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The emotions of graduating medical students about prior patient care experiences

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ABSTRACT

Objectives: To determine the emotional responses to patient care activities described by fourth year medical students.
Methods: Qualitative content analysis for emerging themes in letters written by graduating medical students to patients during a Capstone Course. The patient need not be alive and the letter would never be sent.
Results: Six themes emerged from student letters: (1) Sorrow for the depths of patient suffering; (2) Gratitude towards patients and their families; (3) Personal responsibility for care provided to patients; (4) Regret for poor care provided by the student or student's team; (5) Shattered expectations about medicine and training; and (6) Anger towards patients. Students expressed sensitivity to vulnerable patients, including those who were alone, unable to communicate, or for whom care was biased. Students' expressed powerlessness (inability to cure, managing a work–life balance, and challenges with hierarchy) in some essays.
Conclusion: At graduation, medical students describe strong emotions about previous patient care experiences, including difficulty witnessing suffering, disappointment with medicine, and gratitude to patients and their families
Practice implications: Providing regular opportunities for writing throughout medical education would allow students to recognize their emotions, reflect upon them and promote wellness that would benefit students and their patients.

1. Introduction

Students witness disturbing events during clinical rotations [1], including patient suffering and death [2] and unethical or unprofessional physician behavior [3–5]. As students acculturate to medicine, their empathy [6,7] and patient-centeredness decline [8], and ethical behaviors erode [9]. Writing helps students process stressful circumstances [10], may prevent burnout [11–13], and empowers students who feel they have little influence in clinical environments [14]. Writing triggers provided to medical students in their first clinical year have focused on the "hidden curriculum" (unintentionally transmitted norms and values) [15], difficult patient encounters [16], and experiences in which care was not patient-centered [8].

Studies comparing medical students early in their training with those late in training reveal that students' knowledge, clinical acumen, and sense of professional identity increases with time [17]. The fourth year of medical school, the transition period leading up to residency, is critical for the development of a professional identify and professional behaviors [18,19]. Though graduating students are on the brink of becoming practicing physicians, they still have the capacity to be unsettled by behaviors that the profession has accepted as the norm [5,15]. Reflection during this period supports "each student's intellectual, emotional

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and ethical development . . . growth indispensable to the making of a physician" [20] and provides students the benefit of processing their experience with peers [21]. Despite this, there have been few studies describing advanced students' reflections on their clinical experiences.

Our research question was to understand the situations and emotions evoked by clinical situations that remain memorable to students at the time of graduation to gain insight into the aspects of implicit curriculum that have affected medical students, not just on early rotations, when the implicit curriculum is new, but remain important throughout medical school. This would allow us to strengthen or adapt our explicit curriculum.

In this study, we directed students to write a letter directly to a patient about something that felt unresolved for the student. The nursing school undergraduate literature supports the effectiveness of letter writing [22]. Further, one author (DS) has noticed that letter writing prevents intellectualization or depersonalization that may develop when asking practicing physicians to write narratively.

Content analysis of the letters was used to identify the clinical situations and emotions evoked by these experiences. Qualitative analysis is common in social science research. Its purpose is to understand a situation or phenomena, when it does not include an intervention or manipulation of a situation as in quantitative research [23]. Given the intent of the study – to discover what emotional responses students had to a patient care activity – and the nature of our data – free form letters – we used the qualitative method of content analysis [24]. Content analysis is commonly used when analyzing textual data as it provides a method to inductively determine the themes and frequencies represented in the student narratives.

2. Methods

The setting was a medical school in a private university affiliated with a tertiary care medical center in the south eastern United States. The study population included graduating medical students enrolled in a mandatory four-week Capstone Course in 2008, 2011, and 2012 at a medical school within a private university and affiliated with a tertiary care medical center in the south eastern United States. The Capstone course occurs in March of each year; most students taking this course graduate in May of the same year. The course provides students with opportunities to test their knowledge and clinical skills, reflect individually and personally, and to develop additional skills necessary prior to the start of residency.

During the first session of the Capstone Course, a patient described the impact of various health care providers on his experience of being ill. The patient highlighted ways in which his serious illness impacted his relationship with his family and his providers. The session was intended to provoke memories of physician–patient encounters, both positive and negative. Following this presentation, students moved to small groups where they were given 15 min to hand write a letter to a patient about an experience that the student felt was "unresolved." The students were told that the patient did not need to be alive currently, and that the letter would never be mailed. Time permitting, students were allowed to complete additional letters. After an opportunity to share and discuss their letters in facilitated groups, students were invited (but not required) to turn in their anonymous letters. The letters were transcribed into electronic format to allow for later review.

To create an initial analysis structure, six letters (two from each year that letters were collected) were randomly selected for review by the six authors. Using conventional content analysis [25], each reviewer read the individual letters, identified key portions, and listed recurring themes. Themes from this subset of essays were compared among all six authors. These themes were then applied to another six letters. Additional themes were identified and organized by consensus. A third set of six letters was randomly selected and read by each individual. By the time the group of authors reviewed the third set of letters, few new themes had been found. Two authors (AC and ER) independently analyzed the full set of 184 submitted letters to determine comprehensiveness and generalizability of themes from the sample, revising the codebook (infrequently) until the saturation of themes was reached. While both coders did have exposure to students during their medical school experience, the anonymous nature of the letters precluded either author's previous experience with an individual medical student from biasing interpretation of any individual letter. One author (COG) who had completed qualitative research for her dissertation oversaw this process.

Once final saturation of themes was reached, the two authors reread each essay and independently coded each essay. The authors met to compare coding of each essay. When a coding discrepancy was found, a third author (DS, a clinical psychologist from outside of the institution) resolved the discrepancy. Through these discussions, clarity of the major overlapping themes was established and representative excerpts were identified.

Themes and their subcategories were regrouped after immersion, based on the emotional underpinnings expressed within those themes. A directed content analysis was conducted comparing our themes to those previously published from other medical student narratives [8,15,16,18]. New categories were created representing themes which had similar or dissimilar content to those previously described by others [8,15,16,18].

3. Results

One hundred and eighty-four letters were submitted from the nearly 300 students in the cohort. Student feelings about unresolved events centered around six categories: sorrow for patient suffering; regret for the inadequacy of care provided by the student and the student's team; shattered expectations about the student experience/medicine in general; gratitude to patients and their families; personal responsibility for care provided to patients; and bias and anger towards patients.

3.1. Themes and responses

Each student narrative contained an average of 3.7 main themes per letter. The frequency of the themes are identified in Table 1.

3.2. Sorrow for patient suffering

Students expressed sorrow about the ways in which patients suffer, including death, unalleviated pain, and vulnerability. Students were saddened by the unfairness of illness, particularly for those who did not actively contribute to their demise (e.g. a patient with cirrhosis who never drank) and suffering that seemed painful and futile:

Table 1
Frequency of themes in student letters ($n = 184$).

Themes from student letters	Number	Percentage*
Sorrow for patient suffering	174	94.6
Regret for care provided by student or team	165	89.7
Shattered expectations about medicine	137	74.3
Gratitude towards patients and their families	90	48.9
Personal responsibility to protect patients	65	35.3
Frustration with or anger towards patients	58	31.7

* The percentage is identified as % of letters containing that theme.