



FSPHP 2024 Annual Education Conference

A Survey of Suicidal Behavior Among North Carolina Physicians: Using Data to Inform Interventions

Joseph P. Jordan, PhD

Rebecca L. Mathews, PhD

In absentia – Kelly L. Wester, PhD

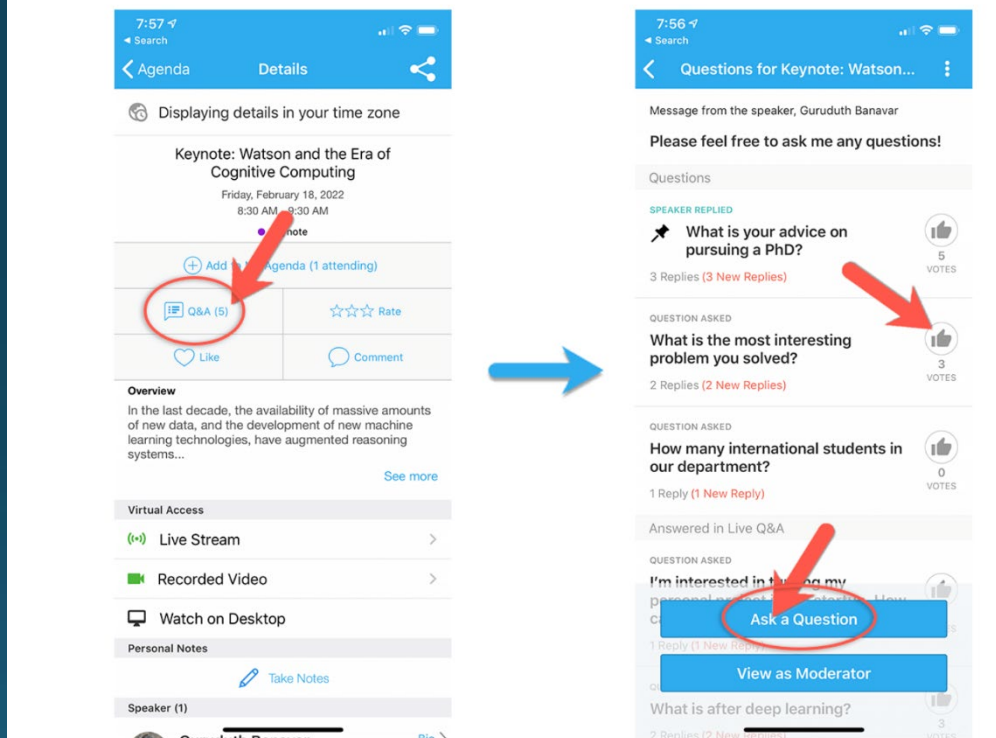


Federation of State Physician
Health Programs

Nashville, TN
April 17-21, 2024

How to ask a question of the Speaker

- Option 1: On the session detail page, tap the “Q&A” button; on the next page, view the existing questions, vote on the questions you are interested in, or click “Ask a Question” to ask a new one
- Option 2: On the event main page, tap “Session Q&A” button; find the session you want to ask questions in, and tap on it.



About Us



Joseph P. Jordan, PhD
CEO
The North Carolina
Professionals Health
Program



Rebecca L. Mathews, PhD,
LCMHCS
Clinical Assistant Professor
The University of North Carolina
at Greensboro



Kelly L. Wester, PhD, LCMHC
Professor
The University of North Carolina
at Greensboro



Federation of State Physician
Health Programs

Disclosure Information

Joseph P. Jordan, PhD – CEO of NCPHP

- No conflicts of interest (of which I am aware)
- Biases: employed by NCPHP
- Honored to be here

Rebecca L. Mathews, PhD – Clinical Assistant Professor at
UNC Greensboro

- No conflicts of interest (of which I am aware)
- Honored to be here



Federation of State Physician
Health Programs

Nashville, TN
April 17-21, 2024

During Our Time...

