Moderator: To Be Determined

# Humanism, the Hidden Curriculum, and Educational Reform: A Scoping Review and Thematic Analysis

Maria Athina (Tina) Martimianakis, PhD, Barret Michalec, PhD, Justin Lam, Carrie Cartmill, MHSc, Janelle S. Taylor, PhD, and Frederic W. Hafferty, PhD

## Abstract

### Background
Medical educators have used the hidden curriculum concept for over three decades to make visible the effects of tacit learning, including how culture, structures, and institutions influence professional identity formation. In response to calls to see more humanistic-oriented training in medicine, the authors examined how the hidden curriculum construct has been applied in the English language medical education literature with a particular (and centering) look at its use within literature pertaining to humanism. They also explored the *ends* to which the hidden curriculum construct has been used in educational reform efforts (at the individual, organizational, and/or systems levels) related to nurturing and/or increasing humanism in health care.

### Method
The authors conducted a scoping review and thematic analysis that draws from the tradition of critical discourse analysis. They identified 1,887 texts in the literature search, of which 200 met inclusion criteria.

### Results
The analysis documents a strong preoccupation with negative effects of the hidden curriculum, particularly the moral erosion of physicians and the perceived undermining of humanistic values in health care. A conflation between professionalism and humanism was noted. Proposals for reform largely target medical students and medical school faculty, with very little consideration for how organizations, institutions, and sociopolitical relations more broadly contribute to problematic behaviors.

### Conclusions
The authors argue that there is a need to transcend conceptualizations of the hidden curriculum as antithetical to humanism and offer suggestions for future research that explores the necessity and value of humanism and the hidden curriculum in medical education and training.

As a conceptual tool, the hidden curriculum (HC) traces its intellectual heritage to the fields of sociology and education.[1] In the latter decades of the 19th century, sociologists began to direct critical attention toward understanding the impact of social structures on individual behavior and the overt and covert subjective meanings individuals attribute to their own and others' social actions. Later social scientists began to explore how some behaviors became popularized or normalized, tracing the relative impact of formal versus informal social norms and the pivotal role played by social relationships in the formation of group norms and culture.[2,3] These lines on inquiry led to work in the 1940s and 1950s on how professional groups such as medicine were both formally and informally organized,[4] including the need to differentiate between the curriculum on paper and something academics were beginning to label the "informal curriculum."[5] It would be well into the 1960s, however, before the term "hidden curriculum" would make its first appearance.[1]

Studies in the field of education, with an eye toward discriminating between the formal and informal dimensions of educational practices, began to surface in the early decades of the 20th century. John Dewey[6] drew attention to the power of "collateral learning," a concept he used to describe learning that happens in the process of doing other things, alluding to the wealth of learning environments that exist outside the classroom. Concurrently, others began pointing to the "experience of curriculum in action,"[7] the impact of "informal education,"[8] and "the informal learning experiences in the school."[9] What emerged was a view of education as a "sociocultural process"[10] in which both personality development and cultural reproduction coexisted as mutually influencing entities.[11]

The two earliest studies of medical education, *The Student–Physician* (1957) by Robert K. Merton and colleagues[12] and *Boys in White* (1961) by Howard Becker and colleagues,[13] had direct impact on what subsequently would be termed "the hidden curriculum." Merton's writings on manifest (conscious and deliberate) functions versus latent (unconscious and unintended) functions, his theory of unintended consequences, and his work on role modeling and modeling were direct precursors to work on the HC. For Becker, the linkages are more direct with his detailed earlier studies on educational settings and the influence of social stratification, social class, and social status on student learning[14,15] along with his subsequent scholarship on latent culture, latent social roles,[16] and the existence of a "student culture" in medical schools.[17] Finally, the role of "place" was

Correspondence: Maria Athina (Tina) Martimianakis, PhD, Hospital for Sick Children, RM 7292, 555 University Ave., Toronto, ON, M5G 1X8; e-mail: tina.martimianakis@utoronto.ca.

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an important ingredient in the rise of the HC as a conceptual tool.

