Medical education and its context in society

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Summary

Medical education does not occur in isolation - it is inextricably linked to the society in which the institutions of medical education are based. This chapter explains why it is important to see medical education in the context of societies and examines the implications of different social science traditions that have been brought to bear on medical education. First, it frames medicine and medical education within a broader social context. A quick review of medicalisation theory and of the recent history of medical education in the West is presented. Second, the chapter reviews the conceptual apparatus developed by key social theorists: Goffman, Foucault and Bourdieu. The central concepts developed by each theorist to make sense of the world are discussed; practical examples of how their perspectives could be applied to medical education research are suggested; and previous literature using these perspectives to throw light on medical education are discussed. Third, the chapter explores current hot topics in medical education research and reviews the contributions made by the social sciences in these areas, This chapter concludes with suggestions as to the areas of medical education where social scientific insights could be next applied. Overall, this chapter aims to: enrich the readers' understanding of the present and future of medical education by offering a range of lenses through which it can be investigated and stimulate the sociological imagination of researchers through a review of some of sociology's key texts on medical education.

Introduction

Social institutions are socially constructed, emerging out of a specific socio-historical context, motivated by socio-historically defined priorities and organised on socio-historically sanctioned models of appropriate human behaviour. No institution – be it Church, state, education or the family – takes on a form that is inevitable.

Our perspective in this chapter is constructivist (Berger and Luckmann 1989 [1966]). Constructivism is a theory of knowledge (an epistemology) that holds that the reality humans perceive arises out of social, historical and individual contexts (Kuper and Hodges 2011). A constructivist perspective suggests that to understand medical education, we need to see it in the context of the societies that produce it. As noted by Kuper and Hodges (2011), there is nothing inevitable in the current way of doing medical education and organising medical schools: historical, social and cultural phenomena shaped them. Seeing medical schools and medical education this way allows us in this chapter to reconsider the relationship they have to society: how they are shaped by history and social factors such as class, gender, lobbies, value systems and power dynamics, among other things.

In this chapter, we provide an overview of several social scientific studies of Western medical education to show the reader what the field has to offer. We focus on the research paradigms that emerge out of anthropology and sociology and limit ourselves to research on medical education done in the West and in English. We emphasise different theoretical traditions for the world they make visible, building upon a growing literature advocating the conscious use of theory in medical education research (Bordage 2009; Cribb and Bignold 1999; Hodges and Kuper 2012; Kuper and Hodges 2011; Reeves et al. 2008).

For those trained in medicine, the most recent literature is often seen as the best as it builds upon a previously established knowledge base. This is partly because medicine works within a positivistic paradigm: its canonical beliefs include the belief in

a "single truth" that can be discovered using a particular set of methods – the gold standard, most often associated with meta-analyses of randomised controlled trials. For those trained in the social sciences, inspiration comes from publications spanning several decades. Older classics lay the foundations of our understanding; more recent work challenge and illustrate them in a more contemporaneous setting. Neither is seen as inherently more valuable. We thus invite the reader to engage with all of them, and ask: how could I apply these frameworks or methods to my own research interests?

Broader context of medical education: history of medicine and medical education

Figure 1: Medical education in society

To understand the socio-historical context of medical education, we need to examine the socio-historical context of medicine itself. Indeed, medical education is deeply embedded in the realities of the medical world, and the context within which disease, medical practice and societies' and individuals' relationships to medicine are developed. What we provide here is a brief overview, inspired by a framework that sociologists of medicine have found particularly fruitful: the medicalisation of society.

Medicalisation of society

Several sociologists have pointed to the medicalisation (Conrad 1992; Conrad and Schneider 1992 [1980]) of society over the course of the 20th century. Medicalisation is "the expansion of medical jurisdiction, authority, and practices into new realms" (Clarke et al. 2003, p.161) or, according to another definition, "a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illnesses or disorders" (Conrad 1992, p.209).

Medicalisation is characteristic of the post-World War II faith in medicine (and science) and the associated rise in medicine's perceived ability to solve social problems ranging from alcoholism to violence. According to medicalisation scholars, the rise of the biopsychosocial model of health (Engel 1977) enabled the ever-greater foray of medicine into daily life, replacing law and religion as the main sources of social authority. This displacement led some social theorists to portray medicine not only as a practice or an area of study but as an institution that exerts wide social influence, which some have called social control (Conrad 1992; Freidson 1970; Illich 1976; Zola 1972).