- Rationale for studying physician suicide
- Existing research
- Our study
- Results
- Implications for intervention
- Takeaways



Federation of State Physician
Health Programs

Rationale For This Study



Federation of State Physician
Health Programs

Where this started

- Fall of 2022
- Three physician suicides in six months
 - Former participant
 - Member of large specialty practice
- Invited to assist in grief process
- Struck by the intensity
- Decided there needed to be a state-wide response



Federation of State Physician
Health Programs

Understanding Physician Suicide



Federation of State Physician
Health Programs

Previous Research

- Research on physician suicide (factors, prevalence, and interventions) is relatively limited in scope and across time.
- 6.5%¹-10%² Physicians experience suicidal thoughts.
- Physicians are more likely to experience SI than many other fields.¹
- Death by suicide is the only cause of death that is higher for physicians than for nonphysicians.³

¹ Shanafelt et al., 2021; ² Yasgur, 2022; ³ Albuquerque & Tulk, 2019



Federation of State Physician
Health Programs

Medscape Research

- Annual report on suicide among physicians.
- Sample size: 9,100-13,000 physicians
- 10% endorsed SI at sometime in their life.
- Over 20% of physicians reported being clinically depressed.

Medscape

Doctors' Burden: Physician Suicide Report

2023



McKenna, 2023; Yasgur, 2022



Federation of State Physician
Health Programs

Contributors for Suicide In Physicians

- Depression
- Burnout
- Stress associated with medical errors
- Concern for malpractice claim
- May be less likely to seek support

Balch et al, 2011; Shanafelt et al., 2011; Kalmoe et al., 2019



Federation of State Physician
Health Programs

Physician Suicide Is Not Fully Understood

- Higher rates of SI than other professions.
- Experiences with suicide continue despite protective factors (e.g., education, employment, SES).

(Shanafelt et al., 2011)



Federation of State Physician
Health Programs

Limitations of Research

- Experience with suicide is limited to the presence of suicidal thoughts or behaviors and not factors that may contribute.
- Physicians may be hesitant to disclose thoughts of suicide or past suicide attempts.
- Ongoing research is needed to better understand the experience of physicians.



Federation of State Physician
Health Programs

2023 Study to Understand Physician Suicide in North Carolina



Federation of State Physician
Health Programs

Research Questions

1. What is the prevalence of suicidal behaviors in licensed physicians in North Carolina?
2. What are the factors related to suicidal behavior in licensed physicians in North Carolina?



Federation of State Physician
Health Programs

Presented by



Method of Study

- Descriptive cross-sectional correlational design
- Data collected via online survey in joint effort between NCPHP and researchers.
- 2-step process
 - 1st step (5 min) with essential questions
 - 2nd step (10 min) with more in-depth questions



Federation of State Physician
Health Programs

Presented by



Step 1

- Approximately 5 minutes
- Questions aimed at assessing demographics and the presence of factors related to physician suicide.

Areas Assessed

- Demographics and professional information (area of specialization, setting of employment, hours worked)
- Burnout
- Concern about malpractice
- Depression
- Suicidal ideation
- Suicidal behavior



Step 2

- Approximately 5-10 minutes.
- Questions designed to gain a deeper understanding of Suicidal behavior and factors related to suicide.

Areas Assessed

- Presence, prevalence,
- propensity SI
- Factors related to suicide (perceived burdensomeness, thwarted belonging, acquired capability for suicide)
- Physician burnout
- Help-seeking behaviors
- Perceived social support
- Responses to trauma



Results of Study

Total of 1,556 physicians responded to the study with 1,461 completing usable items.

Average age 52.24 (SD 12.3)

Time working 21 years (SD =16)

