

Introduction

Practicing, new graduate, and student Clinical Nurse Specialists (CNSs) often suffer from imposter syndrome, with studies demonstrating a range of prevalence of this phenomenon between 36% and 75% (Edwards-Maddox, 2022). As early as 1992, research has found there is a direct cause and effect relationship with the CNS and feelings of being an imposter (Arena & Page, 1992). Three decades later, the CNS population continues to be plagued with the phenomenon. However, by acknowledging this phenomenon's high prevalence in CNS practice, a targeted educational intervention may be able to diminish this common obstacle by providing awareness and strategies to manage the intense feelings the phenomenon creates.

Abstract

Purpose: The purpose of this study is to examine the impact of an educational intervention on the awareness of imposter syndrome and the Clance Imposter Phenomenon Scale (CIPS) scores of CNS participants. This study will also assess demographic variables such as age, gender, ethnicity, and years practicing both as a RN and as an APRN role on the prevalence of imposter syndrome and initial scores on the CIPS.

Sample: A purposive sample of CNSs, with a target of 150 participants, was recruited by the researcher through convenience sampling. Email invitations were sent to CNS professional associations. Invites were posted on social media groups specific to the CNS. Letters announcing an invitation of the study were sent out to CNS professional colleagues.

Setting: Surveys were hosted asynchronously online on the ODU Qualtrics site. Educational module was hosted on the student researcher ODU WordPress site.

Analysis: IBM SPSS Statistics version 29 was used for statistical analysis, with a priori significance level of $p < 0.05$ utilized to conduct the statistical analysis of data. Demographic data is analyzed utilizing descriptive statistics.

Outcomes: To increase the level of awareness of imposter syndrome in the CNS and to provide an educational intervention to decrease prevalence of imposter syndrome in the CNS.

Methods

Design & Procedure: This study used a pre-experimental one group pretest-posttest design. Following IRB approval from Old Dominion University (ODU), the student researcher provided the study invitation to the site coordinators for the National Association of Clinical Nurse Specialists (NACNS) and the Virginia Association of Clinical Nurse Specialists (VACNS) for dissemination. Due to lack of participation the invitation to participate was extended to a DNP focus Facebook page with the intent to target other CNSs working at a DNP level. The invitation to participate was also shared to Armed Forces Affiliate of NACNS.

Educational Intervention and Surveys: Participation was approximately 90 minutes including the education intervention with an estimated time completion of 60 minutes: a pre-test survey with 13 demographic questions and a 20 question CIPS which measures characteristics and acknowledgement of feelings of self-doubt, fear, and being less than capable in the academic and professional role.

Confidentiality: The project was IRB exempt and participants in the survey remain anonymous.

Objectives

Research Objectives:

1. To increase knowledge of IS.
2. To increase recognition of feelings of IS.
3. To decreased feelings of IS.
4. To deliver effective online educational interventions to overcome IS.

Demographic	CNS n=31
Age (mean years)	48
Gender	
Male	1
Female	30
Ethnicity	
African American	2
Native American	1
White	21
Asian	1
Hispanic/Latino	1
Not Hispanic/Latino	1
More than one	3
Other	1
Unknown	1
Education	
MS w/ certification	35%
MSN	26%
DNP	26%
PhD	3%
Practice Years (mean)	
RN (max = 47 yrs)	20
APRN (max = 18 yrs)	5
Population Licensure	
Adult-Gerontology	81%
Pediatrics	0%
Neonatal	0%
Palliative	6%
Oncology	3%
Other	7%
Practice Environment	
Hospital	60%
Out-Patient	7%
Academics	19%
Self-Employed	3%
IP Awareness	68% no awareness
CIPS Awareness	16% no awareness
Scope of Practice	
No CNS role	16%
Limited	22%
Full	61%
Rx Authority	25%
Scoring (actual)	
Pretest	
<40	1
41-60	9
61-80	17
>80	4
Post-test	
<40	2
41-60	14
61-80	13
>80	2
Scoring Changes (range)	33-12 pt decrease
Improved	29
Stayed Same	2

Results

Demographic Summary

The average Clinical Nurse Specialist participant of this study was a 48-year-old white female with a Master's degree who has 20 years experience as an RN and 5 years experience as an APRN, who is working in a hospital setting with full scope of practice licensure as an adult gerontologist but without endorsement for prescriptive authority, and who has no prior awareness of imposter syndrome or the CIPS scoring tool.

Research Questions

RQ1: Is there a significant difference in pre- and post- CIPS scores in participants after completing the educational intervention on imposter syndrome?