A critical mass of work on the HC began to emerge in the 1960s and early 1970s.[18,19] Today, the concept of the HC is applied to a wide variety of educational settings.[1,20–22] Issues using this lens stretch from admissions to accreditation and from the topic of the educational experience and professional identity formation to more point-specific topics such as CME,[23] faculty development,[24] the creation of the "worthy patient,"[25] and the production of heteronormativity during medical education leading to the privileging of heterosexuality and the marginalization of LGBTQ orientations.[26]

Scholarly work using the HC as an analytic lens remains more entrenched within education than sociology. In sociology the focus on implicit influences is related to "social systems," "social structure," and "organizational culture." Nonetheless, when either of these two disciplines attempts to wrestle with the more tacit dimensions of social life, including issues of socialization and cultural reproduction, along with the impact of factors such as power, hierarchy, and social class, both owe greatly to Marxist, feminist, and antiracist social analysis.[27,28]

Within this overall topography, issues of humanism have had an enduring presence in medical education, reflected in writing throughout the 20th century concerned with the balance between the "art" and "science" of medicine; whereas the art of medicine represents the relational aspects of care underpinned by a liberal education.[29,30] Focus on the art of medicine was temporarily eclipsed by the technological and pharmaceutical innovations that ushered in biomedicine, bringing with it an educational preoccupation with developing physician expertise through scientific training.[30,31] However, this preoccupation with science has been criticized steadily for the perceived effect it has had on physician and patient interactions. Today, calls for refocusing medical training on caring for the patient as a person appear regularly in literature pertaining to professionalism,[32–36] interprofessionalism,[37,38] ethics,[39,40] and empathy.[41–43] As the field of medical education developed the tools to understand how espoused values in formal curricula could be undermined by educational and work practices, conversations related to the HC and humanism started to intersect, bringing us to our current exploration.

The aim of our paper is to (a) explore how the construct of the HC is framed and operationalized in the English language medical education literature as an analytical tool in relation to humanism and (b) describe the pedagogical mechanisms, objects, and processes proposed and practiced through the application of the HC concept in reform efforts to nurture and/or increase humanism in health.

## Method

### Compiling the archive

We used a scoping review and thematic analysis approach that draws from the tradition of critical discourse analysis to elucidate the conceptual and theoretical intersections of the HC and humanism in medical education.[44–46] Scoping reviews are broad explorations to systematically map a topic area, identifying key concepts, trends, and gaps. Critical discourse analysis is used to identify and describe patterns in the application of terms and concepts in texts.

The research team met several times to discuss how to sample for articles related to both the HC and humanism. Through consultation with a librarian, MEDLINE was searched using a combination of MeSH terms and free-text terms related to the HC (e.g., "hidden curricul*," "tacit curricul*," "Informal curricul") and humanism, for articles published from 1990 onward, and by limiting returns to six main research journals in the field of medical education, considered mainstream reading for medical educators: *Academic Medicine*, *Advances in Health Sciences Education*, *BMC Medical Education*, *Medical Education*, *Medical Teacher*, and *Teaching & Learning in Medicine*. We theorized that the date 1990 would be a good starting point for looking at the association between the concept of HC and humanism, as the first paper using a formal definition of the HC construct in health professions education appeared in *Academic Medicine* in 1994.[47] The research team, drawing on their combined experience with the topics HC and humanism, and together with the librarian, devised a list of additional search terms including caring and compassion, patient/person/family centered, and empathy. We also included terms such as professionalism, ethical and/or moral erosion, and burnout, among other terms, as our combined experience with these literatures suggested that connections to humanism might also be found there. These constituted entry points for identifying articles that linked the concept of the HC with an interest in humanism. We were also attentive to alternate ways of thinking about humanism during our analysis phase. We included in the archive all types of articles (editorials, research papers, commentaries, discussion papers, etc.). Following this broad search we identified N = 1,887 articles as having relevance for this study.