In the late 70s and early 80s, voices critical of organised medicine started to be heard more loudly (Calman 2007). As the focus of medicine shifted from infectious diseases toward chronic or human-made diseases, as medical innovations such as immunisation and antibiotics were taken for granted and as for-profit medicine grew, the perceived (moral) authority of medicine declined. Some theorists posited that growing queasiness about medicine's commitment to population health (Ludmerer 1999) and disillusionment with collective solutions to social problems led to the healthist movement and its focus on individual empowerment and individual-level solutions (Cheek 2008; Crawford 1980).

History of medical education

One of the main reasons for medical educators to care about the history of medical education is that it enables us to see that our practices are not inevitable, but rather the result of historical processes of definition and legitimation (Kuper and Hodges 2011). The history of medical education in the 20th century in the West is most often told using the 1910 Flexner Report as a starting point. It is, indeed, a milestone in both the white and grey literatures (Whitehead 2011). The Report, titled "Medical Education in the United States and Canada", transformed the form and nature of North American medical education, a model later widely copied around the world. It recommended the closure of 124 of 155 schools then in operation, their affiliation with university centres, and a radical transformation of the curriculum. The curriculum Flexner recommended was modelled after that of Johns Hopkins: two years covering the "six basic biomedical sciences" and two years of clinical subjects (Chapman 1974). Flexner also noted the inadequacy of science as a sole basis of professional practice and advocated in favour of preventive medicine (Chapman 1974; Ludmerer 2010). The Flexner Report was not uniformly well received and did not impact every demographic uniformly. Most particularly, it made access to medical education and the medical profession harder for the poor, women and black people (Beck 2004; Savitt 2006 [1992]).

Between the two World Wars academic medicine was focused on the education of physicians. Several events transformed medical schools. Starting in the 1950s, federal governments funded medical research to unprecedented levels, changing the mission of medical schools such that by the 60s, research rivalled physician training as the mission of medical schools and their faculty (Ludmerer 1999, p.196).

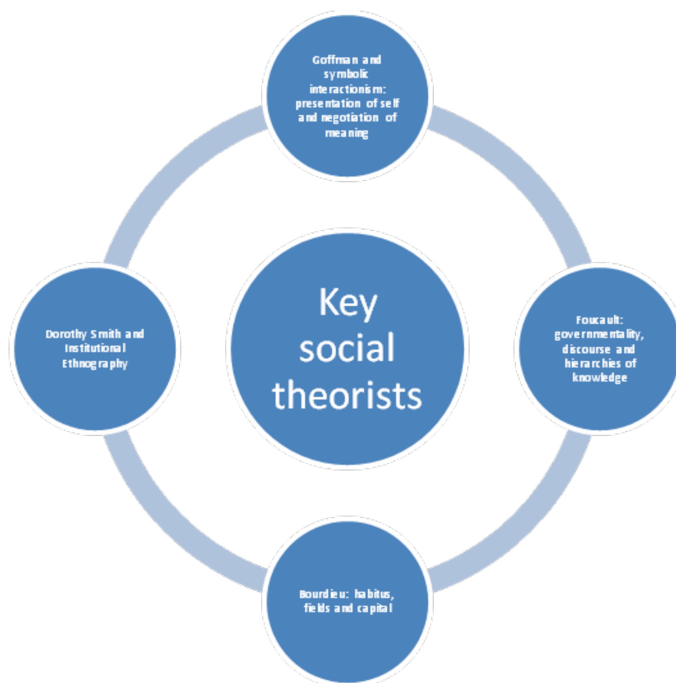
In the 1960s, civil rights for black people in the US and women's increased access to higher education changed cohorts of medical students and, thus, medical education (Beagan 2000; Colombotos 1988; Hafferty and Hafler 2011). In the early 1970s, Howard Barrows and his colleagues at McMaster University (Canada) introduced problem-based learning (PBL), suggesting that clinical skills would be best learned through small-group conversations rather than lectures and observations. Harvard Medical School's adoption of PBL helped it gain traction and put medical learners' needs at the core of medical education (Donner and Bickley 1993; Neville 2009).

According to Hafferty and Hafler (2011, pp.24-5), three interrelated movements emerged out of organised medicine in the 80s, with broad implications for medical education: first, the professionalism movement; second, the evidence-based medicine movement; and third, the patient safety movement. These three shifts arguably arose out of a struggle for legitimacy and power between physicians and non-physicians (including epidemiologists and other non-clinical scientists) (Amsterdamska 2005).