Correlations			
	Change In Score	Pretest Score	Posttest Score
Change In Score	Pearson Correlation	1	-.288
	Sig. (2-tailed)		.337
	N	31	31
Pretest Score	Pearson Correlation	-.288	1
	Sig. (2-tailed)	.116	.538**
	N	31	31
Posttest Score	Pearson Correlation	-.178	.538**
	Sig. (2-tailed)	.337	.002
	N	31	31

** Correlation is significant at the 0.01 level (2-tailed).

Yes, there is a significant difference between the pre-test and post-test CIPS scores following the educational intervention. $p = .002$

RQ2: What is the prevalence of awareness, prior educational intervention, and self-assigned knowledge level of imposter syndrome among participants prior to this study's educational intervention?

Correlations		
	Prior Awareness of IP	Change In Score
Prior Awareness of IP	Pearson Correlation	1
	Sig. (2-tailed)	.594
	N	47
Change In Score	Pearson Correlation	.100
	Sig. (2-tailed)	.594
	N	31

68% of participants had no prior awareness of IP. 16% had no knowledge of CIPS. There is no correlation of awareness with scores.

RQ3: What is the relationship between age and gender in the CIPS scores of among participants?

Correlations			
	Change In Score	Age	Gender
Change In Score	Pearson Correlation	1	-.098
	Sig. (2-tailed)		.798
	N	31	31
Age	Pearson Correlation	-.098	1
	Sig. (2-tailed)	.599	.157
	N	31	31
Gender	Pearson Correlation	.048	.261
	Sig. (2-tailed)	.798	.157
	N	31	31

There is no determined causal relationship between age and gender in the changes in CIPS scores.

RQ4: What is the relationship between years practicing as a registered nurse and clinical nurse specialist on the initial CIPS scores among participants?

Correlations			
	Change In Score	Age	Gender
Change In Score	Pearson Correlation	1	-.098
	Sig. (2-tailed)		.798
	N	31	31
Age	Pearson Correlation	-.098	1
	Sig. (2-tailed)	.599	.157
	N	31	31
Gender	Pearson Correlation	.048	.261
	Sig. (2-tailed)	.798	.157
	N	31	31

The is no correlation between years as an RN and CIPS scores. The relationship is not statistically significant. There is a correlation between changes in CIPS and years of practice as an APRN. The relationship is statistically significant. The more experienced the APRN the lower the CIPS scores.

Conclusions

52 Clinical Nurse Specialists registered to participate in this study.

60% completed all three components of the study.

94% improved post-test scores after completing the education intervention.

37% over all improved CIPS scores after education intervention.

The increased level of experience as an APRN CNS significantly decreases the characteristics and self-deprecating thoughts and feelings of IP in the CNS. Age, gender, and experience as an RN, have no significant impact on CIPS scores.

Implications for Practice & Future Research: 1. Does the CNS graduate student have fewer IP characteristics and less negative self-talk when the clinical preceptor is an experienced CNS? 2. Does focused positive reinforcement education improve the feelings associated with IP in the CNS graduate transition to practice?

Limitations: Limited CNS participation.

Student Researcher

Angela is an Assistant Professor of Nursing at Germanna Community College in Locust Grove, Virginia where she teaches level 1 lecture, lab, clinical, and simulation. She is a member of the VCCS and the GCC curriculum committees and is a member of Faculty Senate Cabinet and RSI.

Angela Rapids
25407 Lafayette Drive
Rhoadesville, Virginia 22542
angierapids@gmail.com

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References

- Arena, D. M., & Page, N. E. (1992). The imposter phenomenon in the clinical nurse specialist role. *Image—the journal of nursing scholarship*, 24(2), 121–125. <https://doi.org/10.1111/j.1547-5069.1992.tb00236.x>
- Clance, P. (2012). Dr. Pauline Rose Clance – Imposter phenomenon. https://www.paulineroseclance.com/impostor_phenomenon.html
- Clance P., Imes S. (1978) The imposter phenomenon in high achieving women: dynamics andtherapeutic intervention. *Psychotherapy* (Chic). 15(3):2Y8 <https://mpowir.org/wp-content/uploads/2010/02/Download-IP-in-High-Achieving-Women.pdf>
- Edwards-Maddox S. (2022). Burnout and impostor phenomenon in nursing and newly licensed registered nurses: A scoping review. *Journal of clinical nursing*, 32(5-6), 653–665. <https://doi.org/10.1111/jocn.16475>