

# Assessing the Prevalence of Imposter Syndrome Across Different Health Professions

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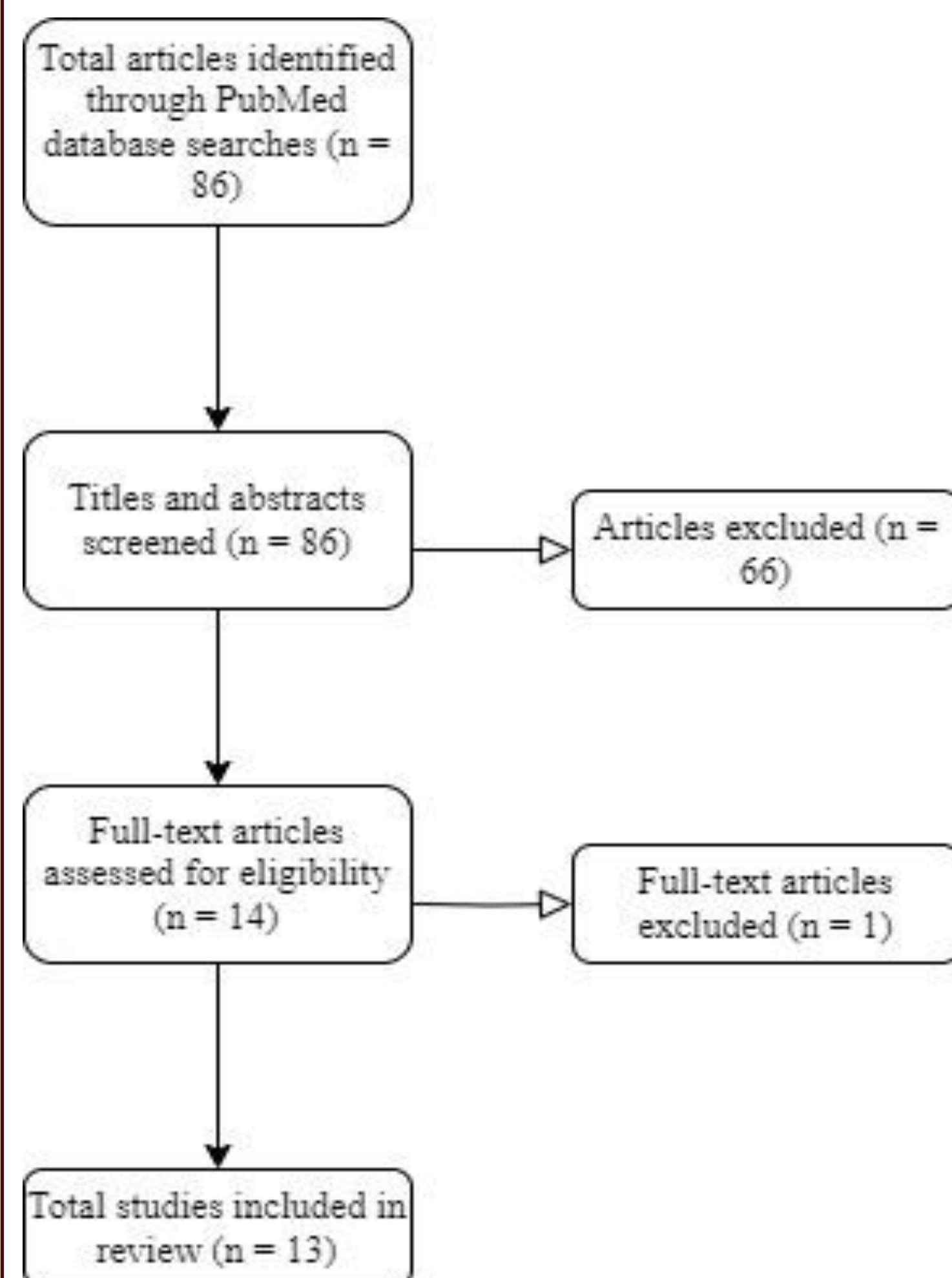
## Introduction