In the midst of these struggles, medical educators in the early 90s were increasingly confronted with the public's loss of faith in medicine's commitment to service. The prestige associated with the profession declined and the healthist movement gained momentum (Crawford 1980). The CanMEDS competency framework, introduced in Canada in 2005 and internationally in subsequent years, can be seen as an attempt to address a perceived decline in professionalism among doctors (Frank 2005; Whitehead et al. 2011).

Key social theorists and related work

Figure 2: Key social theorists



As noted earlier, our perspective in this chapter is constructivist. The key social theorists whose work we review here have all highlighted the constructed nature of the world, standing in contradistinction to the positivistic functionalist tradition. Functionalism sees norms, traditions and institutions as having a function that enables modern society. The role of medicine within functionalism was most famously described by Talcott Parson in his account of the "sick role" (Parsons 1951).

In contrast, the social theorists discussed in this chapter were inspired by conflict theory and the linguistic turn. Conflict theorists, inspired by Marx, discussed the power of medicine in society, and its role in maintaining or furthering class, gender and racial inequality. Finally, the theorists we discuss here were all – except for Goffman – inspired by the linguistic turn of

the late 1960s, with its emphasis on the importance of language as a structuring agent that creates and legitimates realities and power relations. Each theorist – Goffman, Foucault, Bourdieu and Smith – will be briefly introduced; their perspective will then be illustrated with specific examples from the medical education literature.

A. Goffman and symbolic interactionism: presentation of self and negotiation of meaning

Symbolic interactionists believe that the interpretations individuals make of their experiences play an active role in creating their social world (Jacob 1987), and that these interpretations are created by the individual's social interactions. The goal of symbolic interactionist research is to study these interpretations and the meaning that individuals attach to certain things, interactions and ideas: how these interpretations are constructed and evolve; how they are used to make sense of future experiences, especially during interactions. In contrast with functionalists, who see socialisation as a relatively ordered process through which students learn to function as doctors and embody their professional role, symbolic interactionists see the socialisation of doctors as an active negotiation whereby students interpret and reinterpret social norms, act and react, in light of both previous and current identity, beliefs and experiences.

We will focus here on the work of Goffman, who figures among the most cited sociologists in history. We review briefly three of his books to highlight his contributions to our understanding of social life. Key Goffmanian concepts can be found in table 1.

Table 1: Key Goffmanian Concepts and their Definition

Concept	*Definition*	*Key Theoretical Texts*
Face-work	The work needed for individuals to project a positive image of themselves in interaction with others.	Goffman (2005 [1967])
Total Institution	Institution that is segregated from the outside world and is characterised by role dispossession, programming and identity trimming, dispossession of identity, imposition of degrading behaviour, contaminative exposure, disruption of the relationship between individual and his or her actions, and restriction on autonomy.	Goffman (1990 [1961]) Goffman, Lemert and Branaman (1997)
Stigma	An attribute that is deeply discrediting and positions its bearer as being of a less desirable kind. There are three types of stigma: of the body, of character and of race, nationality or religion.	Goffman (1986 [1974])
Body idiom	Information that bodies willingly give and unwillingly give off about self and social relations. This information enables other people's judgement of bodies against conventional standards.	Goffman (1959) Manning (2005)
Front-stage, backstage behaviour	Front-stage behaviour follows situation and role-appropriate prescriptions. Individuals or teams work to maintain a particular impression of a situation in front of an audience even though they may not believe in this impression themselves. Back-stage behaviour is out of character given the constraints of front-stage prescriptions. Teams or individuals enact it with the expectation that no member of the audience will see or hear it.	Goffman (1959)
Frames	A way of organising experiences used to identify what is happening around us. Frames can be fabricated to mislead others, either for their own benefit (benign fabrications) or for the fabricator's benefit (exploitative fabrications).	Goffman (1986 [1974]) Manning (2005)

Goffman's *Asylums* (1990 [1961]) is a series of four essays originating from a study of a Saint Elizabeth's Hospital, a mental health institution in Washington, DC. Through these essays Goffman develops and extends a typology of what he terms the "Characteristics of Total Institutions" (see table 1 and Goffman et al. 1997). The concept of the total institution has been applied previously in educational research and in medical sociology, particularly but not exclusively in the sociology of mental health (e.g. Askham et al. 2007; Egan 1989; Haas and Shaffir 1982b; Malacrida 2005; McEwen 1980; Paterniti 2000).