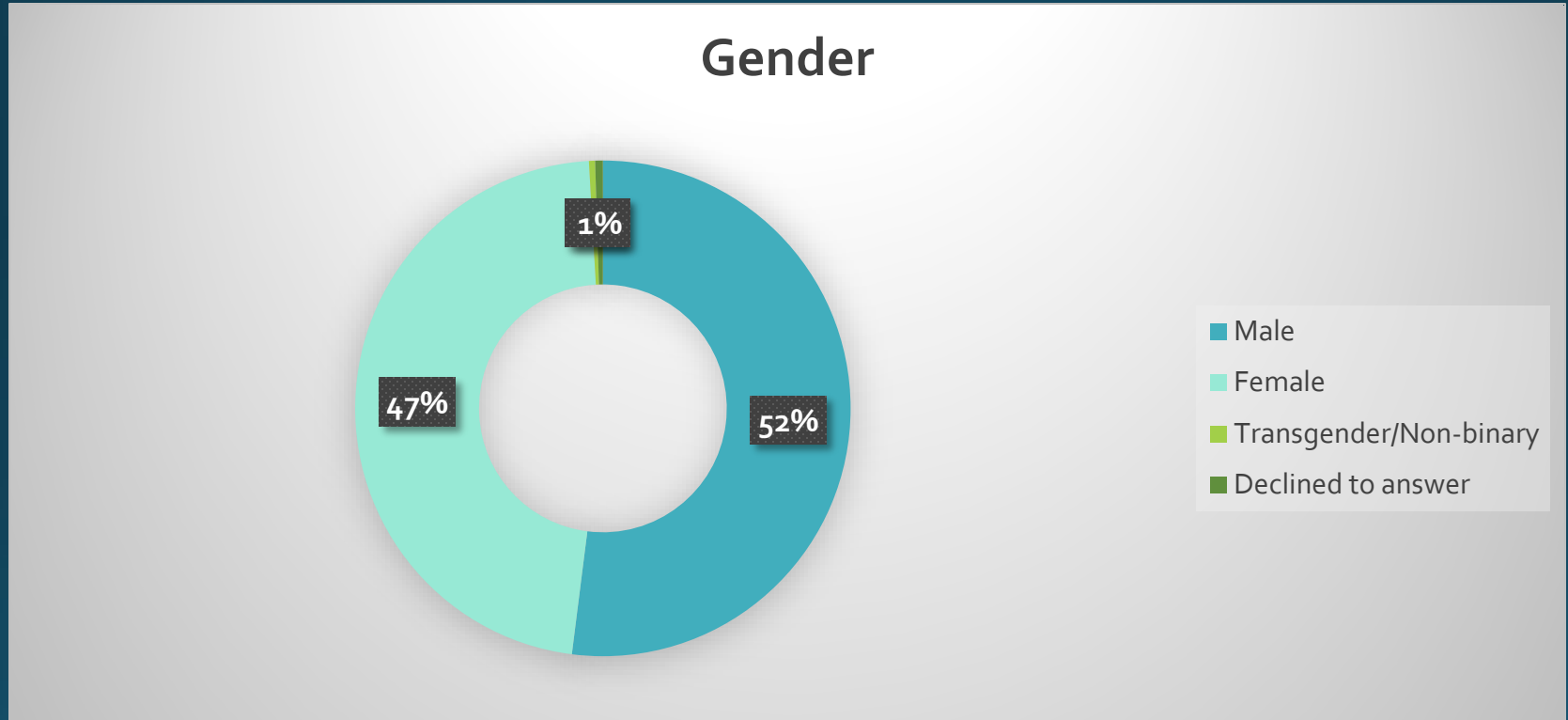
45.3 h/wk (SD = 16.3)

Current position 11 years (SD = 10)



