

## Purpose

To identify empiric research evaluating the effectiveness of interventions to prevent nursing student burnout.

## Background

**Burnout** in nursing students leads to:

- Negative student health impacts<sup>1</sup>
- Decreases academic success<sup>1</sup>
- Increases attrition<sup>1</sup>
- Decreased quality of patient care<sup>1</sup>
- Lower levels of skill mastery<sup>1</sup>
- Intention to leave nursing one-year postgraduation<sup>2</sup>

As of February 2022, the average **turnover rate** in bedside nurses is up to 37%, and burnout is a key driver of nurse workforce attrition.<sup>3</sup>

There is an **urgent need** to:

- Address the overwhelming severity of nursing student burnout
- Build a resilient nursing workforce
- Improve the quality of patient care

## Methods

**Databases:** PubMed, CINAHL, PsycINFO, and Google Scholar

**MeSH Terms:**

- Therapeutics
- Primary Prevention
- Burnout, Psychological
- Students, Nursing

**Inclusion Criteria:**

- Published in peer-reviewed journals
- Evaluated the effectiveness of interventions to prevent burnout
- Nursing student population

**Exclusion Criteria:**

- Abstracts
- Participants other than nursing students
- Reports that could not be translated into English

**Study Selection:** Three reviewers screened the articles independently and then discussed results and discrepancies together to make final decisions for the inclusion and exclusion of studies.

**Data Collection:** A Microsoft Excel document was designed to collect standardized data from each report and produce a results **table**.

**Data Analyses:** Grouped studies by type of intervention

**Table 1.** Search Strategy Terms for Scoping Review.

Concept	MeSH headings	Keywords
Nursing student	Students, Nursing	Pupil Nurse Nursing Student Baccalaureate BSN
Prevention	Primary Prevention	Prevention Preventative Prevent
Interventions	Therapeutics	Therapy Therapies Treatment Intervention Intervene
Burnout	Burnout, psychological	Burnout Burn-out Burn out Burned out

## Results

Of the 258 studies identified in the primary search, 208 were screened, and 29 were selected for full-text review:

- 5 quantitative
- 1 qualitative

Statistically significant reductions in burnout were reported in all 5 of the quantitative studies.

### Effective Interventions

**Education-Based Cognitive-Behavioral Therapies:**

- Self-Aware Nurse Project<sup>4</sup>
- Acceptance and Commitment Training<sup>5</sup>
- Resilience Education<sup>6</sup>

**Physical Interventions:**

- Recreational music-making<sup>7</sup>
- Guided progressive muscle relaxation<sup>8</sup>

**Mixed Education and Physical Interventions:**

- Integral-caring-holistic-science curriculum<sup>9</sup>

## Conclusions

- Six reports that evaluated six different interventions were included in this review.

### Limitations

- Significant limitations reported in the studies were attrition and study design.
- The variation in study design, sample size, analysis, findings reported, and intervention types, doses, and duration limited the ability to compare intervention effectiveness.

### Implications for Practice

- Burnout interventions should be embedded in the nursing curriculum to yield a more sustainable profession.

### Recommendations for Future

- This review captured reports evaluating the effectiveness of nursing student burnout interventions, but there may be value in identifying all interventions attempted for nursing student burnout.
- More research is needed to determine the most effective interventions to combat nursing student burnout.

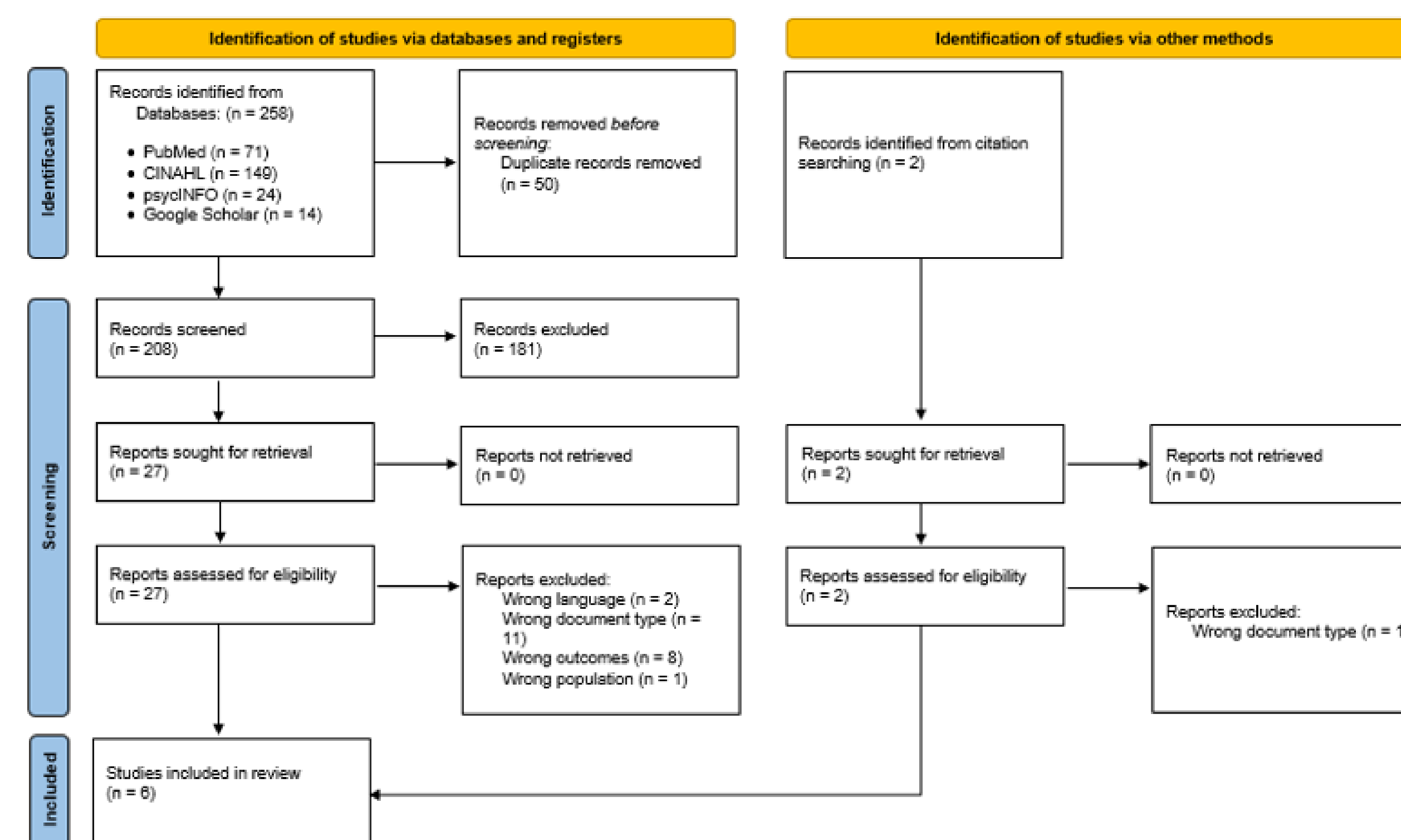
## Acknowledgements

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## References



**Figure 1.** Reporting for this scoping review followed The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) checklist as applicable.



Adapted from: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71.