(Almost) forgetting to care: an unanticipated source of empathy loss in clerkship

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CONTEXT The erosion of empathy in medical students is well documented. Both the hidden curriculum associated with poor role modelling and a sense of burnout have been proposed as key factors, but the precise mechanisms by which this loss of empathy occurs have not been elaborated.

OBJECTIVES In the context of a course designed to help students manage the hidden curriculum, we collected data that raised questions about current conceptualisations of the aspects of medical training that lead to loss of empathy.

METHODS We held nine sessions in the first year of clinical clerkship, in which we asked students to bring to the group their experiences of the hidden curriculum for reflection. Course sessions were recorded, transcribed and qualitatively analysed, and themes were generated for further exploration.

RESULTS We identified an identity developmental trajectory in early clerkship in which students started with feelings of excitement, transitioned quickly to 'shock and awe', progressed into 'survival mode' and then passed into a stage of 'recovery'. Interestingly, in the early stages, students' sense of empathic virtuosity was reinforced. It was not until later, when students were more comfortable in their clinical role, that they reported their tendency to connect with the patient only as an afterthought to the encounter, or not at all, and needed to remind themselves to care.

CONCLUSIONS We offer new data for consideration with regard to medical students' loss of empathy during early clinical training that suggest it is the process of making patient care routine that shifts the patient from the status of an individual with suffering to the object of the work of being a physician.

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INTRODUCTION

That students in medical school seem to lose empathy over the course of their medical training is well documented and a source of critical attention.[1,2] Along this journey, students are doing the hard work (whether intentionally or unintentionally) of developing their professional identity, a complex process that involves their transformation from lay person to physician.[3]

This transformation involves internalising and resolving the constructs of the physician as a healer (care, compassion, insight, respect for the patient) and as a professional (competence, autonomy, self-regulation) that are implicit in society's expectations of the physician.[4] A hidden curriculum of negative role modelling and mistreatment has been perceived as a major source of the erosion of empathy (a key element of the physician as healer) that results in 'stamping out the humanistic tendencies of medical students'.[5] Discourses exploring the exact causes of the loss of empathy in medical trainees emphasise two aspects of entry into medical practice: the effect of poor role modelling that compromises patient-centred values,[6,7] and moral distress or burnout that develops as trainees feel exhausted, inadequate and unsupported.[8,9] Unquestionably, both elements (poor role modelling and distress) are present in studies that look at professional identity formation in medical students.[2,5] However, despite extensive research and attention to the intersection of the hidden curriculum and humanism,[5] longitudinal studies have failed to document precisely what is happening to cause this loss of empathy in medical students.[2]

Recent authors have hypothesised that creating a safe space for reflection and discussion might disempower the negative aspects of the hidden curriculum, thereby allowing students to intentionally counteract the impact of poor role modelling and the distressing aspects of practice that start during the first year of clinical clerkship.[10,11] In the context of a course we instituted to help students manage the hidden curriculum, we collected data that raised questions about current conceptualisations of the aspects of medical training that lead to loss of empathy. The primary purpose of the data collection was to explore the extent to which we could prime medical students to notice their interactions with the hidden curriculum, and coach them to process these learning experiences with the explicit goal of empowering them to develop their best professional identity. However, in the process of analysing our data, we made a serendipitous discovery that lends insight into a potential cause of loss of empathy. It is this analysis and interpretation that we offer here.

METHODS

Intervention

During 2015–2016, we piloted GRAPHiC (Guided Reflection About Professionalisation/Hidden Curriculum), a course aimed at providing a safe environment in which to support students' positive professional identity formation in clinical clerkship. A description of this course has been previously elaborated as consisting of four iterative steps: priming; noticing; processing, and choosing (Fig. 1).[11]

Specifically, we asked students to bring to the group their experiences of the hidden curriculum in the clinical environment in order to allow them to process these experiences in a safe and guided group setting with the purpose of identifying and reinforcing their best medical identity. We conducted nine sessions over a period of 10 months, representing the larger part of the students' trajectory of learning from orientation to late in the junior clerkship. Initially, the course was semi-structured in that we asked students to explicitly notice and record their enculturation experiences, and conducted round-table discussions focused on pre-set questions. As the course went on, the students used the course as a forum in which to discuss many aspects of their clinical experiences, and facilitators encouraged students to look inward and to reflect on the effects of these experiences on their own developmental trajectories. Facilitators took a supportive but not prescriptive approach to reinforcing students' perceptions of professional behaviour.