Selection of articles for inclusion in the final archive was determined using a deductive approach: (a) We automatically included articles that directly focused on or explicitly mentioned the "hidden curriculum" or associated terms (informal, implicit, tacit curriculum) and addressed issues/topics related to humanism; (b) we also included articles that did not explicitly use the term "hidden curriculum" or its associated terms if authors of these articles made statements indicating that structures, culture, relationships, and the learning environment impacted in some way the socialization of medical students to a humanistic perspective; and (c) we excluded articles addressing issues/topics related to humanism (including how to teach humanism) if the authors of these papers did not relate their work to the HC, as per conditions "a" and "b" described above.

Our research associate (C.C.) consulted with one of the study investigators (T.M.) when there was uncertainty about the relevance of a particular article to the research; thus, T.M. sorted a significant portion of the archive. We further delimited the study during the analysis phase (see below). Sorting of the articles (regarding inclusion/exclusion and categorization) also constituted a sensitizing phase (i.e., familiarization with the literature included in our archive and the deeper level of sorting to begin identifying/developing actual codes) to particular issues, topics, and concepts that serve as "connective tissue" between the

HC and humanism. Initial parameters for the first phase of analysis were based on several discussions among the research team. Team members drew on their own respective experiences with both the concepts of the HC and humanism, while the research associate (C.C.) and medical student (J.L.) drew specifically on their initial impressions from reading the literature included in our archive. From these discussions, broad categories for coding were identified/developed and then uniformly applied to the entire data set (see Supplemental Digital Appendix 1 at http://links.lww.com/ACADMED/A301).

We removed articles from the archive that did not help us address at least one of our study objectives. As the analysis progressed we made a further delimitation to the archive: (d) We excluded articles related to professionalism that referenced explicitly or implicitly the HC and its associated terms, but did not relate to caring and compassion attributes of humanism. Following this three-tiered sorting process, we identified N = 200 articles as directly relevant to our study. These constitute our final archive (see Supplemental Digital Appendix 2 http://links.lww.com/ACADMED/A301).

### Analysis

During the sensitizing phase, three team members (C.C., T.M., B.M.) read the same N = 10 articles to identify how authors were using the terms HC and humanism. They presented very similar findings/codes and a high degree of agreement regarding code conceptualization by working together to consolidate coding terms and phrases. Core areas of focus started emerging including a perceived conflation between professionalism and humanism, a strong focus on managing the HC to avoid erosion of humanistic attributes, and a wide array of attributes associated with humanism. The analysis continued with C.C., T.M., J.L., and B.M. randomly selecting an additional 100 articles (25 articles each) to be read and coded. Once again, the four members recorded very similar findings related to the emergent categories of focus and the previously agreed-on open codes and subcodes. Their observations were discussed with the entire team, and a final coding structure was determined which included codes related to definitions of the HC and humanism, actions taken to manage the HC, targets of these actions (i.e., individual, curricular, culture, system, theoretical), and links between the HC and humanism. The team also kept track of who was writing about the intersection of the HC and humanism, the disciplinary background of the scholars, and the attributes that scholars associated with humanism. The final stage of analysis included application of these codes to the entire database by J.L. in consultation with T.M. and tabulating the results into visual representations to ascertain trends that cut across the entire data set.

We provide detailed demographic information below related to our final archive and address each of our aims individually to provide a clearer and more concise discussion on the interaction of the concepts of the HC and humanism within medical education literature.

