21 Humility in Times of Heightened Uncertainty: A Study of Physician Critical Incidents to Prepare Learners for Uncertainty in Clinical Practice

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Background: Uncertainty is a pervasive challenge in clinical practice. While the importance of humility in addressing uncertainty has been discussed in the literature, empirical research on this topic is lacking. Our study aimed to examine the presence and role of humility in physicians' experiences with uncertainty during the COVID-19 pandemic.

Objectives: To identify if and how humility was present in physicians' reflections on uncertain situations during the height of the COVID-19 pandemic, and to explore potential roles of humility in managing uncertainty.

Methods: We conducted critical incident interviews with 12 EM and ICU physicians about their experiences with uncertainty while caring for COVID-19 patients. We deductively coded transcripts for key elements of humility based on conceptualizations by Tangney (2000) and Gruppen (2015). We examined code co-occurrence to identify clusters of humility and conducted iterative thematic analysis to uncover potential roles of humility.

Results: Aspects of humility were frequently present in physicians' narratives. Acknowledgment of shortcomings was most common. Acceptance of limitations, openness, and perspective-taking frequently co-occurred. Two key themes emerged: humility allowed physicians to trust their training despite uncertainty, and enabled pivoting and adapting to new information.

Conclusion: Findings suggest humility facilitates managing uncertainty by promoting trust in abilities and enabling flexibility and openness. There are opportunities in undergraduate medical education to include formal training and specific skills development in humility to prepare learners to navigate clinical uncertainty. Further research should explore nuances of humility across clinical situations and types of uncertainty.

22 Personality Traits and Burnout in Emergency Medicine Residents

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Background: Burnout is prevalent in medical training. The gold-standard for measurement of burnout is the Maslach Burnout Inventory (MBI), which is a questionnaire that scores three factors: emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA). EE is most closely correlated with burnout. Studies have shown a link between certain personality traits and burnout markers, but this has not been evaluated in emergency medicine residents. The personality traits openness, agreeableness, extraversion, conscientiousness, and neuroticism can be measured with a 50-item International Personality Item Pool (IPIP) Big 5 survey.

Objectives: To evaluate the association between personality traits and self-reported burnout in emergency medicine residents.

Methods: Observational, cross-sectional study in an urban, level II trauma center, three-year residency program. Participants were emergency medicine residents. Convenience sampling performed via survey. Subjects were consented and administered two sequential online surveys, the IPIP and MBI, over a secure website with anonymity. Raw/mean scores and standard deviations were calculated for each personality trait/burnout measure and compared by Pearson correlation coefficient. This study received IRB approval.

Results: We achieved 100% resident participation (n = 38). Thirty-one percent of the cohort reported high exhaustion, 13% had high depersonalization and 42% had low professional accomplishment. Two of 38 (5%) residents reported the combination of high EE, high DP and low PA. There was a negative correlation between conscientiousness, openness and agreeableness and emotional exhaustion, however only conscientiousness was statistically significant (Pearson's r = -0.40, p = .01).

Conclusions: In our sample, residents who were more conscientious had lower levels of emotional exhaustion. Programs may consider assessing their resident's personality traits to identify predictors of burnout.

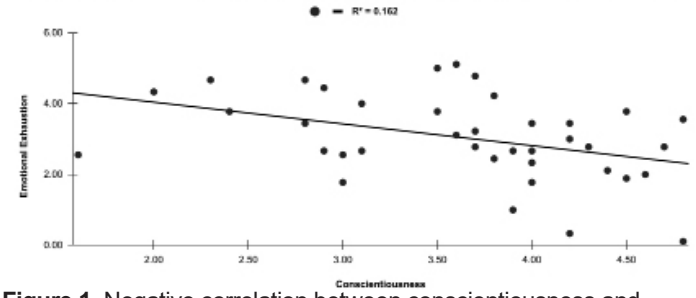

Figure 1. Negative correlation between conscientiousness and emotional exhaustion.

23 Changes in Imposter Syndrome During Intern Year of Emergency Medicine Residency

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Background: Imposter syndrome (IS) affects residents, causes burnout, and is difficult to overcome alone. Residency programs should be aware of when residents experience IS

to provide support. Interns are of particular interest as IS increases during times of transition. Cross-sectional studies on IS in residents have been done but not studies focused on IS during the intern year of emergency medicine (EM) residency.

Objectives: This study aimed to explore changes in IS levels and factors associated with increased experience of IS during EM intern year. We hypothesized that IS would increase at the beginning and end of intern year.