Next, in his book *The Presentation of Self in Everyday Life*, Goffman (1959) develops an elaborate theatrical metaphor for social life. Goffman compares social action to theatre, discussing script, role, front stage, backstage, props and audience. According to this metaphor social interactions are scripted; people follow previously-defined roles contingent upon their individual characteristics as well as on the specifics of the interactional context; front stage (among strangers) behaviour carefully follows

cultural scripts and is thus somewhat deceptive; back stage behaviour happens among insiders, and sometimes contradicts the cultural norms of the front stage.

Finally, in *Frame Analysis*, Goffman (1986 [1974]) lays out a methodology to investigate the way individuals organise the experiences around them. He uses "frames" to connote the way life is actively constructed to fit certain prescribed forms or types of stories. Frames can turn a story into "a joke, a warning, a lesson, an invitation and so on" (Manning 2005, p.338).

Goffman is also seen as a "radical, corporeal sociologist" for whom action is understood as "interwoven with the perceptual field of the agent, understood as a visual, sonorous, olfactory, tactile and saporous order" (Crossley 1995, pp.133, 136). Bodies are seen as critical to the social order: humans analyse information read from others' body idioms and adapt their behaviour accordingly (Crossley 1995; Manning 2005).

Concretely, a Goffmanian or symbolic interactionist orientation would lead researchers to ask questions such as:

1. How does medical school resemble a total institution?
2. How do students make sense of the hardships of medical culture? Which frames do they use?
3. Do medical students participate in face-work (see table 1) in their interactions with faculty? If so, how? What does their body idiom give and give off?
4. How do medical students learn to conceive of stigmatised conditions in medically appropriate manners? How do they learn to interact with stigmatised patients?
5. How do medical students and faculty interact with different types of "normal" and "stigmatised" patients (front stage)? Does their behaviour change when patients are not around (backstage)? If so, how?

Exemplars

Socialisation

One of the most-cited sociological studies in medical education adopted a symbolic interactionist framework. Becker, Geer, Strauss and Hughes' (1963 [1961]) *Boys in White* describes the culture of medical school in light of what they see as the main constraints on students' agency: the overwhelming workload. They show how students interact with and adapt to their environment, develop coping strategies and are meanwhile professionalised into a specific worldview. As noted by Laqueur (2002), however, the reality of medical education in the 50s is incommensurable with that of today; too much has changed in medicine since. A similar study of one of today's medical schools would contribute importantly to the field.

Haas and Shaffir (1982b) analyse the professionalisation of medical students using a dramaturgical approach. They convincingly analyse this process using the concepts of audition, costume, props and vocabulary, role, stage fright, dress rehearsal and script. Thirty years later, this study is still one of the most convincing illustrations of the fruitfulness of Goffman's approach.

A later study by Mizrahi (1986) discusses how the requirements of medical education often run contrary to the needs of patients. Her ethnographic study compares house staff attitudes across two different hospitals and illustrates what she calls the "get-rid-of-patients (GROP) orientation." House staff, she argues, are made to discharge patients as fast as possible and neglect the least interesting cases by the normative culture and by structural constraints. Mizrahi carefully documents how a combative language positions the patient as an enemy; how students learn to GROP through daily interactions; the strategies that enable house staff to reconcile their mission with the necessity to GROP; and how skilful GROPing helps house staff develop a positive reputation and gain status. The idea of GROPing still has relevance today. Indeed, Ludmerer (1999, p. xxv) writes that in the late 1990s "medical schools and teaching hospitals could do well financially if patients were admitted and discharged so quickly that learners could no longer profit from their contact with them"; Caldicott (2007) notes how doctors often "turf" patients to other services to reduce their workload.

Broadhead (1980) analyses how students engage in face work for medical school admission purposes. He shows how students manage their many identities, how they choose to highlight some of them and hide others based on their understanding of the admission process: how they adapt their behaviour to the meaning of medical school. He found that gender was a clearly questionable identity that constrained women's path toward medical school admission.

Learning the proper emotional composure

The study of emotions in medicine started with the pioneering work of Fox (1957, 1980), who first wrote from within a structuralist perspective. A body of literature has since investigated the emotional life of medical students. Hafferty (1988) studied "cadaver stories": a type of oral culture about a medical school-related practical joke composed of a medical student perpetrator, emotionally vulnerable victims, cadavers or body parts and reality anchoring details (Hafferty 1988, p.347). He argues that these stories help students cope with the new emotions associated with interacting with dead bodies: "the act of telling cadaver stories (as well as their content) marks the anxious anticipation of anatomy lab, the initial adjustment to lab, and those periods in lab when the cadaver is most likely to appear as a human referent" (p. 349).