## Results

### Demographic findings

The majority of the articles in our archive were published after 2000 and in the journal *Academic Medicine* (see Table 1). A little over 30% of the texts were review articles or discussion pieces, with no empirical data. A few of these included formal literature reviews, though the majority were narrative, topical, or historical reviews and general discussion pieces. Of the empirical articles, most were qualitative research studies (approximately 25%) employing a variety of methodologies and methods including case study, interviews, and observations. The quantitative studies (approximately 12%) in our archive primarily used survey methods or inventory/scale results. About 12% of the archive consisted of descriptions of curricula, programs, or tools. Of these, a few were formal program evaluations. Commentaries and letters to the editors made up less than 12% of the archive (see Supplemental Digital Appendix 1 http://links.lww.com/ACADMED/A301). There was a wide breadth of geographic focus in our archive with papers commenting on or exploring learning contexts from around the world—namely, Australia, Canada, Finland, India, Italy, Lebanon, Malaysia, the Netherlands, Saudi Arabia, Scotland, Slovenia, Sri Lanka, Sweden, Taiwan, Uganda, the United Kingdom, and the United States. However, most papers (66%) focused specifically on Canada or the United States. We made note of the disciplinary locations of all authors as far as it was possible to determine from their departmental affiliations and, when available, their educational credentials. Some individuals provided multiple disciplinary affiliations either through appointment or training. From this demographic coding we determined that our archive reflects a dominant medical education/clinical viewpoint (i.e., authors with MD degrees working in teaching or educational leadership positions and/or appointed to medical education centers/divisions; authors with other clinical expertise such as nursing, occupational therapy, and pharmacy), with contributing perspectives from individuals with backgrounds in behavioral sciences, social sciences, and humanities. Specifically, there were authors in our archive with backgrounds in cognitive science, psychology, social psychology, sociology, epidemiology, history, law, philosophy, anthropology, biomedical informatics, English, and literature.

Table 1
**Archive Demographics**

| Characteristic | No. of articles |
|---|---|
| **Article inclusion** | |
| Articles identified from literature review | 1,887 |
| Excluded from analysis | 1,687 |
| Included in analysis | 200 |
| **Article inclusion by journal** | |
| *Academic Medicine* | 123 |
| *Medical Education* | 42 |
| *Medical Teacher* | 14 |
| *Advances in Health Sciences Education* | 8 |
| *BMC Medical Education* | 8 |
| *Teaching and Learning in Medicine* | 5 |
| **Article inclusion by date range** | |
| 1990–1994 | 5 |
| 1995–1999 | 25 |
| 2000–2004 | 38 |
| 2005–2009 | 65 |
| 2010–2014 | 67 |

### The HC applied as a conceptual tool: Professionalism and humanism conflated

We kept track of the different ways the concept of the HC was defined and operationalized by authors. In 90%

of the archive, we found references to the "hidden curriculum," "informal curriculum," "medical culture and enculturation," and "institutional values" as operating for or against the goals of the formal curriculum. For example, one author defined the HC as comprising "the commonly held understandings, customs, rituals, and taken for-granted aspects of what goes on in the life-space we call medical education"[48(p44)] while another described it as "the physical and workforce organizational infrastructure in the academic health center that influences the learning process and the socialization to professional norms and rituals."[49(p124)]

In the remaining 10% of the articles we noted explicit and implicit references to learning taking place outside the formal curriculum or mentions of learning as a product of peer effects.[50–51] Nevertheless, negative effects of the HC were closely associated with professionalism lapses and unethical behaviors, which may account for the numerous recommendations we found in our archive for better teaching and regulation of professionalism as a way to promote humanism. Indeed, only two authors in our archive attempted to disentangle professionalism from humanism, and they disagreed fundamentally with how interrelated the two concepts should be considered.[52,53] Finally, in more recent years, HC references reflect an appreciation that individual behaviors are a product of complex social–political relations involving institutions and organizations, with implications, as we discuss below, for how reform was approached.

We recorded the terms authors used to refer to a humanistic orientation, attitude, or ideal. As with the HC construct, authors explicitly or implicitly referenced humanism in their papers, making statements such as that "caring, respect, effective communication and integrity" are "values of quintessential importance in defining the humanistic qualities of physicians,"[54(p942)] and "Integrity, honesty and empathy are the basic qualifications needed to practice ethical medicine."[55(p759)]

Over 80 attributes and values were listed in various combinations by authors who argued that it was important to cultivate or preserve a humanistic orientation in aspiring physicians (see Box 1). Most authors referenced a humanistic orientation by referring to the need to demonstrate "compassion" and "respect" towards patients. Also popular were the terms "professional," "empathetic," "altruistic," "caring," and "ethical."