Methods: This was a prospective, observational, survey-based convergent mixed methods study. Participants were voluntary samples of interns and post-graduate year (PGY) 2 residents from six EM residency programs. The Clance Imposter Phenomenon Scale (CIPS), multiple-choice demographic questions, and open-ended questions on experiences with IS were sent anonymously via email. Interns were surveyed at months zero (July 2023) and one (August 2023) and will also be surveyed at months six and twelve. PGY-2s were surveyed in July 2023 for baseline data on IS after intern year. CIPS scores were analyzed with Mann Whitney U and paired t-tests. Inductive thematic analysis was done on qualitative data.

Table 1. Quantitative survey questions on imposter syndrome (IS) experiences.

	New PGY-2's (n = 20)	Month 0 Interns (n = 24)	Month 1 Interns (n = 11)
Knowledge of IS? n, (%)	n = 20	n = 24	n = 11
No	1 (5)	0 (0)	0 (0)
Yes	19 (95)	24 (100)	11 (100)
Recent IS? n, (%)	*Currently have IS? (n = 15)*	*Currently have IS? (n = 24)*	*Felt IS over past month? (n = 11)*
No	7 (47)	6 (25)	0 (100)
Yes	8 (53)	18 (75)	11 (100)
Past IS? n, (%)	*During med school? (n = 15)*	*During med school? (n = 24)*	*Prior to this past month? (n = 11)*
No	6 (40)	8 (33)	3 (27)
Yes	9 (60)	16 (67)	8 (73)
	Had IS during intern year? (n = 15)		
No	4 (27)		
Yes	11 (73)		
Change in intensity of IS? n, (%)	*During intern year? (n = 11)*		*Over past month? (n = 8)*
Increased	2 (18)		2 (25)
Decreased	8 (72)		3 (37)
No change	1 (9)		3 (37)
Severity of IS experiences based on CIPS n, (%)	n = 17	n = 22	n = 10
Few	2 (17)	0 (0)	0 (0)
Moderate	3 (25)	8 (36)	3 (30)
Frequent	3 (25)	11 (50)	7 (70)
Intense	4 (33)	3 (14)	0 (0)

No statistically significant differences ($p<0.05$) in CIPS scores between new PGY-2's and month 0 and between month 0 and month 1 interns.
IS = imposter syndrome; CIPS = Clance Imposter Phenomenon Scale

Results: 20 PGY-2s, 24 interns at month 0, and 11 interns at month 1 completed surveys. There were no statistically significant differences ($p<0.05$) in CIPS scores between PGY-2's and month 0 interns or between month 0 and month 1 interns. Over half of interns had CIPS scores noting frequent or intense IS experiences. Table 2 lists preliminary themes on factors associated with IS.

Conclusions: Results so far show no significant changes in IS levels over the first month of EM intern year with most interns showing frequent or intense IS experiences. Themes from our qualitative data may inform strategies on alleviating these elevated levels of IS.

Table 2. Factors associated with imposter syndrome during the first month of EM intern year.

Situational factors associated with imposter syndrome	
Themes	**Representative Excerpts**
Physician role: being faced with physician tasks or medical decision-making, difficulty accepting physician identity	"Also when writing my MDM , at times I literally have no idea what to write." "Also, when nurses ask me, can the patient eat? It's literally the hardest question to this day. It makes me feel like I lack knowledge and can't even answer the basic question of eating." "Being called 'doctor' on EMS rotation..."
New professional context: change in clinical setting and/or role	"My first ED shifts..." "...on trauma rotation..."
Limits of clinical ability: when clinical responsibilities exceed perceived or real clinical abilities	"...times when my attending and senior are occupied" "pt nearly coded due to hypotension- my first patient who crashed right in front of me- I felt woefully unprepared" "When I was struggling to keep up with clinical tasks/demands"
External judgment: feeling judged by or against others	"I feel that all eyes are on me as I stand over the patient" "...comparing myself to the way that I perceive others"
Personal/affective factors associated with imposter syndrome	
Self-inadequacy: feeling a personal lack of ability or knowledge irrespective of others	"...usually when I didn't know something that I thought I should" "Lack of knowledge"
Uncertainty: lack of clarity on role, expectations, or the next course of action	"...didn't know how to best handle a situation" "I never know what role I should take" "...being unsure what the expectations are of me"
Isolation: inability to relate to others, feeling that they do not share the same experiences or skills as others	"I feel as if I should just not be there" "...feeling that everyone around me knows more"

24 EM Program Directors' Perception of "Lower 1/3rd" SLOEs in Ranking During the Matching Process

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Background: The possibility of receiving a "lower 1/3" Standardized Letter of Evaluation (SLOE) from a program is stressful for MS IV Emergency Medicine students. No previous literature addressed how program directors perceive these evaluations and what medical students can do to overcome them. We hypothesize that program directors will still rank and match students with a "lower 1/3rd" SLOE and that students can enhance other parts of their application to overcome a "lower 1/3rd" SLOE.

Objective: Using a pilot study to examine the