



Emergency Nurses' Emotional Responses to Patients

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INTRODUCTION

In the high stress and uncertain environment of the Emergency Department (ED), the possibility of diagnostic error is a serious problem facing both healthcare providers and patients. Emotions can run high among both, which can contribute to diagnostic error, treatment disparities, and adverse outcomes for patients.

Although a considerable body of research demonstrates that emotions can reliably influence behavior, little work has investigated emotions in the medical domain (Isbell et al., 2020a, 2020b). Some recent work demonstrates that physicians' and nurses' emotional experiences do impact patient care and clinical decision-making. Specifically, negative emotions (e.g., anger, frustration) have been associated with poorer patient care whereas positive affect (e.g., pleasure, pride) result in better quality care (Isbell et al., 2020a, 2020b). Indeed, in a recent qualitative study, one emergency physician shared with us that "Emotions subconsciously play a role in every single patient and how you work them up, and how you diagnose them, and what you do for them." (Isbell et al., 2020a). Despite this, research on medical decision making continues to overlook this important fact.

The primary goals of this study were to (1) examine the emotional experiences that emergency nurses have when recalling their own recent positive and negative (i.e., angry) patient encounters, (2) investigate the extent to which nurses believe these experiences influenced their clinical decision-making and behavior, (3) identify themes in the encounters, and (4) investigate the extent to which there are differences in patient populations and characteristics (i.e., age, race, gender) in the positive and negative encounters that nurses recall. This study is part of a larger experiment in which we investigate the effects of recalling an emotional encounter on ED nurses' treatment recommendations, decisions, and perceptions of patients, as a function of whether the patient has a mental illness or not; however, the methods and results reported here focus specifically on research questions concerning the patient encounters.

METHODS

Participants. Participants in this study consist of 160 emergency medicine nurses. Using contact information obtained from the Emergency Nurses Association, participants were recruited through postal mail. Interested nurses then completed an online form to gain access to the study, which was conducted online using Qualtrics.

Procedure. Participants were randomly assigned to write about either a positive or an angry patient encounter that they recently had in the ED. Following prior research (Isbell et al., 2020b), we instructed participants to recall about the experiences as vividly as possible in an effort to re-experience the encounter as they described it. Participants then reported their experiences during the encounter using a measure of 28 emotion and engagement items. This measure formed 7 scales (see Figure 1; Cronbach's alphas = .78 to .97). All responses were recorded along sliding scales from 0 (*not at all*) to 100 (*very much*). In addition, they reported whether they believed their emotions influenced the treatment and care of the patient they described, and reported the age, sex, and race of the patient they described. We also collected participants' demographic information.

Coding of Qualitative Data. Using a shared codebook, the first author and two additional RAs coded all encounters for key themes, including patient populations, that emerged in the encounters.

Data Analyses. Quantitative data were analyzed using descriptive statistics, t-tests, and repeated measures ANOVA. Qualitative data were analyzed using chi-square tests.