Participants

Having obtained ethical approval from our institution's Behavioural Research Ethics Board, we approached the 26 students who were about to enter clerkship at two distributed sites of our medical school at the end of their second year in medical school through an e-mail that outlined the course and expectations, and included a copy of the letter of consent for the study. As this was intended as a pilot course, we pre-specified that we would conduct the course with a minimum of five students and a maximum of 12. Accordingly, after the first 12

- *Priming*

Preparing students in advance of clinical experiences for their encounter with social pressures in the clinical environment to engage in unprofessional or inappropriate behaviour, and identifying their motivations for conforming or complying with external pressures

- *Noticing*

Training students to become self-ethnographers by documenting their own enculturation experiences and their attendant experiences in the clinical context of pressures to conform

- *Processing*

Guiding students to reflect after their experiences in a safe group and to consider what happened, what they did, what they might have done, what the 'right' thing to do might have been, and what strategies they might try next time

- *Choosing*

Supporting students in selecting behaviours that validate and reinforce their aspirations to develop their best professional identity, and in choosing what to eschew as behaviours and values that are part of the current culture, what they wish to adopt as part of their own professional identity, how to act on these decisions in ways that reinforce their own development but do not alienate them from seniors and peers, and how to be have with humility rather than arrogance when they reject the behaviours and values of others

Figure 1 Schematic of the four-step reflective curriculum.[11] Reproduced with kind permission (Springer)

respondents to our e-mail had consented, we closed recruitment. This was a phenomenological study and was designed to explore the lived clerkship experiences of the students who participated in the course. Facilitators on the course included three clinical faculty staff, a second-year resident physician and a final-year medical student, all of whom were involved in the research project. All facilitators completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE).

Data

Course sessions were audio-recorded and transcribed. Data were de-identified and entered into qualitative data analysis software (NVivo Version 11.0; QSR International Pty Ltd, Melbourne, Vic, Australia). The students were also encouraged to keep journals of their experiences on a secure university website and provided separate consent for the inclusion of individual journal entries in the data analysis. Written and verbal (audio-recorded and transcribed) debriefing discussions between course facilitators were also included as data for analysis.

Analysis

After each of the nine course sessions conducted over a 10-month period, audio-recordings and transcriptions were reviewed and themes were identified for exploration in the next session by the primary investigator in discussion with the course leaders and co-investigators. For the analysis of the larger study, pre-specified nodes were generated in accordance with the primary purpose of the study (exploring the phenomena of priming, noticing, processing and choosing) and the pre-set question ('What are we learning about these phenomena?') with the aim of exploring the trajectory of professional identity formation. Data that did not fit with pre-specified nodes of analysis were further discussed among the investigators and explored by secondary analysis. Emerging patterns in the data were considered and elaborated collectively before the full dataset was recoded by the principle investigator to identify confirming and disconfirming examples of these themes. The results presented below are based on themes that emerged as a part of this secondary analysis.

RESULTS

Twelve students participated in the course and consented to participate in the study. Ten students did so in person and two participated by videoconference from a remote site. The dataset comprised nine GRAPHiC course sessions with co-facilitator debriefing, plus journal entries and

debriefing notes, yielding over 750 pages of transcribed material.

Our study identified an interesting identity developmental trajectory in early clerkship in which students started with feelings of excitement, transitioned quickly to a sense of 'shock and awe' as they gained ringside seats in the medical environment, progressed to 'survival mode', during which they were overwhelmed and started to wonder if this career was right for them, and then passed into a stage of 'recovery' in which they began to feel a sense of having a meaningful place in patient care.

Interestingly, it was only in the third stage that students started to articulate their own sense of a loss of empathy for patient suffering. These stages and their impacts on students' own articulations of their sense of empathy for patients are elaborated in the sections below.

