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Uncovering cynicism in medical training: a qualitative analysis of medical online discussion forums

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ABSTRACT

Objective The development of cynicism in medicine, defined as a decline in empathy and emotional neutralisation during medical training, is a significant concern for medical educators. We sought to use online medical student discussion groups to provide insight into how cynicism in medicine is perceived, the consequences of cynicism on medical trainee development and potential links between the hidden curriculum and cynicism.

Setting Online analysis of discussion topics in Premed101 (Canadian) and Student Doctor Network (American) forums.

Participants 511 posts from seven discussion topics were analysed using NVivo 11. Participants in the forums included medical students, residents and practising physicians.

Methods Inductive content analysis was used to develop a data-driven coding scheme that evolved throughout the analysis. Measures were taken to ensure the trustworthiness of findings, including duplicate independent coding of a sub-sample of posts and the maintenance of an audit trail.

Results Medical students, residents and practising physicians participating in the discussion forums engaged in discourse about cynicism and highlighted themes of the hidden curriculum resulting in cynicism. These included the progression of cynicism over the course of medical training as a coping mechanism; the development of challenging work environments due to factors such as limited support, hierarchical demands and long work hours; and the challenge of initiating change due to the tolerance of unprofessionalism and the highly stressful nature of medicine.

Conclusion Our unique study of North American medical discussion posts demonstrates that cynicism develops progressively and is compounded by conflicts between the hidden and formal curriculum. Online discussion groups are a novel resource to provide insight into the culture of medical training.

INTRODUCTION

Cynicism, defined as a decline in empathy and emotional neutralisation during medical training, is a continued concern for medical educators.[1] [2] One hypothesis about the development of cynicism among trainees is perceived conflict between the formal and hidden curriculum, with the hidden curriculum defined as 'a set of influences that function at the level of organizational structure and culture' that impact the perception of medicine and decision making by medical trainees.[2] [3] Conflicts between the formal and hidden curriculum likely occur when trainees enter the clinical setting and realise the values of patient-centred care are often challenged by the demanding, time-pressured realities of medicine.[4] [5]

There remains some debate in the literature on whether empathy wanes and cynicism escalates as one progresses in training.[6–10] Studies examining the underlying factors that contribute towards increasing cynicism and declining empathy are mostly qualitative in nature and primarily sample students and residents from a single academic institution.[2] [11–16]

Online discussion forums are widely popular and have been leveraged to provide insight into a variety of topics in medical education.[17–19] For medical trainees, online discussion forums such as Premed101 and Student Doctor Network are used to contribute questions, advice and opinions regarding issues in medicine (eg, the residency matching process, perceived competitiveness of specialties), the training process and education.[20] [21] This allows for dynamic sharing of information at various levels of medical training in a safe digital space that can be widely disseminated across institutions and archived for further participation

Strengths and limitations of this study

► Online discussion forums are a novel resource to obtain medical trainees' anonymous perspectives regarding graduate and postgraduate education.
► Online forums allow for dynamic interactions and participation among individuals from several training sites rather than a single academic institution.
► Results may represent a subset of individuals who post on online discussion forums.

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at multiple time points. These digital forums can serve as unique resources to better understand trainee cynicism and the hidden curriculum.

Our goal was to perform a qualitative content analysis of online medical discussion forums (Student Doctor Network and Premed101) to explore trainees' perceptions of cynicism, when cynicism occurs, whether cynicism is progressive through medical training and the factors that enable and constrain the development of cynicism. We also sought to examine the impact of the hidden curriculum on the development of cynicism.