Conrad (1986) tells a similar story about emotions and culture through his study of the "myth of cut-throats" among premedical students at Brandeis University. Conrad found that this myth helped students externalise and explain their failures. It had no clear anchoring into reality, however, with cooperation as the actual dominant mode of interaction at Brandeis.

B. Foucault: governmentality, discourse and hierarchies of knowledge

Foucault is a theorist of discourse: language is seen as more than merely descriptive, but rather as an agent in the definition and strengthening of power relationships within society, through institutions such as church, (penal) state, medicine and education. Foucault believes that there is "no external position of certainty, no universal understanding that is beyond history and society" (Rabinow 1991, p.4). Truth, then, "is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation and operation of statements" (Foucault 1980, p.133), rather than as anything objective and universal. Many researchers today adopt a Foucauldian approach to study contemporary language use and practices (Rabinow 1991).

Hodges, Kuper and Reeves (2008) offer an overview of discourse analysis as it can be applied to medical and medical education research. They group approaches to discourse analyses into three clusters: linguistic, empirical and critical. Foucault-inspired discourse analyses are "critical": they are concerned with power and investigate discourse in archives of verbal, text or graphic data. Hodges et al. (2008, p.570) note how the aim of discourse analyses is thus partly to identify the way language shapes and constrains the way institutions and individuals can think, speak and act.

One of Foucault's main contributions has been to identify three different "modes of objectification" whereby human beings have been made into subjects (Rabinow 1991, p.21). The third and most original of these modes is called "subjectification", the process whereby an individual transforms him or herself into a subject using a range of techniques or operations on one's body, soul, thoughts and actions (Rabinow 1991, p.11). Through this lens, researchers can study how students, for example, transform themselves into physicians.

For Foucault, modern power is something dynamic, evolving and productive rather than sovereign, repressive and inflicted upon helpless people. Power is a web of relationships that permeate society. Individuals are "the place where power is enacted and the place where it is resisted" (Mills 2004 [2003], p.35). It is partly for his emphasis on resistance that feminists and critical theorists use Foucault to highlight the possibilities for individuals to resist power (Mills 2004 [2003]).

Table 2: Key Foucauldian concepts and their definition

Concept	*Definition*	*Key theoretical texts*
Power	Something that is performed, a strategy rather than a possession. A web of relationships and practices that subject the individual but also trigger resistance.	Foucault (1980) Mills (2004)
Knowledge	An occurrence that makes sense only within a particular society and history, thus within a specific nexus of power relations.	Foucault (1980)
Normalisation	A system of finely graded and measurable intervals within which individuals can be distributed around a mean that defines a social norm.	Rabinow (1991) Clarke et al. (2003)
Regime of truth	The types of discourse that a society accepts and makes function as true and the types of persons who are legitimate bearers of truth	Foucault (1980)
Discourse	Discourse is not merely text or sign, but practices that produce the object about which they speak	Foucault (2002 [1972]) Mills (2004)

Using a Foucauldian perspective in medical education research would help us answer questions such as:

1. Historically, how did we come to believe something to be true? Who benefits from having people believe such a thing is true? What function does this thing play in society?
2. Who decides on matters of medical education curriculum and reform? Who has no voice and is forgotten? How do dissidents resist?
3. What are the characteristics of the dominant discourse about certain medical ideas?
4. How does science legitimate the stigmatisation of certain bodies and people, and thus serves to subject these people?
5. How did medical ideas evolve? How have they been incorporated into ways of being and ways of doing in medical education?
6. How do medical students and faculty resist socialisation or change in their level of autonomy?

Exemplars

Stone (1997) compared the patient-directed and doctor-directed discourses of diabetes care and found that self-care and autonomy were valued in the patient literature, while "compliance" and "adherence" were emphasised in the doctor literature. She argues that the compliance-focused discourse of doctors is ultimately driven by economic imperatives and thus partly inhibits the goal of patient empowerment. Speed (2006) revisits the literature on mental health service users to highlight the discursive particularities of framing these users as patients, consumers or survivors. Comparing the discourses as they occur during interviews with mental health service users, Speed shows how these discourses co-exist and enable users to construct their experience of mental health. Coveney (2008) analyses the discourse surrounding fatness and notes that three "subject positions" of children condone what he calls the "government of girth." These discourses position fat children as sick, anti-social and/or innocent, and thus as legitimate targets of weight-based intervention.