Stage 1: Shock and awe/reinforcement of virtuosity in self

In the early sessions, experiences shared by students tended to have an external focus. Not surprisingly, students readily noticed egregious behaviours in other health care professionals, such as the denigrating of colleagues, speaking disrespectfully when referring to patients, making jokes with racial or sexist overtones and demonstrating poor communication skills with patients (i.e. 'bad role modelling'):

> And just as he broke the news saying this is an adenocarcinoma, you have lung cancer, his phone rang. And he pulls it out, and I'm in there with him, and I'm, like, don't answer that. He's, like, just – I swear to God it was right after he said you have lung cancer. Phone rings. He's, like, I'm sorry, I'm on call, I have to take this. Answers it in the room with the patient, and it was, like, this guy's, like, just sitting there, like, and he carried on with the conversation, looked up the X-rays and everything on a TV. And – or on the computer and then five minutes later he hangs up and says, "Okay, so back to …" and it's, like, oh, my God. And I was, like, this is not how this should have played out.

Students found this type of behaviour by their seniors to be disillusioning and often expressed outrage when reflecting on these experiences:

> You think that these doctors are caring and so on and really you see the hidden side, it's the hidden curriculum, the hidden side of medicine, the backstage of medicine… it was a little disillusioning, you know, if I'm honest.

Interestingly, however, we did not see any evidence in the students' responses to suggest that these experiences led to a 'normalisation' of this behaviour in their minds. Although they did not specifically intervene to stop the behaviour, we did not observe or hear students justifying this inappropriate behaviour in others.

Rather, as students discussed these experiences with one another, there was evidence that these experiences reinforced their own sense of virtuosity and commitment to staying professional:

> I don't want to ever name-call or label patients… who says mean things about babies?! That's just awful…
>
> …that's my mission in third year. I don't want, especially, like, surgical rotations, I don't want to refer to my people, like, to the organs that aren't functioning or whatever it might be, right.

Stage 2: Survival mode/reinforcement of empathy for patients

As clerkship progressed, the number of stories posted in students' private journals decayed. Further, the stories they did tell both in the journals and in the course sessions shifted to descriptions about their struggles in becoming a functioning member of the health care community:

> I was just, like, "I suck. I'm an awful human being, like, why am I in medicine?"

Students also articulated feeling pressure to stay silent in the face of unprofessional behaviour in others and the resulting sense of distress this invoked:

> Like, no, I don't think that's okay. But then what do you do? It's, like, okay well, if I correct you, I'm going to be in trouble. So… but I'm not going to let you know that I think it's okay. So then it's, like, your option is to kind of, like, freeze and stay silent. I don't know, I'm not proud of it, but that's basically what I've been doing to survive.

During this stage, we saw students feeling completely overwhelmed by their experiences, resulting in a sense of burnout. As one of our course leaders commented during a faculty debriefing:

> This transition period is a time that's very vulnerable for these people. And they express a lot of feelings that, like, they're so vulnerable that, like, any little comment, you know, like, not having eye contact or whatever, puts them into this area of despair, where they're not worthy and they are so in desperate need of mentors or friends or anyone that will just be supportive for them.

Although this sense of burnout in students was not surprising, we found that their responses to these feelings of not fitting in and the resulting despair seemed to invoke a stronger sense of empathy for patients, rather than a loss of empathy:

> One thing I think I can take away from this experience is that so many of my patients must feel this way – helpless and burdensome, regardless of what they have done previous to falling ill. I hope the feelings I am going through will only strengthen my ability to empathise with my patients in the future. Otherwise, this all seems very pointless.

Further, in their efforts to manage their sense of inadequacy, students reported increased vigilance for the mistreatment of patients:

> And we see it so clearly. And I'm sure that there are situations – if we, despite how jaded we become, I think there's something so unique about having that – sort of step back to just observe. . .
>
> And what I can do each day. And sometimes I can't do a lot medically 'cause I'm learning. But I can comfort people. I can spend a little bit of extra time with them, and that's been actually really reassuring. So that's my strategy. I don't know if it'll always work but – it's how I'm coping right now.

Stage 3: Hitting their stride (forgetting to care)

In later sessions, students' stories and reflections seemed to shift again, this time in a direction that suggested they were starting to hit their stride. They reported feeling more and more comfortable in their role, speaking the language of medicine, giving better accounts of their patients to their preceptors, and feeling that they were contributing positively to patient care:

> But after a while you sort of see, you know, oh, this patient has an AKI [acute kidney injury], this is how I manage AKIs. This is how I approach them. This is how I figure out what is going on and this is how I manage them. And then you just sort of tailor it a little bit towards each patient. I don't know. It was – yeah, it was kind of remarkable, really, when you think about it.