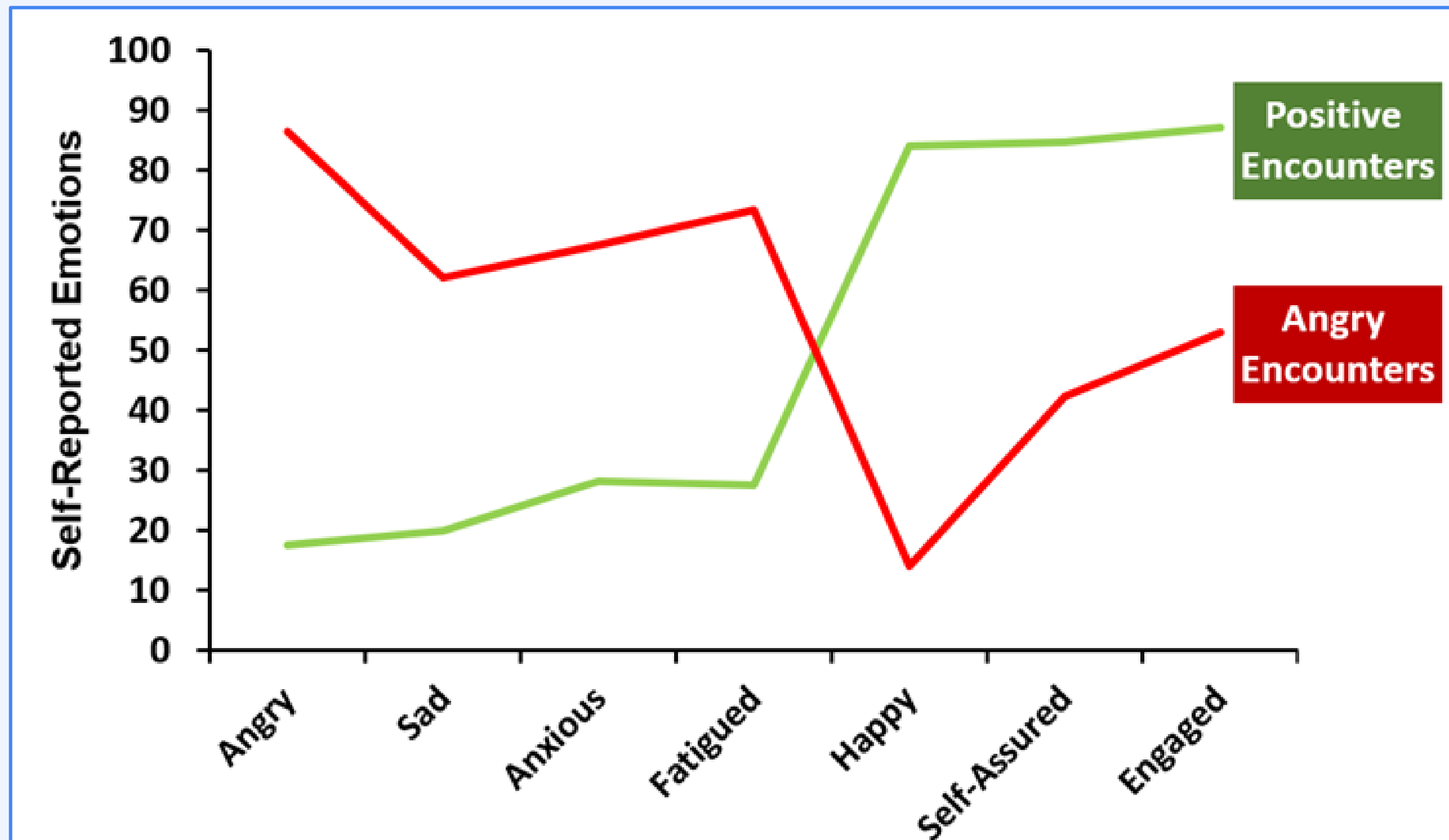
RESULTS

Age	$M = 38.09$ ($SD = 10.30$)	
Sex	Females:	146 (91.2%)
	Males:	14 (8.8%)
Race	White:	139 (86.9%)
	Asian:	8 (5.0%)
	Black / African American:	1 (0.6%)
	Native Hawaiian or Other Pacific Islander:	1 (0.6%)
	Multiracial	6 (3.8%)
	Other:	5 (3.1%)

Table 1:
Participant
Demographics

Figure 1: Emotion Profiles

Mean Emotions and Engagement as a Function of Encounter Type



Note: For all scales, the difference between the angry and positive encounters is statistically significant, all $p < .001$.

Did these emotions influence patient treatment and clinical care? The majority of nurses (59.4%) believed that their emotions had no influence on their clinical reasoning and decision making for the patient. 28.7% reported that their emotions did influence care, and 11.9% reported that they were uncertain. No differences emerged as a function of encounter type, $p > .40$.