Hodges (2007), one of the first scholars to bring discourse analysis to medical education research, identifies three discourses around the Objective Structured Clinical Examination: performance, psychometrics and production, each with its own regime of truth. These discourses create specific roles for different types of individuals, and augment the power of different types of institutions.

Whitehead, Austin and Hodges (2011) argue that the construction of the CanMEDS roles and their representation in the form of a daisy can be read as an attempt by the medical profession to defend professional authority: an armour built against threats to medical expertise and autonomy.

Two examples of Foucault-inspired studies in higher education are also worth noting. Gale and Kitto (2003) discuss the marketisation of Australian universities and show the individual practices whereby faculty resist and subvert changes that threaten their autonomy. Writing about law school rankings, Espeland and Sauder (2007) argue that the quantification of educational attributes leads to the possibility of comparison, judgement and control and thus enable the conflation of the *statistically* normal with the *morally* normal.

Medical textbooks

Several studies of medical education use discourse analysis to investigate the nature and construction of medical knowledge as it is transmitted to students in medical textbooks. In an early study, Scully and Bart (1973) read and coded 27 gynaecological textbooks across three time periods. They found that textbooks were written from a male viewpoint, portraying men's sex drive as stronger and women as frigid, meanwhile supporting hierarchical gender roles where women's needs were subordinate to men's. One of the most cited examples of such a critical approach to the medical textbook is Martin's (1991) "The Egg and the Sperm". Martin's description of medical textbooks shows the impact of cultural beliefs about gender in description of biological phenomena, and thus suggests that the scientific objectivity touted to be at the core of medicine is not the full story. The recent study of menopause by Niland and Lyons (2011) shows that textbooks have tended to downplay the complexity of this phenomenon, focusing instead on ideas about hormonal failure and on the likely success of future research in the area. Thus, textbooks reinforce a cultural script that sees medicine as conqueror rather than fundamentally uncertain. Chang and Christakis (2002) investigated the changing norms around body fat in *Cecil's Textbook of Medicine* from 1927 to 2000. They found that obesity shifted from something that people do (a moral failure) to something that people are done to or experience (an environmental press).

C. Bourdieu: habitus, fields and capital

Bourdieu's theory of practice seeks to bridge the gap between individualistic and structural theories of human behaviour (Grenfell 2008; Maton 2008). Individualistic theories tend to see humans as rational actors who interpret information and act upon it rationally. Structural theories suggest that human behaviour is partly determined by social factors such as gender, sexual orientation, race, class and education.

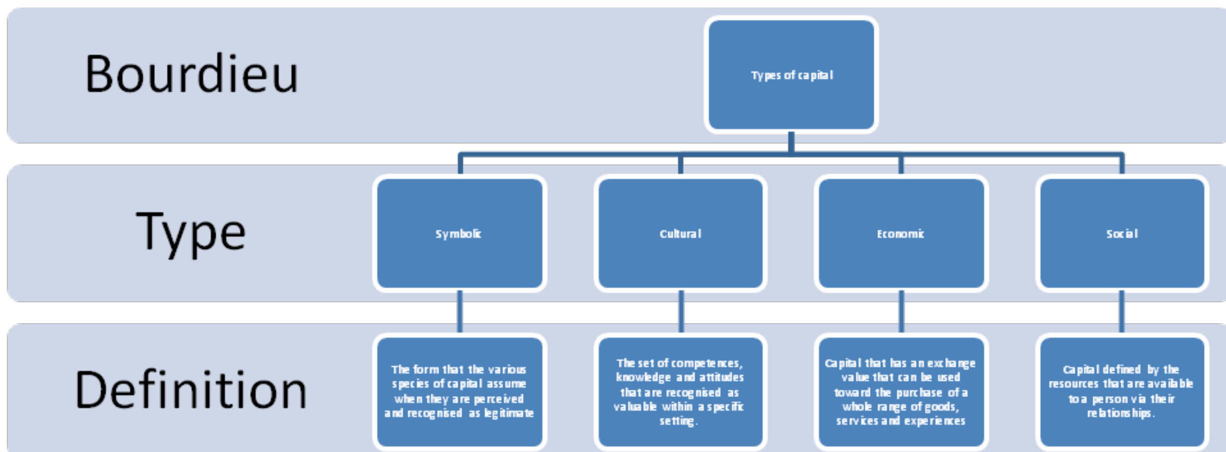
Bourdieu's theory views individual practices as the result of a mutually-defining relationship between agents' learned dispositions (*habitus*) and their social positions (capital) within a specific context (field) (see table 3). The individual's subconscious behaviour, in particular, results from such relationships, yielding predictable outcomes at the aggregate social level. In contrast, conscious behaviour in the form of calculated decision-making can sometimes break away from these predictable outcomes (Mullen 2009; Swartz 1997).