To discern how the identified attributes/values relate to medical training, we decided to map the terms onto the CanMEDS competency framework.[56] We chose the CanMEDS framework because most of our archive related to a North American context, the competency framework is currently used in Canada and several other parts of the world, and it aligns well with the ACGME competencies. We discovered that most of the attributes and values listed in our archive in association with a humanistic orientation corresponded to competencies associated with the roles of Professional and Communicator. Specifically, the role of Professional includes the expectation that medical students and residents "exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism." Correspondingly, one of the key competencies of the Communicator role includes the imperative to "develop rapport, trust and ethical therapeutic relationships with patients and families." In other words, the conflation we noted in our archive between professionalism and humanism may be a by-product of educational organization because competency frameworks in medicine are used to order, delimit, and regulate educational processes. Interestingly, while the enabling competency of "demonstrating compassionate and patient centred care" appears under the role of Medical Expert, very few other attributes identified as important to a humanistic orientation in our archive (i.e., "competence," "excellence," "humane," "responsible," and "skilled") relate to this role. As well, while humanism is thought to be tied to exposure and engagement with humanities disciplines, and the HC as an analytical term emerged from the social sciences, only 7 of the 200 texts in our archive recommend revising the formal curriculum, which to a large degree underpins the expertise of physicians, to include a stronger concentration of humanities and social science teaching. A number of questions are thus raised with regard to the particular associations engendered by the use of the HC when considering humanism in medicine, which we will consider below.

**Dueling concepts: The HC and humanism intersect**

While we encountered diversity in the way the HC was conceptualized and defined (reflective perhaps of the disciplinary diversity of the authors engaged in this writing), we also found a dominant thrust in conceptualizing the HC as antithetical to humanism—a carrier of dehumanizing effects engendering a "thickening of the skin" necessary for surviving contemporary medical practice (and medical education). The HC personified as a teacher of professionalism was conceptualized as needing regulation and management. The HC described at the level of phenomenon was described as something generalizable to include loss of idealism, ritualized professional identity, emotional neutralization, erosion of ethical integrity, acceptance of hierarchy, and learning of what is "really" valued as "good doctoring." It was often approached as a phenomenon needing to be understood, its mechanism exposed in order to be contained. When the HC was conceptualized as a relational construct and associated with enculturation of medical students, it was often disassociated from institutional, structural, and systems issues. Rather, teachers were held accountable for failing to role model the espoused ideals of the profession.[57]

However, when the HC was conceptualized as broadly including effects of structure, organization, and culture, authors were more likely to make references to needed reforms at the level of the institution.[58] Although tacit learning can positively reinforce messages received in the formal curriculum, we did record a preoccupation in our archive with harmful effects of the HC. The HC was largely perceived to teach through mistreatment and negative role modeling, in the process stamping out innate humanistic tendencies of medical students. References to erosion of humanism were present in diverse interrelated conversations including the overspecialization of medicine and medical practice, the standardization of medical practice, the overreliance on technology in diagnosing, and the intolerance for uncertainty. Some authors

Box 1
**Attributes/Values Associated With Humanism**

| | | | | | |
|---|---|---|---|---|---|
| Acceptance | Communication | Diversity | Honest | Neutral | Self-aware |
| Accountable | Compassionate[a] | Duty | Honor | Non-judgemental | Self-care |
| Advocate | Competence/excellence | Egalitarian | Humane | Openness | Sensitive |
| Altruistic[a] | Confidentiality | Emotional intelligence | Humble | Patient Education | Service |
| Attentive | Conscientious | Empathetic[a] | Inclusive | Patient Relationships | Skillful |
| Authentic | Considerate | Engaging | Integrity | Patient-Centred | Sociable |
| Autonomy | Cooperative | Enthusiastic | Intellectual | Polite | Social responsibility |
| Beneficence | Courage | Equanimity | Interested | Present/Mindfulness | Supportive |
| Calm | Courteous | Ethical[a] | Introspective | Professional[a] | Sympathetic |
| Caring[a] | Culturally sensitive | Fair | Kindness | Reflective | Teamwork |
| Cheerful | Curious | Fidelity | Knowledgeable | Relationships | Tolerance |
| Civic duty | Dedicated | Flexible | Leadership | Reliable | Trust |
| Collaborative | Dignity | Funny | Learning | Respect[a] | Understanding |
| Comforting | Diplomatic | Generous | Listener | Responsible | |
| Commitment | Disciplined | Genuine | Moral | Scholarly | |