METHODS

Online discussion boards are categorised by topics known as threads, which feature questions, observations or conversations points. Online forums have provided users with more 'democratic' landscapes where they can share spontaneous narratives. These narratives represent a rich collection of emotional discourse, which are ideally suited for qualitative analysis, because this is where the tension between the lived experiences of medicine, healthcare, hidden curriculum, learning, expectations, behaviours and their interpretations exist. Commenters may reply to the original thread and to each other in text format on these discussion boards, which result in records that can be downloaded. We examined original postings and response posts from Premed 101 (http://forums.premed101.com/), a Canadian website, and Student Doctor Network (SDN) (http://www.student-doctor.net/), an American website, specifically looking for threads pertinent to the development of cynicism. These two forums are the most widely used discussion forums among medical professionals in their respective countries, which was why they were chosen for analysis in this study. In order to identify threads for analysis, we used a purposeful sampling strategy, and a study member (JZP) completed a preliminary scan of discussion forum content and posts from 2010 to 2016 for relevance to the study topic. Based on the initial scan and most common terms noted in relevant threads, a keyword search was then conducted to locate additional threads and posts using the following search terms: 'cynicism', 'empathy', 'mental health' and 'medical school stress.' Once the preliminary review was complete, the team met to discuss forum content and select threads for inclusion based on relevance to the topic. Following this initial selection, threads were examined in a stepwise fashion with the understanding that the final sample size would be determined by the analytical requirement of data saturation and that additional threads would be reviewed as required.[22] We progressed gradually through analysis until no new ideas could be derived from the review of successive data and the collection of new data did not offer further insight on the topic.[23] At this point, theoretical sufficiency was reached and data collection was complete.[24] Data was imported into NVivo11 (QSR International) to facilitate data management.

We used a qualitative approach to perform inductive content analysis to identify the key themes in the discussion threads. During analysis, data was examined repeatedly in order to discern patterns and themes.[25 26] The process of coding the data and recognising the overarching themes and sub-themes involved three main stages: open coding, axial coding and selective coding.[27 28] First, two researchers trained in qualitative methods (JZP and CC) reviewed the data independently, line-by-line, to identify patterns and generate a set of preliminary codes.[26] The research team (JZP, CC and AD) then met to discuss initial impressions of the data and the preliminary codes. Second, during the axial coding phase the code set was revised, refined and regrouped into themes, highlighting areas of similarity and differences. The research team (JZP, CC and AD) assembled during this phase of analysis to review and discuss the axial coding. Finally, during selective coding, a general description of the research topic was formulated and the central phenomenon was constructed from the data. Codes were re-organised around unified themes. At this final stage, the research team (JZP, CC and AD) met to discuss themes, review the selected quotes and establish concurrence. JZP and CC also searched threads for positive deviants that challenged the existing themes. The trustworthiness of our findings was enhanced through the use of multiple independent coders, and team consensus building discussions at all three phases of coding. We conceptualised the varied perspectives of the research team members as an essential component of the interpretive process. The research team also maintained a detailed audit trail of all coding and data-related decision making.

Ethical considerations
The Children's Hospital of Eastern Ontario Research Ethics Board approved this research protocol prior to study commencement. While individual-level informed consent was not required for the analysis of aggregate data, we elicited permission from individual commenters prior to including direct quotations of comments or postings in the discussion threads. These select commenters were contacted privately via direct message to seek permission to include their anonymised quote in study publications and materials, and all commenters were given the opportunity to review their quote prior to its inclusion.

Patient and public involvement
Patients and the public were not involved in the design or conduct of the study; however, a link to this article will be posted to both the Premed 101 and SDN discussion boards upon publication.

RESULTS
A total of 511 posts from seven discussion threads in Premed 101 and SDN were included in the analysis (see table 1). A total of 205 posters participated in these discussion forums. Commenters self-identified as medical

Table 1 Summary of discussion threads analysed, discussion forums and country of origin for each thread and the number of posts examined

Thread name	Discussion forum and country of origin	Number of posts/ posters
1. Excessive and unnecessary stress on med students	Student Doctor Network—USA	269
2. How does med school change a person?	Student Doctor Network—USA	22
3. My theory on why med students show decline in empathy	Student Doctor Network—USA	46
4. Why the cynicism	Student Doctor Network—USA	54
5. Mental health in medical school	Student Doctor Network—USA	29
6. What they don't tell you before getting into medicine	Premed101— Canada	42
7. Is it possible to finish med school without becoming too salty or cynical?	Premed101— Canada	49

students, residents and faculty staff, although not all commenters stated their level of training. Two posters were from other career backgrounds such as pharmacy and dentistry. We constructed three overarching themes and six sub-themes in our analysis. (See table 2)

Challenges inherent to the hierarchical and demanding nature of medicine

A common discussion topic in the online forums was the challenging nature of medicine and medical training.

