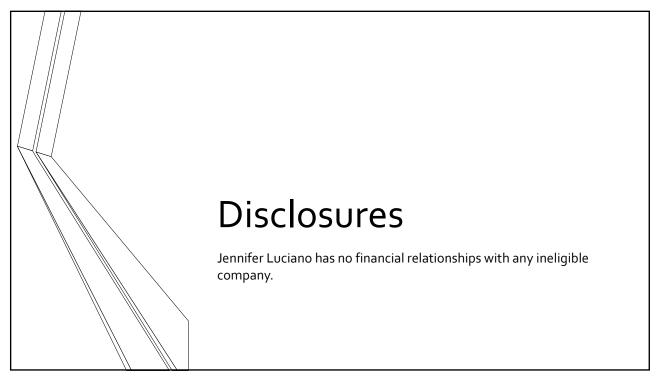


Jennifer Luciano, PharmD

December 19, 2025

Henry Palmer CE Finale

1



# Recognize Recognize the signs and symptoms of imposter syndrome as they commonly present in pharmacy practice and education, including during career transitions such as rotations, residency, and new professional roles. Examine Examine the personal, academic, and systemic Learning factors that contribute to imposter syndrome among pharmacists and pharmacy students, with **Objectives** emphasis on high-performance expectations and professional identity formation. Identify Identify practical, evidence-based strategies to manage and overcome imposter syndrome, fostering resilience, confidence, and professional growth within pharmacy practice and education.

3

During her first advanced pharmacy practice experience (APPE) rotation, Taylor begins to feel anxious and doubts her ability to succeed. Despite positive feedback from her preceptor, she believes her success is due to luck and fears being "exposed" as incompetent. Which of the following signs BEST indicates Taylor may be experiencing imposter syndrome?

- **A.** She frequently attributes her achievements to external factors rather than her own skills.
- **B.** She seeks constructive feedback to improve her clinical performance.
- **C.** She feels confident in her abilities after receiving positive evaluations.
- **D.** She openly celebrates her accomplishments with peers.

Samantha, a third-year pharmacy student, feels constant pressure to maintain perfect grades and outperform her peers. She worries that any mistake will confirm she doesn't belong in the program. Which factor MOST likely contributes to her imposter syndrome?

- A. Lack of interest in clinical practice.
- **B.** Limited exposure to patient care settings.
- **C.** High-performance expectations within pharmacy education.
- **D.** Strong peer support and mentorship.

5

Jonathan, a fourth-year pharmacy student, received an award for academic excellence but feels he doesn't deserve it. He attributes his success to luck and worries he will fail in his next rotation. Which cognitive reframing technique would BEST help Jonathan?

- **A.** Avoid taking on challenging cases to reduce the risk of failure.
- **B.** Ignore his feelings and focus solely on upcoming tasks.
- C. Seek constant reassurance from peers about his abilities.
- **D.** Challenge negative thoughts by listing specific actions that led to his success.

# Have you ever......

Felt like you only received recognition as a fact of being lucky?

Felt that you could do better work then what you're turning in?

Worried that someone may find out that you're not as good at your job?

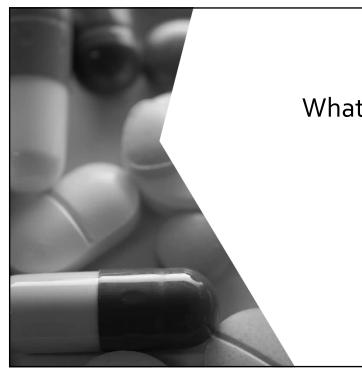
Felt like you shouldn't be giving a presentation/writing a paper/doing research on a topic because you're not an "Expert"?

Felt that you didn't deserve a compliment because you didn't do anything special?

7

# I experienced imposter syndrome at the following level (select all that apply)

- Student
- Resident
- New practitioner
- Change of role/position/career
- As experienced pharmacist
- I have never felt like an imposter



What aspects of pharmacy contributed to your feelings of imposter syndrome?