Representative examples from archive documenting the use of terms in relation to humanistic orientation[b]:

- "An ethic of caring requires physicians to be willing to listen to patients with empathy and compassion, and to take responsibility … students are learning to care: to advocate, to empathize, to attend to needs, however small; in other words they are learning to be receptive and responsible." (Konkin et al, 2012, p 594)
- "As a group, these faculty members embraced empathy, compassion, fairness, and courage." (Higgins et al, 2011, p 241)
- "For young physicians to become more humane and effective healers, they must demonstrate professional conduct." (Coulehan, 2005, p 893)
- "But also mandated are competencies that nurture humanistic values, such as moral reasoning and ethical judgment; communication; professionalism and role recognition; and self-awareness, self-care, and personal growth." (Cooper et al, 2007, p 322)
- "… competence depends on habits of mind, including attentiveness, critical curiosity, self-awareness, and presence; that it includes the cultivation of emotions, values, and reflection in daily practice." (Browning et al, 2007, p 906)
- "The qualities of the good physician in this formulation were captured in eight categories: (1) altruism, (2) responsibility and accountability, (3) excellence and scholarship, (4) respect, (5) honor and integrity, (6) caring/compassion/communication, (7) leadership, and (8) knowledge and skills." (Karnielli-Miller et al, 2011, p 370)

[a]Denotes most referenced in relation to a humanistic orientation.
[b]Full citations can be found in Supplemental Digital Appendix 2 at http://links.lww.com/ACADMED/A301.

specifically related the dominance of biomedicine to the denigration of "nonscientific topics, such as medical history and the social-cultural contexts of medicine."[59(p212)]

The HC as "the real teacher" is understood to socialize students to what is "actually" valued in medical education and medical practice. Ironically, this positioning of HC effects displaces the role of the formal curriculum as the foundational underpinning of medical training. Indeed the "real teaching" is perceived to happen implicitly, making the "real curriculum" hard to find and to revise, unless all teachers are targeted as needing to be better regulated. A physician can be clinically knowledgeable and not be humanistic, and still be successful in the system, while a humanistic physician who is not clinically competent will fail. This is the message received very early on by students, and it is knowledge that they need in order to succeed in their studies. As one author noted, the "prevailing metaphors of medical education continue to be heavily mechanistic (the body is a machine), linear (find the cause, create an effect), and hierarchical (doctor as expert), while its dominant narrative tends to be a story of restitution (patient becomes ill; patient is cured by physician expert; patient is restored to pre-illness state)."[60(p194)]

Thus, students receive implicit messages that humanism is secondary to clinical scientific knowledge.[59] Therefore, if the

HC is indeed a prime mechanism by which students are socialized into the profession (as suggested by the literature), challenging the HC is potentially risky because doing so entails critiquing the medical profession's traditional agenda, most notably how the profession's self-interest is preserved through the cultural reproduction of sociopolitical relations, including medicine's alignment with science. However, despite the potential tarnish to medicine's good name, scholars within and outside of medical education have taken aim at the HC through various reform efforts. We now explore the *end* to which the concept of the HC has been used in educational reform efforts (at the individual, organizational, and/or systems levels) related to nurturing and/or increasing humanism in health care.

### The HC and humanism-based reform efforts in medical education

Analyses of the literature revealed that discussions of HC and humanism-based reform efforts could be grouped into three distinct, yet related, thematic categories: (1) the objectives of the reform efforts (e.g., to increase humanism, thereby thwarting aspects of the HC; to dilute elements of the HC to allow the growth of humanism); (2) the mode/format of the reform efforts (e.g., programs, courses, extracurricular initiatives); and (3) "who"/"what" the reform efforts are targeting (e.g., students, faculty, curriculum/structure, culture of organization).