Federation of State Physician
Health Programs

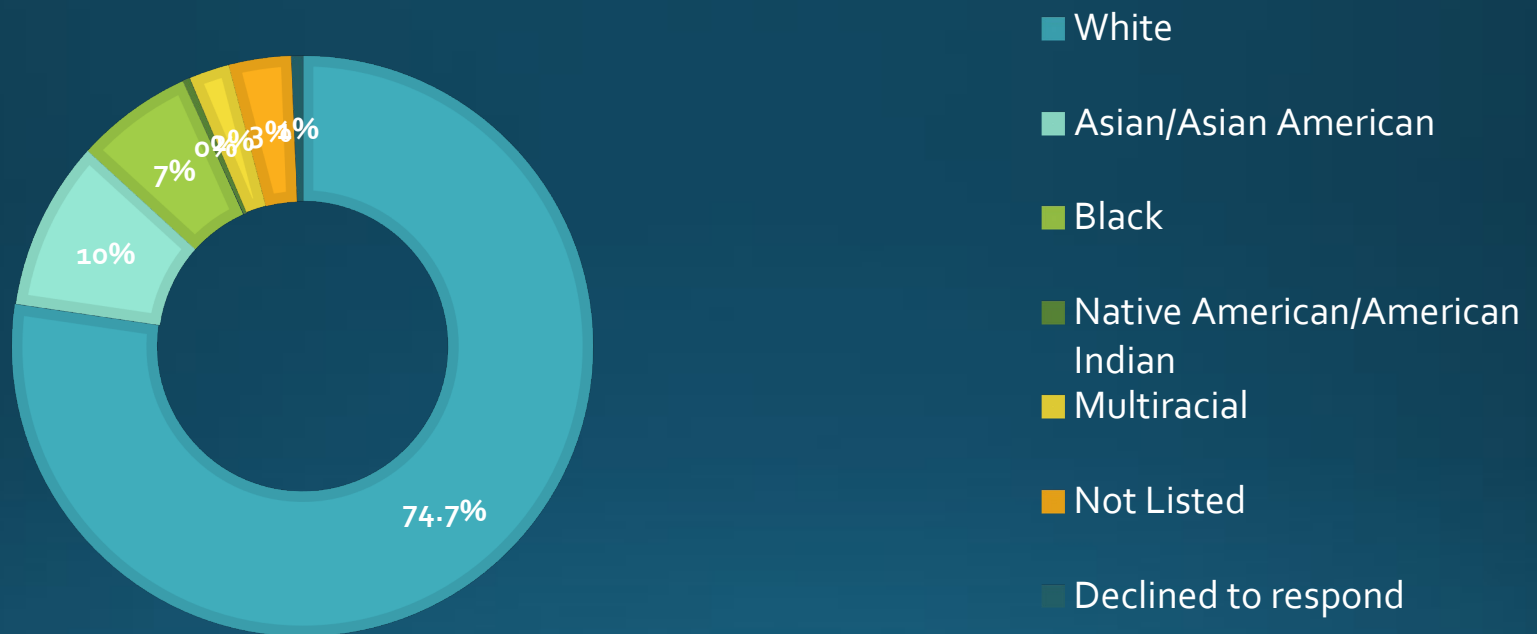
Demographics: Gender



Federation of State Physician
Health Programs

Demographics: Race/Ethnicity

RACE/ETHNICITY



Federation of State Physician Health Programs

Demographics: Specializations

Allergy and Immunology	0.5%	Oncology	2.1%
Anesthesiology	4.7%	Ophthalmology	1.3%
Cardiology	1.4%	Orthopedics	2.2%
Critical Care	3.4%	Otolaryngology	0.9%
Dermatology	1.3%	Pathology and Lab Medicine	1.0%
Diabetes and Endocrinology	0.7%	Pediatrics	2.4%
Emergency Medicine	7.3%	Physical Medicine and Rehabilitation	12.0%
Family Medicine	16.6%	Plastic Surgery	1.2%
Gastroenterology	1.2%	Psychiatry and Mental Health	0.5%
General Surgery	2.9%	Public Health	9.6%
HIV/Infectious Diseases	1.6%	Pulmonary Medicine	1.3%
Internal Medicine	12.8%	Radiology	1.4%
Nephrology	1.0%	Rheumatology	0.9%
Neurology	2.3%	Urology	1.2%
OB/GYN & Women's Health	5.7%	Specialization not listed	9.5%



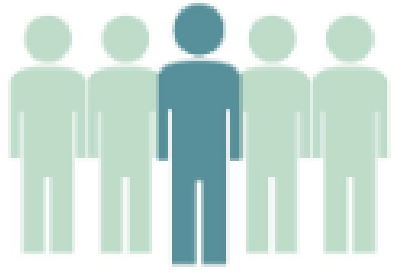
Federation of State Physician
Health Programs

Demographics: Workplace

- Most (70%) worked in urban areas with 18% in rural areas and 9% working in both settings.
- Where work took place
 - 36% Hospital
 - 23% Private practice
 - 25% Hospital-affiliated clinic
 - 16% Other setting (telehealth, research, academic hospital, VA clinic)



Results: Suicidal Thinking



17.5% reported suicidal ideation in 12 months

Approximately 1 in 5 physicians reported “yes” to considering taking their own life in the last 12 months.

- 18% Male
- 17% Female
- Rates similar across racial and ethnic categories except multiracial (31% of those who were multiracial endorsed SI)



Federation of State Physician Health Programs

Practice Setting and Suicidal Ideation in last 12 months

- Urban physician – 17.4%
- Rural physician – 19.0%
- Hospital setting – 20.1%
- Private Practice – 16.2%
- Hospital Affiliated Clinics – 17.4%
- Other types of settings – 14.2%



Federation of State Physician
Health Programs

Presented by



Results: Burnout

- 25% of physicians endorsed the statement, “I am definitely burning out and have at least one symptom of burnout”
- 61% endorsed feeling a great deal of stress from their job



Federation of State Physician
Health Programs

Presented by



Results: Asking For Help



**67.5% did not disclose
suicidal ideation**

Those that did disclose were more likely to talk with intimate partners or spouses and a mental health professional.