9

# What REALLY is imposter syndrome/phenomenon?

- A pattern of behavior that leads to distress
- Presence of imposter traits correlated with
  - Self-handicapping behavior
  - Shame proneness
  - Guilt proneness
  - Low self-esteem

 Distress results in fear of evaluation this can lead to decrease d physical health, decreased academic or professional performance and suicide

Dread of discovery

Sullivan J and Ryba N. AJHP. May 2020

# Do I suffer from imposter syndrome or phenomenon?

- Exhibit perfectionist tendencies
  - More focus on mistakes then achievements
- Fear judgment and discovery
  - Fear that someone will find out (supervisors/co-workers)
- Refusing to own your success
  - Downplay achievements
  - Negative self-talk

 Can lead to "downshifting" revising goals to become less ambitious – preventing you from reaching your full potential

White S. ASHP Connect Blog

11

# Why might IP be common in pharmacy students/professionals?

- High achievers with perfectionist tendencies
- Lifelong learners
- Knowledge is always changing
- Work under intense scrutiny
- Career transitions may lead to increased responsibility and challenges

Tsai ACCP Q &A

# Imposter phenomenon among health professional students

- 988 students from the Medical University of South Carolina surveyed with 477 responses
  - Response rate 48%
  - 47% men
  - Mean age 26.2 (range 20-54)
    - 46 % (n=221) medicine students
    - 21% (n=102) dentistry students
    - 17% (n=82) nursing students
    - 15% (n=72) pharmacy Students (at time of study entry level degree was a BS)
- 3 Scales were administered
  - Brief symptom inventory- used to measure general psychological adjustment
  - Multidimensional perfectionism scales used to assess the character trait of perfectionism
  - Clance's Imposter Phenomenon scale

Henning K, Ey S, Shaw D. Medical Education 1998

13

# Clance IP Scale

Each statement rated as 1-5 (not at all true to very true)
Add up scores for all 20 items

## Sample Statements

- I have often succeeded on a test or task even though I was afraid that I would not do well before I Undertook the task
- I can give the impression that I'm more competent than I really am.
- I rarely do a project or task as well as I'd like to do it.
- Sometimes I'm afraid others will discover how much knowledge or ability I really lack

 $\underline{https://paulineroseclance.com/pdf/IPTestandscoring.pdf}$ 

# Imposter phenomenon among Health Professional Students

## Results

- MPS Scaled- all students rated themselves highest in self oriented perfectionism
- BSU Scale- moderately high levels of psychological distress
  - Pharmacy students more distressed than other programs
    - Percentage of students in clinical range Pharmacy 51.1%, Dental 29,7%, medical 21.1%, nursing 21.3%
- IP scale
  - Using arbitrary cut off ≥62
  - 30.2 % of all students in the clinical range for IP
  - Pharmacy mean score of 59.4
  - More women than men (37.8% vs 22%, p<0.001)

Pharmacy students reported more socially prescribed perfectionism than other programs

## Discussion

- Pharmacy students were at greatest risk for psychological distress
  - 1/2 of students reported stress similar to those reported by psychiatric populations.
- Found strong relationship between perfectionism and IP to psychological distress

Henning K, Ey S, Shaw D. Medical Education 1998

15

# Imposter Phenomenon in Pharmacy Faculty and Students

# Methods- conducted in May 2020

- Student pharmacists and faculty at Sullivan University College of Pharmacy and Health Sciences and Northeast Ohio Medical University College of Pharmacy
- Response rate 35.5% (209/589 students and faculty)

### Results

Table 3. Clance Impostor Phenomenon Scale (CIPS)<sup>a</sup> Results of Student Pharmacists and Faculty Members by Institution and Score Classification (N=209)