Table 3: Key Bourdieusian concepts and their definition

Concept	*Definition*	*Key theoretical texts*
Habitus	"System of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organise practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them" (Bourdieu 1990, p. 53).	Bourdieu (1990) Bourdieu and Wacquant (1992) Maton (2008) Swartz (1997), Ch. 5
Field	A network or configuration of objective relations between positions. Positions are objectively defined by their present and potential situation in relation to different species of capital whose possession commands access to the profits at stake in the field.	Bourdieu and Wacquant (1992) Swartz (1997), Ch. 6
Capital	Accumulated labour (in its materialised form or incorporated / embodied form) that enables agents or groups to appropriate reified or living labour.	Bourdieu (1986)

Bourdieu's theory of practice discusses social hierarchies in terms of levels of capital (see table 3). A person's position in a field depends on their levels of different forms of capital, which include economic, social, cultural and symbolic capitals (see figure 3).

Figure 3: Bourdieu's types of capital



Bringing Bourdieu to medical education research leads researchers to ask questions about struggles for power (or scientific legitimacy) within medical education. As noted by Albert and Kleinman (2011, p.266), these struggles "typically take the form of competition to determine the legitimate ranking of productions and producers, and the principle (or set of criteria) according to which they will be assessed and ranked."

Concretely, this concern with power would lead researchers to ask questions such as:

1. What are seen as legitimate types and sources of knowledge in medical education?
2. What are the reasons behind medical schools' differences and similarities of organisational form, curriculum and branding?
3. How do actors in the field perceive legitimate ways of conducting medical research?
4. Upon what factors do hierarchies in medical education depend?
5. How do students from different backgrounds (gender, class, race, sexual orientation) experience medical school differently?
6. What role does gender play in the legitimisation of certain ways of being and of hierarchies in medicine?
7. What types of bodies carry symbolic capital? How do these bodies' standards shape admissions and evaluation?

Exemplars

In a 2011 study, Brosnan interviewed students and faculty at two medical schools in the UK to evaluate what is considered as legitimate knowledge in medical education and why. She found that scientific knowledge and the symbolic capital associated with it regularly trumped clinical knowledge for prominence in the curriculum (Brosnan 2011). In an earlier publication, she invited medical educators to conceptualise medical schools as part of a field and to view differences between schools as the result of competition for capital: prestige, students and funding (Brosnan 2010). Albert and his colleagues have a long-standing interest in using Bourdieusian concepts to discuss medical education as a field. Albert (2004) showed how such a conceptualisation clarifies the internal debates about what epistemology, methodology, purpose and quality standards in medical education research hold sway. In a later set of two papers, Albert and colleagues (2009; 2008) have argued that the unequal symbolic capital of different types of research and knowledge production within the health research field put social scientists at the bottom of the hierarchy.

Bourdieu's notion of habitus has been used by Lo and Stacey (2008) to dissect and revisit the idea of cultural competency. The idea of cultural beliefs, they argue, is insufficient to conceptualise the role that culture plays in health encounters. Instead, an understanding of culture as habitus acknowledges the structuring effects of culture meanwhile leaving room for individual and contextual differences. Bourdieu-inspired studies of education more broadly have also yielded critical insights into the way habitus translates into differential experiences and outcomes that are relevant to medical education. Lareau's classic studies, for example, showed the extent to which class transforms youth and parents' experiences with schools through different habitus and relationships to authority (Lareau 1987, 2002). Similarly, Mullen's (2009) interviews with Yale juniors and seniors from different socio-economic backgrounds highlighted the wide, class-stratified differences in experiences of Yale, and in pathways from high school to Yale. Her studies uncover how successful, lower class youth broke away from their habitus – applying to Yale on a whim or because of the intervention of a mentor – while upper-class youth took their elite education for granted.

D. Dorothy Smith and Institutional Ethnography

Institutional Ethnography (IE), developed by feminist sociologist Dorothy Smith, is a method of inquiry that uses people's everyday experiences as the starting point for an exploration of the often invisible social relations that underpin or organize their experiences (Smith 1988, 1999, 2003, 2005, 2006). Smith uses the term institution to denote the complex "ruling relations" (Smith 2005) organized around specific functions such as education or healthcare. This approach is based on Smith's complex understandings of the social organisation of knowledge that makes "texts" define ruling relations locally in the everyday world. Texts are reports or documents – such as a care pathway or evaluation form – that become activated by those who use them in their work. The materiality of texts enables their replication and shapes people's local activities and ruling relations.