Positive Patient Encounter: Example

"A recent patient experience I can happily reflect on happened a few months ago. The patient was an older gentleman who passed out in the church. Him and his wife were both so nice and appreciative for everything. They held open honest conversations with me and the provider and were happy to answer all our questions. In addition, they were knowledgeable about his past medical history and medications he takes daily. The wife was very concerned for her sick husband, it was so sweet to watch her care for him. The patient was genuinely worried himself and was so kind."

CODES: (1) patient expressed gratitude/satisfaction towards provider; (2) family member expressed gratitude/satisfaction towards provider; (3) patient was cooperative, positive or understanding

Angry Patient Encounter: Example

"I had a patient who had come in saying he was having hallucinations and wanted help. He was very rude, unwilling to answer my questions for my assessment, refusing to change out of his clothing, refusing to give a urine sample, refusing to let me draw blood. These were all basic tasks that I needed to complete in order for us to move forward with an assessment from our psych team. The patient was someone we saw in the ER often and knew his story. He typically would come in after not having taken his meds, he would be high or drunk or both, and he would give us a hard time when he knew what the protocol was for patients we needed to have checked out by the psych team. I was extremely frustrated that he was wasting my time when I had 4 other patients who actually wanted my help and cooperated with me. While I had been trying to help out of the bed and into a chair, he yelled at me to leave his room and leave him alone, and I became so frustrated and angry that I did exactly that. The patient was unsteady on his feet and fell from the bed and I was so frustrated that I did not have any empathy towards him."

CODES: (1) Demanding/entitled/ manipulative behavior from a patient; (2) Verbal abuse from the patient towards provider (actually occurred); (3) Frequent/high emergency department utilizer; (4) Patient does not care for personal health or manage medical conditions; (5) Wasting MD or nurse time by coming to ED; (6) Mental illness; (7) Substance abuse

Table 2: Common Themes in Encounters

Angry Encounters	
Demanding, Entitled, Manipulative Patients	45.9%
Verbally Abusive Patient	36.5%
Patient Refusing Necessary Treatment	28.5%
Mental Illness and/or Substance Use	25.7%
Unrealistic Patient Expectations	24.3%
High Frequency ED Utilizer	17.6%
Patient Doesn't Care for Self or Manage Condition	17.6%
Issues with Family Members	17.6%
Patient Wasting ED Resources (e.g., time, space)	16.2%
Physical Abuse from Patient or Family Member	10.8%
System Factor:	
Patient Care Barriers Not Under Control of the ED	55.4%
Positive Encounters	
Patient Expressed Gratitude/Satisfaction Toward Nurse	54.1%
Patient was Cooperative, Positive, Understanding	43.2%
Made a Difference for Patient	32.4%
Family Member Expressed Gratitude/Satisfaction	31.1%
Meaningful Connection with Patient	18.9%
Felt Proud of Abilities	17.6%
Mental Illness and/or Substance Use	12.2%

