

Addressing Mental Wellness in Student Registered Nurse Anesthetists (SRNAs)

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Introduction

- SRNAs experience acutely high stress levels that impact well-being, and ultimately patient care ¹
- SRNAs rate stress levels at 7.2/10 on a Likert Scale ^{2,3}
- Poor coping mechanisms increase the risk of substance abuse, depression, anxiety, and suicidal ideation (SI) ^{4,5}
- 35% of SRNAs report SI during their anesthesia training ³

Purpose

Purpose: To provide mental wellness resources and education to SRNAs in the form of a mobile application (app).

Objectives:

- To decrease stress and/or anxiety in SRNAs.
- Develop and distribute an optional mobile wellness app to SRNAs.
- Identify ongoing stressors, coping mechanisms, and recommendations for future wellness training.

Methods

IRB approval obtained

Setting: Midwest nurse anesthesia program

Population: 35 SRNAs enrolled nurse anesthesia program

Planning:

- Create a mobile app titled *WellnesSRNA*
- Assess stress and anxiety using the Perceived Stress Scale – 10 (PSS) and Penn State Worry Questionnaire (PSWQ)

Implementation:

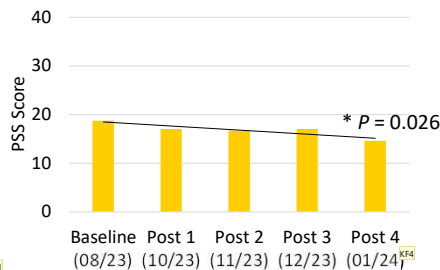
- Consent for participation using Qualtrics
- Distribute baseline PSS & PSWQ & mobile app for download
- Re-assess PSS and PSWQ scores after app distribution
- Include a free comment section with final post-intervention assessment to address objective 3

Data Collection and Analysis:

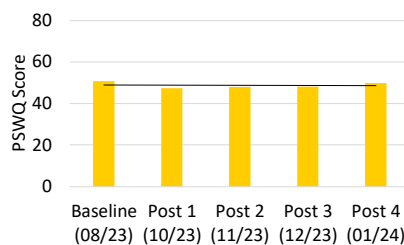
- Results from assessments collected anonymously with Qualtrics online survey and data collection software
- Data analyzed using Intellectus Statistics software

Outcomes

Stress (PSS) Average Over Time

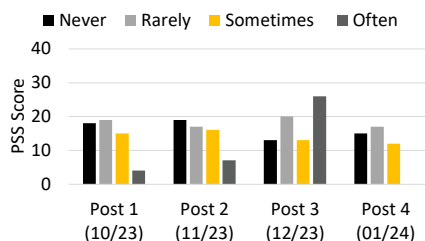


Anxiety (PSWQ) Average Over Time

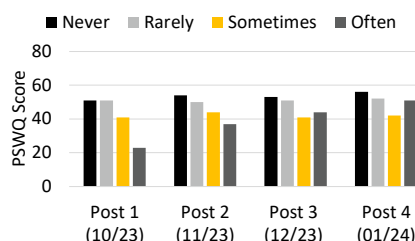


QR code for the application

Stress (PSS) by Application Use Over Time



Anxiety (PSWQ) by Application Use Over Time



Identified stressors, coping mechanisms, and recommendations for future wellness training:

Stressors

- Time Management
- Relationships
- Finances
- Work-life balance

Coping Mechanisms

- Exercise
- Mindfulness
- Meditation
- Oversleeping
- Overeating
- Alcohol

Recommendations

- Counselor availability
- Regular advisor check-ins
- Improve communication between program and students
- Increase time off

Evaluation

Objective 1: Statistically significant decrease in stress at four-months PI ($p=0.026$)

Objective 2: Application distributed in September 2023

Objective 3: 65% of SRNA participants commented on stressors, coping mechanisms, and recommendations

Limitations

- Participants completely anonymous
- Most participants rarely used the application
- Performed at one institution

Conclusions

- Identified stress and anxiety levels of SRNAs
- Presented program administration with ideas for SRNA support

Dissemination

- DNP program defense in March 2024; Presentation at the Iowa Association of Nurse Anesthetists Conference and Department of Anesthesia Grand Rounds

Sustainability

- Free-text assessment results forwarded to program faculty
- Maintain and update the app for future SRNA cohorts

References

- Mesisca J, Mainwaring J. Stress, anxiety, and well-being in nurse anesthesia doctoral students. *AANA*. 2021;89(5):396-402.
- Chipas A, Cordrey D, Floyd D, Grubbs L, Miller S, Tyre B. Stress: Perceptions, manifestations, and coping mechanisms of student registered nurse anesthetists. *AANA*. 2012;80(4):S49-S55
- Griffin A, Yancey V, Dudley M. Wellness and thriving in a student registered nurse anesthetist population. *AANA*. 2017;85(5):325-330.
- Griffis C, Bambgbose E, van Pelt M, DeVon H, Wilhalme H, Choi K. Preliminary investigation: Pilot study of wellness and suicide prevention for student registered nurse anesthetists. *AANA*. 2023;91(6):407-418
- DeFord S, Bonom J, Durbin T. A review of literature on substance abuse among anesthesia providers. *J of Research in Nursing*. 2019;24(8):587-600. doi: 10.1177/1744987119827353
- Griffin A, Yancey V, Dudley M. Wellness and thriving in a student registered nurse anesthetist population. *AANA*. 2017;85(5):325-330.

Acknowledgments

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Slide 1

KF0 Use the 2024 poster checklist,
title font is 85, author is 56

Fear, Kathleen,
2024-03-23T16:21:44 176

KF1 per checklist add purpose to

Fear, Kathleen,
2024-03-23T16:24:00 265

KF2 do not state determined HSR,
per checklist, add name of IRB,
I assume UIHC.

Fear, Kathleen,
2024-03-23T16:26:27 059

KF3 should consent be first?

Fear, Kathleen,
2024-03-23T16:28:57 046

KF4 Maybe decrease the size of
the app and QR so tables are
bigger?

Fear, Kathleen,
2024-03-23T16:32:04 229

KF5 You might need a caption
here: SRNA identified stressors,
coping mechanisms & future
recommendations

Fear, Kathleen,
2024-03-23T16:34:08.505