We found that the majority of reform efforts are aimed toward enhancing humanism among medical students—primarily through formal programs, courses, and seminars.[61,62] The structure and nature of these reform initiatives range from embedded curricula that attempt to engage students in humanism-based exercises and experiences throughout the four years of their undergraduate medical training, to episodic reflection exercises and one-time/stand-alone short-term seminars. A few articles suggested exposing medical students to more humanities-specific *disciplines* (e.g., history, art, music, philosophy) [63–70]; however, almost all reform-based efforts featured in the literature strove to promote individual-level humanistic *attributes* (e.g., empathy, compassion, integrity, respect). Although medical students are the primary target of programmatic reform efforts, there are also initiatives designed to promote humanistic traits and behaviors among medical school faculty and staff.[71] These faculty-based reform initiatives were focused on cultivating positive role models, advisors, and mentors that will exhibit humanistic traits to students, and, similar to the student-based reform efforts, were not oriented toward engagement with principles and ideologies of the humanities disciplines.

What is somewhat absent from the literature, however, are details regarding how the now humanism-enhanced students and faculty actually will thwart elements of the HC nested within medical education. Rather, it appears either assumed or treated as nonproblematic that the increased presence and practice of humanism among the medical school populace will somehow obstruct the "teachings" of the HC.[72–75] Although the remedial programs/courses often are outlined in great detail, there is little specifically as to how these students and faculty newly knighted in humanism (through reflection, readings, group exercises, simulated patients, etc.) will dismantle the deleterious conditions and effects of the HC.

Efforts directed toward diluting aspects of the HC to allow humanism to blossom frequently feature a call to vanquish perceived HC-based noxious elements nested within medical training such as negative role modeling and status hierarchies among health care professions. The assumption is that such efforts will automatically promote an institutional ethos of equality, cooperation, openness, and professionalism. Within this realm of reform-based literature, elements and "teachings" of the HC are perceived as detrimental to students' socialization and professionalization, particularly with regard to the development and maintenance of their other-oriented attributes, like humanism, and therefore must not only be "outed" but dismantled. Proposed approaches include removing or altering certain ceremonies (i.e., the white coat ceremony); significant reformation of medical school admission practices; exploration of institutional resource allocation (e.g., space, appointments, promotions); examining siloed learning environments and systems; critically evaluating assessment instruments and practices; and the dissection and deconstruction of "slang," "med speak," and institutional jargon. However, very few studies within our database featured any of these directives as operationalized "interventions." Therefore, little is known as to the actual impact these strategies would have on the HC.

As noted above, curriculum and programmatic-based reform (e.g., formal course/exercises, role model training, interprofessional education initiatives) appear to be the weapons of choice to confront the HC (by enhancing humanistic attributes among institutional players[76–82]). Nonetheless, these reform efforts have stressed microlevel, individual- and group-oriented change. Less attention has been paid to structural- and organizational-based reform (meso- and macrolevel) to dilute or alter aspects of the HC through addressing and reshaping institutional culture and nested hierarchical boundaries, or providing an institutional atmosphere/climate for humanism to flourish. In short, reform efforts have been more oriented toward a bottom-up approach than a top-down one. In this sense, a majority of the reform-based literature in our archive appears to conceptualize learners (medical students) as needing protection from negative role models and the dehumanizing effects of socialization into medicine.[83–88] As such, students rarely are discussed as active participants in their education and training. Rather, they are portrayed as innocent, passive victims of the debilitating effects of HC, lacking socioemotional resilience, and requiring extra efforts to cultivate humanistic traits. This dissection of the HC offered above suggests that the HC is something that is "done to" students. It is therefore not surprising that a majority of the reform efforts are also aimed at trying to "do something to" medical students (i.e., enhancing humanistic attributes and characteristics through formal instruction), rather than addressing the overarching institutional culture.

## Discussion and Future Directions

Suggested solutions to HC "ills" are nested within better teaching of professionalism and ethics, a stronger concentration of reflective practice, stronger regulation of teachers, and, more recently, the infusion of social science and humanities teachings among other recommendations. All

of these proposed solutions live at the individual or organizational level, and very few call into question "systems"-level matters concerning, for example, the basic structure or funding mechanisms of the profession. The conflation of professionalism and humanism we noted in our archive may account for the disproportionate focus on interventions to "fix" behaviors, suggesting the need to explore this conflation more systematically.