		SUC	NEOMED (n=124)				
	All	Overall (n=85) n (%)	Students (n=72) n (%)	Faculty (n=13) n (%)	Overall n (%)	Students (n=102) n (%)	Faculty (n=22) n (%)
Classifications (with rar	nges)						
Few (≤40)	13 (6.2)	7 (8.2)	5 (6.9)	2 (15.4)	6 (4.8)	3 (2.9)	3 (13.6)
Moderate (41-60)	76 (36.4)	31 (36.5)	28 (38.9)	3 (23.1)	45 (36.3)	37 (36.3)	8 (36.4)
Frequent (61-80)	92 (44)	34 (40)	28 (38.9)	6 (46.2)	58 (46.8)	47 (46.1)	11 (50)
Intense (>80)	28 (13.4)	13 (15.3)	11 (15.3)	2 (15.4)	15 (12.1)	15 (14.7)	0 (0)

Boye J et al. AJPE 2022:86(1)

# Imposter Phenomenon in Pharmacy Faculty and Students

## Discussion

- Survey completed during early part of the COVID-19 pandemic
- Low response rate but similar to other studies
- Unknown baseline knowledge of IP
- Hypothesized implications of the findings impact on
  - Academic or professional success
  - Job satisfaction
  - Self-efficacy
  - Work engagement
  - Propensity for burnout

Boye J et al. AJPE 2022:86(1)

17

# Imposter Phenomenon among Pharmacy Residents

## Methods

- 818 Survey responses from the 4,376 PGY1 and PGY 2 pharmacy residents in 2018-2019 (18.7% response rate)
- 709 responses included in the results
  - Clance IP Scale
    - Score cut off ≥ 62 to identify imposters vs. nonimposters
  - Mayo Clinic Resident/Fellow Well-Being Index
    - 7 question to assess distress in medical residents
    - Score ≥ 5 cut off for identifying those in greatest risk of distress

Illivan Am I Health System Pharm 2020

### Results

- 414 (57.5%) Imposters Identified
  - Mean CIPS score 64
    - 47.6% "Frequent", 33.3% "moderate", 12.6% "intense", 6.4% "few"
  - Prior mental health treatment and increasing hours worked per week were significant predictors of IP
    - >80 hours compared to 60 hours P<0.001
  - Mean RWBI 4.2
    - 47.8% scored ≥ 5
    - Age previous mental health treatment and increased hours worked were predictors of high RWBI

# Imposter Phenomenon among pharmacy residents

## Discussion

- Suggests pharmacy residents exhibit more distress than other previously studied groups
- More than half of residents had a CIPS indicating imposter
- About ½ had a RWBI score indicated distress
  - Limitation not designed with pharmacy in mind but similar work settings and broad questions
- Long hours = more distress
  - ASHP limits duty hours to 80 hours/week
  - Cause vs. effect
- Residents with history of mental health treatment more likely to report imposter traits

Sullivan. Am J Health System Pharm 2020

19





# Overcoming Imposter Syndrome

- Acknowledge your feelings
- Talk to others
- Develop a quick response plan
- Understand strengths and limitations
- Overcome perfectionism
- Own your successes

21

# Record Keeping

## **Documenting Achievements**

Recording achievements and positive feedback provides evidence of competence and builds self-worth

### **Promoting Self-Reflection**

Journaling successes and challenges encourages selfreflection and personal growth over time.

# **Boosting Confidence**

Reviewing records regularly shifts focus from doubts to accomplishments, fostering confidence and reducing anxiety.



# Cognitive Reframing

## **Changing Negative Thoughts**

Cognitive reframing transforms negative thought patterns into positive, constructive perspectives for better mental health.

### **Viewing Mistakes Positively**

Mistakes should be seen as learning opportunities rather than failures to foster growth and resilience.

### **Reframing Techniques**

Techniques include challenging irrational beliefs, practicing self-compassion, and affirming personal strengths.

## **Building Resilience**

Reframing reduces self-criticism and promotes resilience, encouraging embracing growth over fear.



23



# Supportive Healthcare Communities

#### **Emotional Support and Validation**

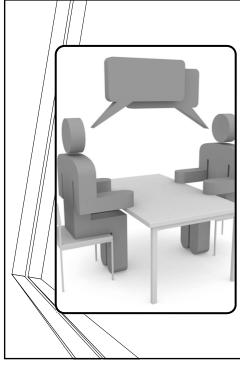
Peers and mentors provide essential emotional support that helps validate individual experiences and feelings.