Interestingly, it was at this stage that students became embarrassed to report their tendency to connect with the patient only as an afterthought to the encounter, or not at all. They described their own tendency to make human suffering feel routine in their interactions with patients through repeated exposure and needed to remind themselves to care. Sometimes their recounting of their experiences consisted of descriptions of the 'technification' of their interactions (i.e. they focused on technical issues rather than on developing an empathic relationship with the patient). One student articulated this in describing an interaction with a specific patient:

> I was on a late-night obs/gyn shift and a patient came in for a quick non-stress test. I think whereas previously it would have been my goal to get to know them a little bit and build something, this was very practical. I think the way it's felt for me, just very professional. But in a – using that kind of a negative connotation and very – it's sterile – okay, this is what we're going to do. This is what we need to do, like, systematic and then leave. And – rather than being warm, I think, I, like, was delivering some of the information or – a bit more – in a way that is unlike myself and in a way that I didn't think I would.

Another student described this process more as a global experience of changing priorities in his interactions with patients:

> I've noticed a change in myself, personally. . . I guess it was always my first priority in second year and in early first – in early third year that a rapport was my sole and – certainly my initial priority. And certainly in second year I didn't really have any other goals,'cause I didn't really

> know anything, so it was just about rapport. "Go in and build rapport." But anyway, I'm noticing now that it's not my first priority at times.

Other students more explicitly described the 'routinisation' of patient suffering and their loss of empathy for the experience of patients. One student, for example, described a moment of noticing himself being blasé about a patient's suicide attempt:

> . . .and maybe it's because I'd seen quite a few suicide attempts and a lot of depression and so maybe it was just so that I was quite matter of fact. . . It was a little routine: "Not another run of the mill suicide attempt", which is scary. That's weird, you know, that's weird. That shouldn't feel that way.

Another student described feeling frustrated with a patient who was struggling to articulate the exact nature of his abdominal pain:

> . . .it's like the fifth abdominal pain of the day and you're kind of just trying to get the information out of this patient. And you catch yourself becoming frustrated with them and you want to be short with them and then you kind of – at least I think I sort of catch myself and be, like, "No. Think about it. This is the first time that they're trying to describe this to someone." You have to put yourself in their shoes and, you know, they don't know the technical terms. They've never tried describing this to someone before.

DISCUSSION

The erosion of empathy in medical students who enter the clinical environment has been well documented.[1,2] Although both a hidden curriculum associated with poor role modelling and a sense of burnout have been proposed as key factors in this process to date, the precise mechanisms by which this loss of empathy occurs have not been elaborated.[10] As we watched through the eyes of our students, we identified an interesting identity development trajectory in early clerkship that replicated the literature's descriptions of both the 'shock and awe' induced by the medical environment and the adoption of a 'survival mode' in which students felt overwhelmed and began to wonder if this career was right for them. Yet, as our students described, these experiences did not seem to be the source of the loss of empathy.

In the 'shock and awe' stage, counter to what we had previously assumed, students' experiences of the hidden curriculum in the medical learning environment tended to lead to a reinforcement of their own virtuosity and commitment to staying professional, or an 'I'll never be like that' attitude. Consistent with previous studies,[12–14] our students discussed being witness to a variety of unprofessional behaviours including objectification and disparagement of patients, callous communication with patients, and disregard for safety and confidentiality protocols. Yet as they discussed these egregious lapses in professionalism by those around them, students alternatively discussed reasons why others might behave this way and developed strategies that would help them guard against these types of behaviour in themselves. The course leaders repeatedly prompted the students to notice situations in which they themselves participated in these types of behaviours and regularly modelled such revelations by reporting personal examples of very similar lapses in professional behaviour. Yet the students were unable to report any instances of their own. Of course, we were unable to ascertain whether the students were not engaging in these behaviours, or whether they simply failed to notice or record them. However, by contrast with other studies that have identified a desensitisation to these aspects of the hidden curriculum,[14] and the subsequent adoption of such behaviours[12] as a result of social pressure and normalising of the behaviour, the reflections offered by our students seemed to suggest that these experiences reinforced rather than eroded their own sense of virtuosity.