Table 2 Themes and sub-themes from discussion group analysis

Themes of the hidden curriculum	Pertinent sub-themes
Challenges inherent to the hierarchical and demanding nature of medicine	*The progression of cynicism over time* *The reinforcement of hierarchy that creates an unpleasant work environment* *The pressure to work long hours and high demands for efficiency*
Challenges of safeguarding well-being	*Lack of support as a major stressor* *Consequences of cynicism on physician well-being and patient care*
Culture of tolerance of unprofessional behaviours throughout training and across generations	Not Applicable

The following sub-themes were recognised: *the progression of cynicism over time in medical training; reinforcement of hierarchy in medicine that creates a challenging work environment* and *the pressure to work long hours and high demands in medicine.* Interestingly, there was widespread consensus that empathy declined and cynicism increased during the medical training process and no positive deviants were noted.

Progression of cynicism over time in medical training

There was consensus that the loss of idealism in medicine and feelings of cynicism occurred during the course of training from student to physician. Discussion posts emphasised that this occurs when patients are seen as a diagnosis rather than as people and as trainees become clinicians who prioritise efficient practice.

Although trainees are exposed to the physical and mental struggles faced by patients on a daily basis, the discussion groups revealed that this aspect of the clinical environment seemed to contribute less in creating cynicism. Rather than long work hours and a heavy workload, trainees expressed that perception of their low rank, worthlessness and disrespect from mentors led to emotional neutralisation. Consequently, they highlighted that time points in which cynicism predominates are transitions from pre-clerkship to clerkship and beyond. Cynicism was portrayed as a 'staircase' that the trainee climbs during their career path rather than sporadic changes in attitude from individual clinical encounters. As students become more exposed to 'real doctoring' in the clinical setting, cynicism may be a coping mechanism designed to protect oneself from hardships that one observes and experiences during medical training.

> I personally know folks that are more jaded and clinical thinking now. People are less than people…. more a diagnosis. (Thread 2)

> I think there is a major shift in cynicism throughout medical school… There's an even bigger increase in cynicism as you go through clerkship. Hours are long, call is frequent, and you are always the low-person on the totem pole rotating into an unfamiliar specialty/ward. You also start to really experience the widespread dysfunction in medicine, and finally get lots of 1 on 1 time with bitter interns/residents/staff. You will probably get treated like crap by a higher-up at least once, if not frequently. (Thread 7)

Reinforcement of hierarchy in medicine that creates a challenging work environment

Medical students and clerks were in agreement that some of the greatest challenges they faced stemmed from the learning environment in the clinical context rather than the formal requirements of content and curriculum. Professional training was described as being cut-throat and competitive, hindered by administrative policies, long hours and the need to constantly maintain high level performance. Posters addressed the work culture

challenges of residency that contributed to an overarching sense of not being respected or valued, including having limited control over scheduling, exposure to challenging colleagues and situations and a general lack of recognition and support. It was believed that long work hours were a symptom of larger cultural problems in medical education rather than the root cause of the negative experiences.

> That said, work hours are a symptom of the main problem: the attitude in medicine that treats residents (and to a lesser extent staff physicians and medical students) like they somehow don't have the same human needs as everyone else. Long work hours, lack of schedule control, lack of appreciation, and all the other forms of disrespect you list. (Thread 7)

> Except what most people don't realize is the insane amount of unnecessary bureaucracy, unprofessional behaviour by superiors that goes unchecked, and sometimes toxic culture of the 'Dedicate it all and to nothing else', or you are a 'slacker'/'loser" type etc. (Thread 6)

Pressure to work long hours and high demands for efficiency

Sleep deprivation was repeatedly noted among students and residents as a major reason for feeling unhappy during training. Trainees shared a sample of their schedule, where working in the hospital often meant staying for long hours and subsequently arriving at early times for the following day.

> Vampirish and inhumane hours, 12–15 hour days or staying up all night and then (if you're lucky) sleeping a few restless hours during the day only to then go do it the next day/night, 6 or 7 days a week, for 3–7 years. (Thread 1)

The reported consequence of devoting the majority of one's clinical hours to meeting the demands of medical training included the breakdown of interpersonal relationships outside of the hospital. Trainees felt isolated, as they felt it challenging to have social interactions when work hour demands are rigorous. Students, residents and staff described this barrier as a cause of personal grief and feelings of isolation, which may contribute towards cynicism in all stages of medical training.

> Above all, the breakdown of old relationships and the inability to form new ones… I don't think age takes the sting off of any of these. (Thread 1)

Another conflict shared by trainees pertained to wanting to meet staff demands while simultaneously balancing the amount of time spent directly with patients. For example, in order to get work done in time for rounds, some patient needs were bypassed. Several trainees expressed that the desire for efficiency and pleasing staff resulted in the objectification of patients and eventual loss of compassion.

