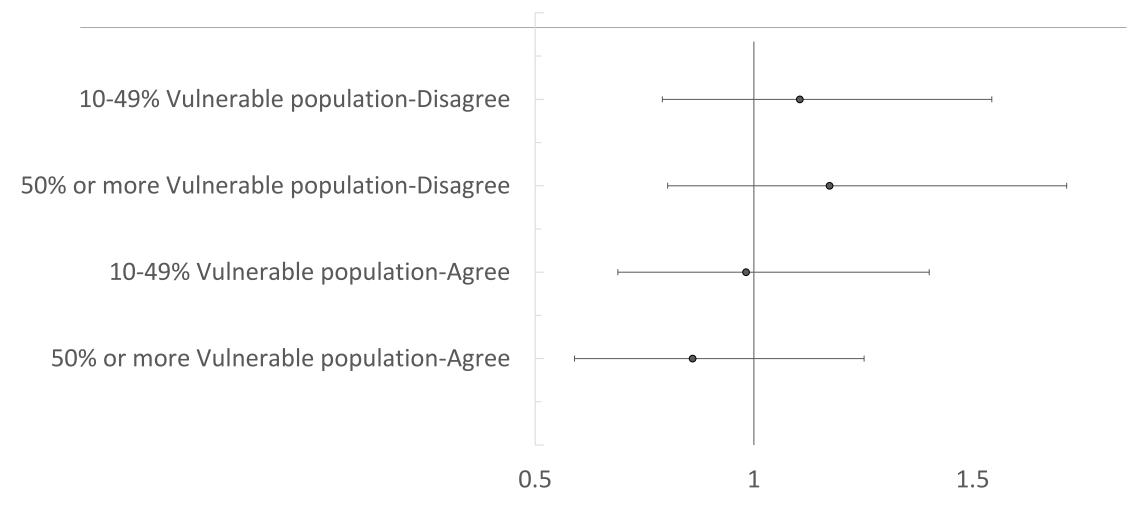
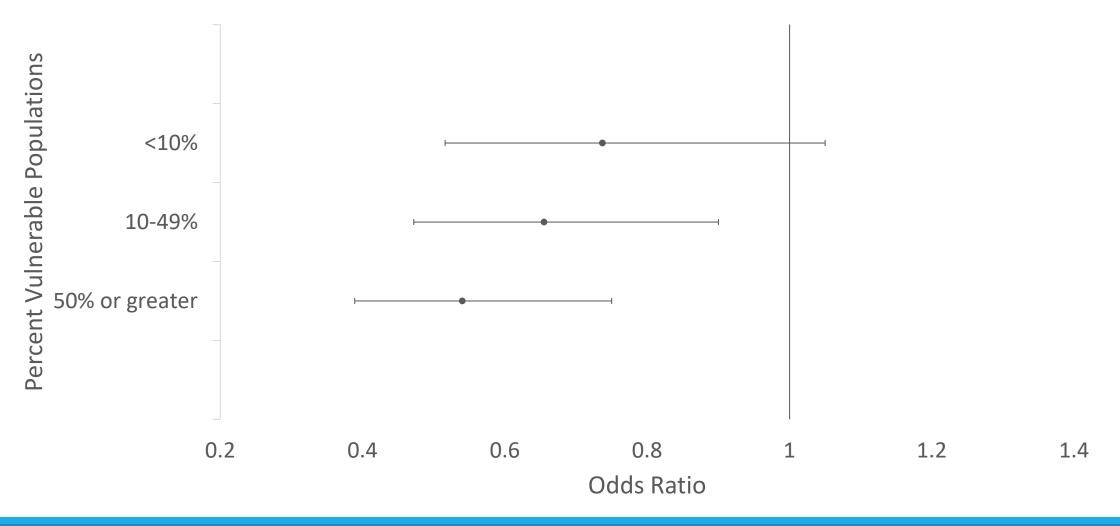


Figure 2: Odds of burnout in physicians who report sufficient resources





### Limitations

Only California and Illinois

Low response rate

Lower number of male respondents

Binary gender

Self report



#### Conclusions

- Working with vulnerable populations was not associated with higher/lower rates of burnout for either gender
- •Having sufficient resources was associated with lower rates of burnout regardless of percent vulnerable population.
- •When controlling for individual and practice-based characteristics, a perception of having sufficient resources was associated with lower odds of burnout. This association was stronger for greater percent of vulnerable populations.



## Thank you!

yjabbarpour@aafp.org