- Imposter syndrome (IS) refers to the psychological experience in which an individual experiences “intellectual fraudulence” or doubt of one’s skills, talents, or accomplishment [1].
- Previous literature assessing imposter syndrome in various healthcare professionals have found that feelings or experiences associated with imposter syndrome are quite common.
- While the majority of research on imposter syndrome has identified its prevalence among high-achieving individuals, the particular causes of this phenomenon has barely been explored.
- One study examining the relationship between imposter syndrome and professional identity explored how certain factors such as ethnicity, gender, etc. may cause feelings of imposter syndrome [2].
- **Objective:** Our study seeks to assess the prevalence of imposter syndrome in different healthcare professionals by conducting a literature review. We also seek to identify factors that may contribute to imposter syndrome such as race/ethnicity, gender, etc.

## Methods

- Study design: Literature review
  - Articles found through PubMed using MESH terms
- Inclusion Criteria:**
- Primary Article
  - Survey including the Clance Imposter Phenomenon Scale
  - Access to full article
- Exclusion Criteria:**
- Not based in the United States

## Figure 1. Summary of Pubmed Search



## Results

**Table 1. Demographic Information and CIPS Scores in Study Populations**

Articles	Population	Number of Participants	Gender (% women)	Prevalence (%)	CIPS Score < 40 (few; %)	CIPS Score 41-60 (moderate; %)	CIPS Score 61-80 (frequent; %)	CIPS Score 81-100 (intense; %)
Deshmukh et al.	Radiologists	30	37	83	10	19	62	8
Rice et al.	Medical students who are underrepresented in medicine	1231	53	97	3	38	50	9
Levant et al.	Medical students	127	59	51	N/A	N/A	N/A	N/A
Chodoff et al.	Internal medicine residents	28	75	57	N/A	N/A	N/A	N/A
Chakraverty et al.	MD-PhD students	9	44	44	N/A	22	33	44
Kenneally et al.	Pharmacy students	267	68.9	98.2	2.2	29.6	50.2	18
McWilliams et al.	Students from Arts and Sciences, Business Administration, Engineering, Law, and Pharmacy	391 (189 pharmacy students)	67	99	2.6	N/A	N/A	25
Boyle et al.	Pharmacists and Pharmacy students	209	70.7	93.8	6.2	36.4	44	13.4
Sullivan et al.	Pharmacy residents	720	77.9	57.5	6.4	33.3	47.6	12.6
Negrón et al.	Pharmacy students	163	N/A	58	10	32	47	9
Carvajal et al.	Primary care physicians who are underrepresented in medicine	430	77	100	N/A	57	43	N/A
Landry et al.	Dietitians/Nutritionists	1015	95.8	62	7.7	27.8	43.3	21.2
Carroll et al.	Physical therapists	422	61.8	31.5	17.8	48.6	26.8	6.9

## Discussion

### Key Findings

- The prevalence of imposter syndrome ranged from 31.5% to as high as 100% in the study populations.
- Imposter syndrome tends to be more common in women than men.
- Race and ethnicity play a role in the development of imposter syndrome. Minority students report experiencing feelings associated with imposter syndrome more often than their Caucasian counterparts due to a multitude of reasons including discrimination, microaggressions, and a lack of diversity in faculty and the student body.
- Stressful work environments, ambiguous, uncertain situations, and comparison to colleagues or workers in the same field via social media further contribute to imposter syndrome
- Education and workshops on imposter syndrome, psychological safety, diverse school and work environments are some ways to help mitigate imposter.

## Limitations

- Only articles with free access were used in this study
- Some articles did not include information about the factors contributing to imposter syndrome in the participants or how to mitigate them
- Lack of racial/ethnic diversity in study populations

## Conclusions

- Imposter syndrome is a prevalent issue across different health professions, potentially leading to consequences that may affect professional performance.
- Gender, race/ethnicity, cultural differences, unwelcoming work environments are some factors that may contribute to the development of imposter syndrome. On the other hand, increasing awareness of imposter syndrome through education and workshops may help to mitigate imposter syndrome.
- Imposter syndrome is an important problem that needs to be addressed, especially among health professionals. This study can pave the way for future researchers to evaluate ways to mitigate imposter syndrome.

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