In the second stage, 'survival mode', students described having little time for much other than attending to the basic needs of living as they coped with the almost overwhelming clinical work required of an apprentice learning in a high-stakes professional arena. Yet, again, students did not report this as leading to a suppression of the empathic response.[2] In fact, during this period many described an almost heightened empathic response, in which they seemed to more easily identify with their patients and their attendant suffering. Some students found this focus on patient suffering actually helped to remind them of why they had entered medicine in the first place and gave them a purpose in the

clinical setting, despite their lack of clinical experience.

As we continued to follow the students, we heard them recover from the survival stage as they became more seasoned in the role of a medical student and more adept at gathering the pertinent history (the part of the story the attending physician wants to hear), and began to appear more competent and to feel more confident in discussing treatment plans with the patient. This expertise came from the experience of seeing more and doing more, and from teasing out the whys and hows by, for example, comparing the current patient's presentation of a small bowel obstruction with the previous presentation of a small bowel obstruction. The conversations in course sessions often started with more sophisticated discussions of clinical experiences in which the student represented the central actor. Students' language and ability to think like a physician evolved as they were observed by the faculty facilitators. The sessions featured more laughter and more discussion of students' career choices. It seemed as if students were hitting their stride.

Interestingly, it was in this recovery phase that students brought to the table stories of their own loss of empathy. They reported impatience with patients who were having trouble describing their symptoms, annoyance with intrusions into plans made outside of work, lack of connection with patients presenting for mundane tests, and emotional detachment while gathering histories. They described viewing the suffering of patients as part of the clinical presentation and 'remembering to care' as an afterthought, often at the end of a clinical encounter when they realised the encounter had been all about gathering the information required to make a diagnosis and a coherent presentation to the preceptor.

Thus, based on this study, we offer new data for consideration in the discussion of medical students' loss of empathy during early clinical training: that it is the routinisation of patient care that shifts the patient from the status of an individual with suffering to the object of the work of being a physician. There is no doubt that this process is reinforced by various aspects of the hidden curriculum.[15] However, we were struck by the fact that it seemed to manifest in our students most clearly through the process of becoming competent in the core practices of doctoring.

Finally, we would note that although the overall trajectory we have described has the appearance of linearity, there was in fact evidence of vacillation in the students' progress through these stages of 'shock and awe', 'survival' and 'hitting their stride'. Moreover, there were oscillations in their sense of connection with various patients (with intermittent loss and re-emergence of appreciation of the patient as an individual rather than as an object of work). However, by the end of the study (the end of their first clinical training year), students were consistently reporting the shift into the third stage of their enculturation.

Of course, our conclusions are highly speculative because this was not the intent of this study and there are several limitations that should be considered. Our study relied on students' reporting of their enculturation process and required them to 'notice' and record their own behaviours, rather than being observed. We do not know whether the students were unable to notice their adoption of the negative aspects of the hidden curriculum or whether they truly were non-conformists and non-compliers. Further, this part of the study was concluded at the end of the first clerkship year and hence we are uncertain if these students will participate in more egregious acts as they progress in their training and set out on the slippery slope of medical enculturation. We would also note that students were able to notice this shift in themselves, to report it and to remind themselves to care; however, we are not sure how our course might have affected this process in terms of whether we enhanced students' capacity for reflection and efforts to counteract the shift in their empathy, or whether we merely captured these factors in the course's documentation processes. Thus, many questions remain and future studies are required to explore this phenomenon further.

We are nonetheless intrigued by the possibility that poor role modelling and other pernicious aspects of the hidden curriculum may be less significant factors in the erosion of empathy than the simple routinisation of patient care that is enabled by the development of competence as a physician. This is not to suggest, of course, that we need not address these perennial concerns of medical education. Finding ways to address the negative aspects of the hidden curriculum and supporting students through the shock and awe and survival mode stages are important.

However, we may want to further investigate how and why empathy is eroded as students attain competence in clinical work, and we may need to explore ways in which we can help sensitise students to the routinisation of care in order to ensure that as they engage in making their activities as a physician routine, they do not inadvertently come to perceive patient suffering as routine in the process.

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