Posts have attributed this desire for efficiency as a healthcare system issue that aims to quickly move patients in and out of hospitals. Commenters emphasised that doctors start out as genuine, but become jaded after trying to keep up with the highly demanding system for long periods of time.

> …we all want to be 'good doctors', do the right thing. The sad thing is that after a year or two of 1/4 call, where your worth as a person is determined by how quickly and efficiently you can keep the system moving, all of that goes out the window. It is a broken system that makes broken doctors. (Thread 7)

> It's definitely happened to me as a clerk and in the first few months of residency, especially on off-service rotations, but on-service too, where I just haven't had the time or the energy to do things for patients that I really would like to be able to do. (Thread 7)

Challenge of safeguarding well-being

The desire to maintain a sense of balance and well-being, professionally and personally, was a topic of discussion in the online boards. The following sub-themes were recognised: *the lack of support as a major stressor*, and *the consequences of cynicism on physician well-being and patient care*.

Lack of support as a major stressor

Overall, residents described feeling undervalued for their work in hospitals. In some instances, residents pointed out that their pay did not correspond to the high stress environment that they were constantly working in, as well as the long, unpredictable hours. These sentiments were expressed in both the Canadian and American contexts on the online discussion forums. The sense of inadequate support from peers, colleagues and, in particular, supervisors also seemed to stem from a sense of impaired autonomy over work and personal life schedules, constantly having to relocate and adapt to working in unfamiliar and new environments, and general isolation due to work commitment. Posts repeatedly highlighted how aspects of residency training neglected 'basic human needs' and failed to consider trainees' personal well-being due to prioritising work needs.

> After all, surgical (residents) have the same requirements for a healthy lifestyle as other residents, despite the occasional assertion to the contrary. Surgeons still need to sleep, eat, exercise, socialize and spend time with their families, just like everyone else. (Thread 7)

Several medical students discussed lacking support in terms of the discordance between meeting their attending's demands and their syllabus expectations. Students repeatedly emphasised their 'low status on the totem pole' in the clinical environment, and felt that this lowly status instilled a hesitance to advocate for change due to fear of poor evaluations or seeming unprofessional if reported to the clerkship director. Students also emphasised that

advocating for improvement seemed futile as they cannot resign from the job of a medical student if they are truly unhappy during a placement, and would rather tolerate mistreatment than risk poor judgement from preceptors.

Consequences of cynicism on physician well-being and patient care

A common theme across discussion boards was the consequences of progressive cynicism throughout medical training, which likely had a negative impact on physician career satisfaction, the quality of patient care and the quality of mentorship for future generations. Many also highlighted the intergenerational transmission of norms and how unhappy doctors tend to produce more unhappy doctors.

Medical trainee mental health was raised in a number of discussion threads related to career satisfaction. Commenters noted the high rate of poor mental health documented among medical students and residents compared with other professions. However, several students and residents were hesitant to seek help because they feared that this would be perceived as a sign of 'weakness' in a field where professionalism and perseverance are highly valued. Overall, commenters felt that contributing factors to poor mental health should be addressed rather than criticising individuals who have a reduced quality of life and difficulties in work–life balance.

Acknowledging cynicism in medical school also prompted individuals in the discussion groups to recognise the implications of mentorship. They advocated for the need for more focus on the consequences of cynicism in medicine. Posts praised the existence of forums that discussed the nature of cynicism in medicine, acknowledging that open dialogue and information sharing can support change, such as creating more informed pre-med students, promoting mental health programmes in medical schools and residency and working towards improving work environments rather than perpetuating shame in medicine.

Culture of tolerance of unprofessional behaviours throughout training and across generations

Commenters felt that unprofessional work environments in medicine were slow to change due to the stigma among students and residents that feeling overwhelmed is an indication of being inadequate. Unprofessional behaviour in this context typically referred to a lack of respect that trainees received from supervisors and trying to meet high demands in medicine that may compromise good patient care. Consequently, trainees are afraid to seek help or admit to being overworked in an environment where individuals are typically very high achievers and set high expectations for themselves and their colleagues. The perpetuation of stressful work environments may be due to transmission of norms, namely preceptors normalising the challenges they experienced in their formative years and then maintaining similar conditions for their trainees.