## Normalizing Self-Doubt

Shared experiences in trusted groups normalize imposter feelings and reduce feelings of isolation.

## **Fostering Belonging**

Professional networks and peer programs create spaces where vulnerability is met with empathy and confidence grows.



# Seeking Structured Supervision

### **Guidance and Feedback**

Structured supervision offers essential guidance and constructive feedback during important learning phases to enhance growth.

### Regular Check-ins

Regular meetings with supervisors clarify expectations and validate progress, reducing uncertainty and fear of failure.

#### Safe Communication Space

Creating an open and safe space allows discussing challenges and receiving constructive input effectively.

### **Building Confidence Gradually**

Setting achievable goals through supervision helps build competence and confidence, reducing imposter syndrome stress.

25

# **Building Personal Skills**

### Mindfulness and Stress Management

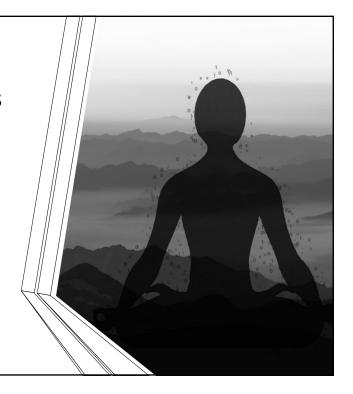
Mindfulness and stress management techniques like meditation improve emotional resilience and reduce anxiety.

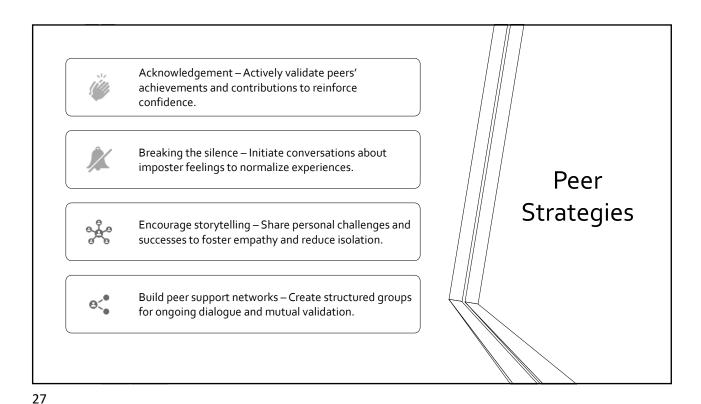
### **Time Management**

Set aside dedicated time to work on a specific task and prevents procrastination.

#### Recognizing when you are stuck

Asking for help to keep you moving forward. Recognizing that it's okay to ask for help.





Institutional
Strategies

Creating Awareness – Implement workshops and campaigns to highlight imposter phenomenon and its impact.

Education on IP – Integrate training into orientation and ongoing professional development programs.

Faculty/preceptor Development – Train educators to recognize and address imposter feelings among students and staff.

Structured Mentorship – Establish formal mentorship programs to support identity formation and confidence building.

# Opportunity to Share

 Please share any experiences that you may have had with student/residents/new practitioners or yourself and the strategies you used to overcome these feelings.

29

# Supporting Pharmacy students, residents, and new practitioners at every step

Alex feels anxious before a case presentation and believes others are more knowledgeable. Which strategy would MOST help?

- A. Memorize every detail to avoid mistakes.
- B. Practice self-compassion and remind himself learning is a process.
- C. Avoid asking questions during rounds.
- D. Compare his style to the top-performing student.

# Supporting Pharmacy students, residents, and new practitioners at every step

Maria received an award but feels undeserving and attributes success to luck. Which technique would BEST help?

- A. Challenge negative thoughts by listing actions that led to success.
- B. Ignore feelings and focus on tasks.
- C. Seek constant reassurance from peers.
- D. Avoid challenging cases to reduce failure risk.

31

# **Questions?**