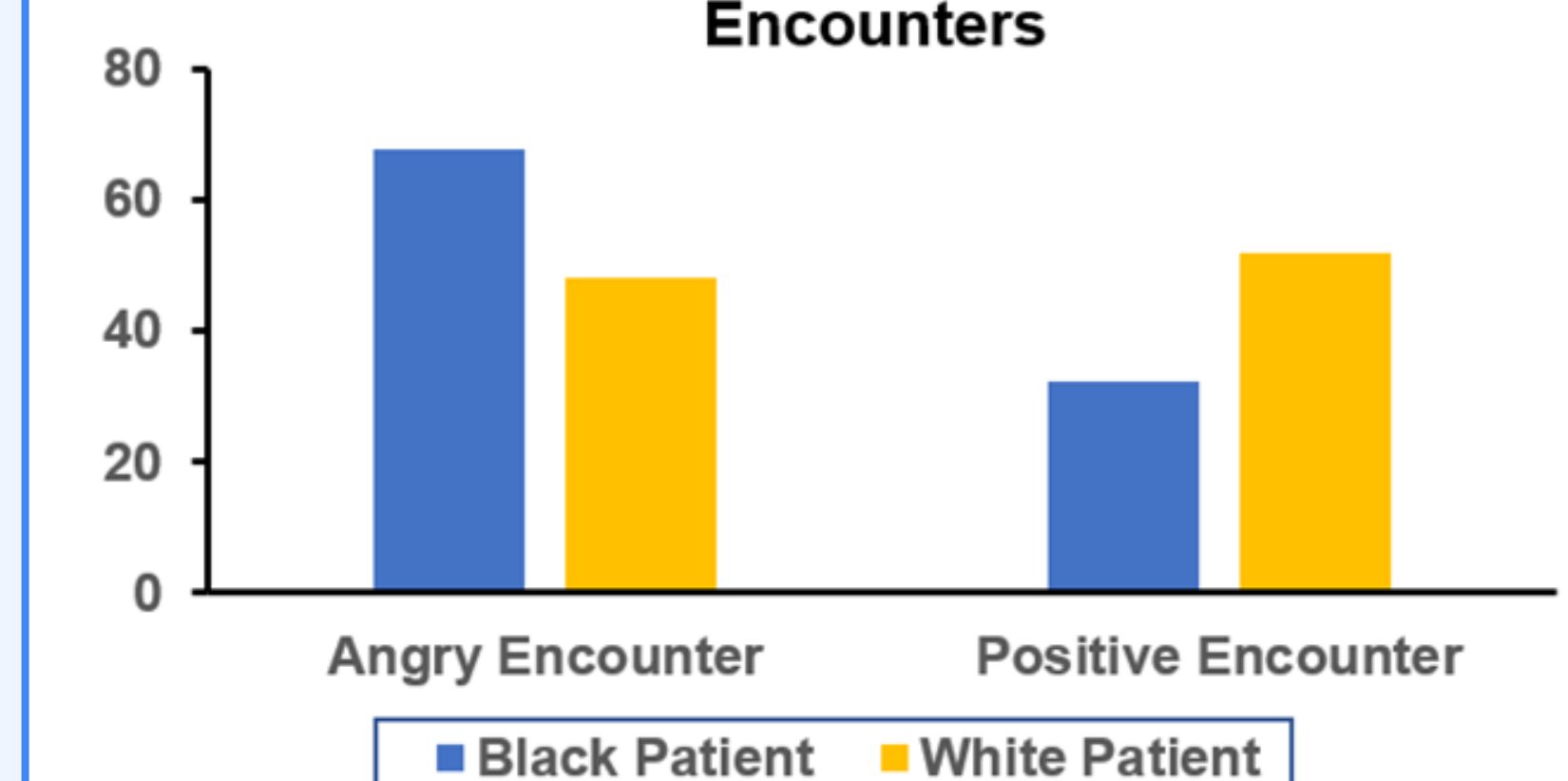
Patient Demographics

• **AGE:** Patients described in angry encounters were significantly younger than those described in positive encounters ($M = 42.37$; $SD = 22.30$ versus $M = 55.60$; $SD = 25.39$), $t(157) = 3.49$, $p < .001$.

• **SEX:** Overall, male patients were described in 46.9% of encounters, females were described in 51.9% of encounters, and non-binary patients were described in 1.3% of encounters. Male and female patients were equally likely to be described in both angry and positive encounters, $p > .25$.

• **RACE:** An analysis focused on Black and White patients only demonstrates a trend in which nurses were more likely to describe a Black patient when writing about angry encounters compared to positive encounters, $\chi^2(1) = 2.71$, $p < .10$ (see Figure to the right).

Percentage of Black and White Patients Described in Angry and Positive Encounters



CONCLUSIONS

Nurses reported intense emotions in response to patient encounters, and reported being more engaged in encounters with patients who elicited positive emotions compared to those who elicited anger. Despite this, the majority of nurses indicated that their emotions did not influence their clinical decision-making and care for their patients. Importantly, the patients most frequently described in negative encounters (e.g., Black individuals, those with substance use, mental illness, frequent ED utilizers) are from vulnerable communities for whom health-care disparities are well-established. These communities are often disproportionately affected in a negative way because of the negative stigmas associated with them. Interventions are needed to address these disparities.

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