I've seen so many residents embrace the attitude in this weird form of quasi-Stockholm Syndrome, where they downplay, excuse, or even support the negative aspects of being a resident all while their quality of life suffers. I understand it as a coping mechanism, but it keeps that attitude alive for the next generation of residents. (Thread 7)

A culture in medicine that reflexively defends the sucky parts of medicine as necessary or desirable isn't a culture that's likely to promote change. (Thread 7)

Students and trainees acknowledged that the harsh work environment and lack of respect from supervisors posed a greater challenge than solely long work hours. However, the culture to prevail and achieve in medicine was again brought up as the reason for continued silence.

It is the med-school culture. There is little support. Students just don't admit how hard it is. There is an unsaid stigma that feeling stressed/overwhelmed/exhausted/or hurt makes one 'weak' in medical school. (Thread 5)

Ultimately, the consequence of defending a culture that pushes for high efficiency and achievements at the expense of the individual's well-being was viewed as a barrier to progress in medical education.

It is still so difficult for people in medicine to open up about their struggles (with balancing efficiency vs learning). When these disclosures are met with criticism, it encourages everyone else who may be unhappy with their situation to continue to suffer in silence. (Thread 6)

DISCUSSION

In the present study, we used an novel analysis of discussion posts to explore cynicism by Canadian and American medical students, residents and faculty members and uncovered three key themes: (1) the challenges inherent to the hierarchical and demanding nature of medicine; (2) the need to safeguard well-being and (3) the culture of tolerance of unprofessional behaviours.

Results from previous studies have not made a definitive conclusion on whether empathy declines as medical students enter their clinical year of training. While some studies note that the first drastic decline in empathy and loss of idealisation occurs in third year of medical school, others have suggested that changes in empathy levels do not differ significantly as medical students and residents progress in their training.[16 29–33] Our analysis of online discussion forums supports the notion that the loss of empathy and development of cynicism are progressive in nature and evolve largely during the transition from pre-clerkship to clerkship. This may occur because clerkship students are faced with similar clinical challenges and ethical dilemmas as the rest of the medical team, but have a minimal authoritative role. Being in this position

makes students more vulnerable to influences by their mentors, and students may feel conflicted when their personal values of 'good doctoring' do not align with preceptors' practices of 'real doctoring.' Our results align with other studies demonstrating that the hierarchical nature of medicine and poor role modelling can create unprofessional work environments and increased stress on trainees. This unprofessionalism may be more distressing than frequent exposure to traumatic clinical cases.[8 34 35]

Testerman *et al* have proposed two models for the development of cynicism: (1) the intergenerational model, where a student's cynicism occurs progressively as a coping mechanism to mistreatment by cynical residents and staff and (2) the professional identity model that suggests cynicism among trainees declines as individuals attain a higher authoritative position and become more confident in dealing with the contradicting values of the formal and hidden curriculum.[12] Testerman *et al* supported the professional identity model because they noted a decline in cynicism among staff who achieved a 'professional identity,' as compared with residents and students. Results from our study, however, seem to favour the intergenerational model, as residents describe being more cynical during residency when compared with medical school, and attribute this progression to a 'staircase' that one climbs throughout training. This conceptualisation of the development and progression of cynicism was also noted in a study by Griffith *et al*, who found that in the first 5 months of postgraduate training, residents perceived their patients with less idealistic values.[36]

Research has linked elements of the hidden curriculum to the development of cynicism. In a study of internal medicine residents, Billings ME *et al* demonstrated that the hidden curriculum, and specifically unprofessional behaviour from colleagues, nurses and patients, correlated with residents' level of depersonalisation, emotional exhaustion and level of cynicism.[37] Similar to our findings, residents from this study also attributed belittlement from staff, lack of control over scheduling, loss of autonomy in the clinical setting and poor work relationships as factors that led to burnout. Increasing cynicism among residents parallels the pattern of increasing cynicism among medical students; both medical students and residents start medical school and internship with higher empathy and lower emotional distress, but experience a decline in empathy over time.[7 29] Our findings suggest that there may be a 'double hit' scenario, where trainees are most vulnerable to increased cynicism when transitioning to clerkship, and then again when transitioning to residency. It has been posited that this may be a protective mechanism at times of transition.[14 15]

Emotional neutralisation, a consequence of cynicism, carries a negative connotation during the early medical training process. That said, practising physicians view emotional neutralisation as a coping mechanism to sustain the various clinical, hierarchical and system challenges that one faces in medicine.[38] Our findings support

that cynicism occurs when trainees cope to safeguard their personal well-being in a highly demanding work environment. The impact of cynicism among physicians is substantial; consequences include a decline in professionalism, burnout and a loss of empathy that can ultimately jeopardise patient care.[1 37 39] In order to mitigate these consequences, an understanding of how and why cynicism develops is key. Online forums provide a holistic view on this topic by presenting diverse perspectives from geographically dispersed individuals, and across the spectrum of training and practice.