- Only 32.5% had told someone about their SI



Federation of State Physician
Health Programs

When Having Suicidal Thoughts, Physicians Reach Out To:

- An intimate partner or spouse (64.6%)
- A mental health professional (48.1%)
- A friend (22%)
- A medical professional (13.6%)
- A family member not a spouse (13.4%)
- Parents (8.5%)
- Colleagues (6.1%)



Federation of State Physician
Health Programs

Presented by



Results: Support

- 45 physicians said a colleague reached out to them to ask to help with their potential thoughts of suicide
 - Of those 45, 12 had SI within past year.
- 244 physicians endorsed they had experienced suicidal thoughts and no one had reached out to them.



Specific Factors Related to Suicide

- 3 regression analysis - SI in last 12 months, SIDAS, CHRT-SR
- 11 predictors examined
 - Burdensomeness,
 - Belongingness,
 - Capacity,
 - Social Support,
 - Supportive Work Env.,
 - Work Pace/EHR,
 - Depression,
 - Hours worked, Years as provider,
 - Malpractice Risk, Medical Error



Federation of State Physician
Health Programs

Presented by



Specific Factors Related to Suicide: Model 1 (SI in Past 12 Months)

- Accounted for 37% of the variance of SI
($F_{11,1032}=55.39, p=.000, R^2=.374$)
 - 4 Factors were significant:
 - Work pace/EHR stress
 - Perceived burdensomeness
 - Depression (strongest predictor)
 - Perceived social support (Those who reported greater support were less likely to report SI.)



Specific Factors Related to Suicide: Model 2 (CHRT-SR)

- Accounted for 76.7% of the variance of SI ($F_{11,1018}=300.65, p=.000, R^2=.767$)
- 6 Factors were significant:
 - Length of years having practiced
 - Perceived burdensomeness
 - Thwarted belongingness
 - Depression
 - Concern about having made a medical error
 - Perceived social support (those who reported greater support were less likely to report SI.)



Specific Factors Related to Suicide: Model 3 (SIDAS)

- Accounted for 40% of the variance of SI ($F_{11,243}=14.03, p=.000, R^2=.399$)
- 2 Factors were significant:
 - Perceived burdensomeness
 - Depression



Discussion and Recommendations

- Almost 1 in 5 physicians in NC endorsed SI in last 12 months (previous research about 6%)
- 2.3% of NC physicians serious suicide risk
- Few communicated their SI to anyone



Discussion and Recommendations

- 2 main predictors – Burdensomeness, Depression
- 2 out of 3 models – Less Perceived Social Support
- Work Pace/EHR, Medical Errors, Years as provider were additional individual factors



Recommendations

- Resources to increase access to mental health
 - Outside their system, telehealth, annual appointment
- Provision of training to SO/Spouses recognize/refer
 - Training in QPR (Question, Persuade, Refer), enhances social support



Federation of State Physician
Health Programs

Presented by



Recommendations

- Provision of training to colleagues in recognize/refer
 - Training in QPR or other method of inquiry to ask or be asked
- Learn to recognize depression and burdensomeness
 - Training or other methods to help recognized signs and symptoms of depression
 - Make it alright to ask or be asked



Federation of State Physician
Health Programs

Presented by



Limitations

- Accessing physicians
 - Bounced or incorrect email addresses
 - Emails may have been to a practice administrator rather than physicians themselves.
- Physicians may be disincentivized to report mental health concerns.
- Reliance on self-report and electronic information gathering



Future Directions

- Meeting with Professors Wester and Mathews to discuss next steps and intervention planning (QPR Training statewide)
- Presenting at FSPHP
- Replicate with PA, PharmD, Veterinarian
- Seek assistance of American Foundation for Suicide Prevention
- Doctor's Checkup in partnership with NCMS



Federation of State Physician
Health Programs

Presented by



Thank you

Joseph Jordan, PhD
NCPHP
jjordan@ncphp.org

Rebecca Mathews, PhD
UNC Greensboro
rlmathews@uncg.edu



Federation of State Physician
Health Programs

Nashville, TN
April 17-21, 2024

References

- Albuquerque J, Tulk S. Physician suicide. CMAJ. 2019;191(18):E505. doi:10.1503/cmaj.181687
- McKenna J. Doctors' burden: Medscape physician suicide report 2023. Medscape. March 3, 2023
- Shanafelt TD, Dyrbye LN, West CP, et al. Suicidal ideation and attitudes regarding help seeking in US physicians relative to the US working population. Mayo Clinic Proceedings. 2021;96(8):2067-2080. doi:10.1016/j.mayocp.2021.01.033 report 2022. Medscape. March 4, 2022.
- Yasgur B. A tragedy of the profession: Medscape physician suicide