The largely North American perspective of our archive suggests that relating humanism to professionalism may be culturally specific to this region. Although other regions were represented in our archive, our sampling approach limits our capacity to draw out the context-specific dimensions of the application of the HC concept as an analytical tool and ways in which humanism is defined in different cultures. These are important aspects to explore moving forward because patient-centered care is closely associated with cultural representations of health and illness. Correspondingly, our demographic analysis made visible that medical educators through their collaborations are drawing on and using sensitizing concepts and perspectives from an array of disciplines to inform medical education practice in relation to humanism. Exploring systematically what each of these disciplinary perspectives has contributed to this topic can help us set a research agenda for pursuing evidence-based educational and health practice in relation to issues of humanism.

Programmatic exercises (like portfolio work and reflective practice skill building) are injected into the curriculum as a way to teach students to manage HC effects. These recommendations are premised on the largely unproblematized assumption that medical students are passive participants in their enculturation, their humanistic qualities and moral compass eroded and stamped out of them through close association with negative role models (their teachers) and the stressors associated with medical training. Although not prevalent in the literature, students are sporadically conceptualized as knowers, their experiences providing a direct entry to the effects and operations of the HC and their actions often changing medical culture for the better.[89] Conceptualizing students as agents of their learning provides a novel entry point for studying professional identity formation as a dynamic process. Sociocultural learning theories provide pathways for examining the HC and humanism intersection through research that explores resiliency among learners and how students may challenge and subvert harmful influences in their daily practice and interactions with their preceptors, peers, and learning environment. This shift may also encourage medical educators to broaden their scope of practice beyond considerations of curriculum and pedagogy, to think about education as a sociopolitical endeavor—a starting point for interrogating how systems, structures, and institutions impact socialization and professionalization processes. In addition, there are many untapped dimensions of tacit socialization and learning that may contribute to conversations about humanism, in particular work that aims to understand and counter issues of racism, classism, gender, and other discrimination in medical training and health practice. These topics, as discussed in our overview of the HC tradition, are important dimensions of tacit socialization that have immediate implications for how physicians train and practice.

The intersect between the HC and humanism often is presented as a zero-sum game—boosting humanistic traits among institutional players who will, in turn, vanquish the HC and/or dismantle elements of the HC to allow humanism to flourish. From this perspective, a medical student can either retain his or her humanistic qualities or become enchained by the noxious tangles of the HC. In short, the literature suggests that medical education is inimical to the HC. However, we agree with authors in our archive who question this relationship.[89] We propose that the "teachings" of humanism in its broader meaning (as the name for a broad range of fields of learning and inquiry) are complementary to the "teachings" of the HC rather than antithetical. Perhaps, like most things, there is a necessary balance, in this case between the promotion of those traits named "humanistic" and the realities of medicine to which the HC responds. In this sense, future research should explore the role(s) of the HC in medical education (i.e., the manifest and latent functions)—not just as an "evil machine" that grinds up fragile hapless medical students or residents and spits them out, but as a mechanism that provides an equilibrium to our future physicians, balancing what we want and what is possible. In other words, "the hidden curriculum hides in the gap between the ideal and the real practice of medicine, and it provides the lessons that students and educators need for the everyday work of medicine."[90(p60)]

In this paper we explored the conceptualization and operationalization of the HC as it relates to humanism, and spotlighted the themes associated with reform efforts regarding the HC and humanism. We found, with respect to both study objectives, a battle between "good" (humanism) and "evil" (HC) being waged on the terrain of the individual—a battle that continues despite the extensive amount of research and attention (as featured in this scoping review). This preoccupation with managing HC effects obfuscates the positive effects of latent socialization and informal learning, including the many ways that educators and learners learn to navigate contradictory messages about what is right and what is possible, while managing, and perhaps most important, challenging the realities of contemporary health care. Moving forward and beyond, as scholars continue to explore the intersect between the HC and humanism, we suggest starting from the position that it is both necessary and valuable for humanism and the HC to coexist within medical education and training, especially as we strive to empower health professionals to advocate for their patients and contribute to changes in the way health care is organized and delivered.

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