As emphasised in previous studies, our findings also support the importance of role modelling and mentorship in addressing cynicism and the hidden curriculum.[40–44] Students and residents seek inspiration from mentors and experience more idealism when they identify positive role models.[7 45] On the other hand, the lack of positive role models, such as being taught by cynical residents and staff, facilitated the development of cynicism and a decline in empathy among medical students.[1 37 46] Results from our study support the notion that mentorship and positive role modelling should be made available throughout medical training, such that professional attitudes and support can be passed on from staff to trainees. Mentorship structures should be reinforced during the transition period from pre-clerkship to clerkship, and from medical school to residency, as these seem to be key moments when there is a potential increase in cynicism and decline in empathy. While the concept of mentorship in reducing cynicism is not a novel recommendation, this study highlights that although issues pertaining to the hidden curriculum have been acknowledged in the medical literature, they continue to persist in daily medical culture.

A major strength of this study design is that online discussion forums allow for a greater understanding of cynicism and the hidden curriculum at an international level due to the ease of access to forums by users from Canada and the USA. That said, given the we were unable to isolate the geographical location of posters, this study does not allow for a detailed commentary on potential areas of congruence or divergence between nations. Over the last 10 years, there has been increasing evidence from studies done at single academic institutions that cynicism progresses from non-clinical to clinical years.[2 11 14 15] Our study expands on this idea and may carry greater external validity given that the viewpoints from discussion forums reflect those of individuals from several institutions, levels of training, and specialties. The capacity for user anonymity on forums promotes dynamic interactions between individuals with lower risk of consequence. These forums create a democratic space for sharing emotionally powerful experiences that highlight the tension between the realities of medicine as influenced by the hidden curriculum and personal expectations of good doctoring. Online discussion forums can also minimise social desirability response bias, which may be present in other qualitative methods that involve face-to-face interaction with

peers and colleagues, such as focus groups involving staff, residents and medical students. In a discussion forum, the hierarchical nature of medicine is minimised such that the pressure to respond in a manner perceived as acceptable or one that aligns with the dominant discourse are lessened.

Our study has some notable limitations. Contributors to discussion forums may be biased towards individuals who use forums to discuss their concerns and provide support for others on the site. Discussion posters in this study may comprise individuals who feel more vulnerable and are reaching out anonymously for this reason, and they may in fact be more cynical that the general medical community. Although commenters on the discussion boards did not identify their country of origin, we assume that most commenters are residents of either the USA or Canada, reflecting North American medical practice. Additionally, our purposeful sampling and selection strategy of threads for inclusion in analysis could have introduced bias. For example, by selecting threads that explicitly examined cynicism, we may have inadvertently excluded threads containing divergent or opposing views. Finally, we obtained agreement from discussion board commenters retrospectively to include their verbatim quotes. This limited our sample of quotes for inclusion as some commenters may not have been active on the discussion boards at the time we contacted them and did not reply to our request for permission. In those instances, the content of postings was summarised and described but the verbatim quotes could not be included for publication.

Ultimately, cynicism among doctors has been shown to affect the quality of patient care.[47 48] Addressing and acknowledging cynicism as a main theme of the hidden curriculum can serve as an initial step in establishing true patient-centred care.

CONCLUSION

Our unique study has demonstrated the potential for online discussion groups to provide unique insight into the culture of medical training. Our findings highlight that exposure to the differing values of the formal and hidden curriculum seems to impact cynicism in trainees at all stages of learning, particularly at transition points. Interventions that can help reduce cynicism could focus on decreasing the gap between the formal and hidden curriculum that is passed on through stages of medical training. Examples of such interventions include mentorship and positive role modelling, especially at transition periods from pre-clerkship to clerkship and from medical school to residency. Future studies could explore perceptions and attitudes among trainees at key transition points to further examine how cynicism evolves between various stages of training.

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