Essential to IE is always actual people, their actual doings and how the latter are coordinated across different sites. Understanding the social world therefore requires taking up a specific position – for example the standpoint of residents in a first year program – as a starting point from which to explore, or map, the socially-organised conditions of that experience. In

this sense, IE samples a process rather than focuses on a population of individuals; it provides an alternative to the highly abstract and theoretical accounts of the world often provided through mainstream sociology (Smith, 2005). Smith was influenced by George Herbert Mead, Merleau-Ponty, Marx, Bakhtin, Foucault and Garfinkel, yet she does not identify with any of their theoretical traditions or interpretive procedures. The social strategy she developed is “constrained by the project of creating a way of seeing, from where we actually live, in the powers, processes and relations that organized and determine the everyday context of that seeing” (Smith, 2005).

A major focus of IE research has been people's everyday lives as sites of interface between individuals and a vast network of institutional relations, discourses and work processes. Institutional ethnography also emphasises people’s work and how it is coordinated with that of others. Work refers to what people actually do in particular places, under definite conditions and with definite resources (Smith 2003). So defined, “work” eliminates the paid/unpaid dichotomy and includes activities that we do not normally consider part of work, such as waiting (Diamond, 1992).

IE researchers use the notion of “problematic” to denote and investigate a puzzling aspect of the taken-for-granted everyday world rather than what those in a local setting describe as a “problem”. The problematic is what defines and gives rise to the series of “puzzles” the researcher wishes to explore. IE has been increasingly used in healthcare focused research over the past two decades. Examples of the types of questions institutional ethnographers might ask include:

1. How do physicians, or other clinicians, integrate hospital or government policies, such as waiting time strategies, into the clinical work that they perform?
2. How do medical educators take up the pressure to adopt psychometric measurement strategies in their everyday practices with residents?
3. How is the patient’s everyday experience of pain management organised textually and discursively through the increasing emphasis on self-management?
4. How do medical students adapt their learning strategies to the types of assessment they will undergo?
5. How do undergraduate medical faculty understand and implement competency frameworks?

Exemplars

Diamond’s (1992) ethnography of seniors’ residences in Chicago is an extraordinary account of the experience of both working in and being a resident of a nursing home. Diamond became a certified nursing assistant in a nursing home in the Chicago area in order to take up the standpoint of nursing home workers. Diamond explores how nursing care is institutionally organised and how this coordination contributes to efforts at ongoing healthcare reform as they are being practiced in the United States and elsewhere: with an emphasis on efficiency.

Rankin and Campbell’s (2006) book *Managing to Nurse* focuses on nurses’ participation in Canadian healthcare reform. Among the important contributions of this book is an emphasis on how the accounting logic that permeates current healthcare reform changes the caring work that nurses perform. In addition, Campbell has conducted several IE studies aimed at explicating the role of nursing work in healthcare delivery and healthcare reform (Campbell 2001; Campbell and Jackson 1992; Campbell and Manicom 1995). Rankin’s recent work has also used the theoretical framework of institutional ethnography to explore the practices of nursing educators as they evaluate students, thus explicating some of the troubling practices of evaluation work (Rankin et al. 2010).

McCoy (2005) undertook a study of the doctor-patient relationship from the standpoint of women and men who live with HIV in conditions of economic and social marginality. She draws on focus group and interview conversations with 79 HIV-positive individuals in southern Ontario to offer a close reading of patients' descriptions of good doctoring in light of their specific needs and life circumstances.

Focusing on a high-profile research report on hospital length-of-stay, Mykhalovskiy (2001) conducted an ethnographic study of the production of health services research and how this research is taken up by hospital administrators. In Mykhalovskiy’s analysis, the discourse of “efficiency” and its role in hospital restructuring is rendered visible.

Webster (2009) explored the positivist discourse of evidence-based medicine as it is taken up by community physicians charged with implementing “best-practice” acute stroke care in Ontario, Canada. Through her work, the discourses of evidence-based medicine and knowledge translation come into view as managerial tools designed to control the delivery of care rather than as designed to improve patient care. She uncovers some of the assumptions and hidden priorities underlying these discourses.

E. Other theorists worth reading

Given space constraints, we have focused on four theorists out of a large number of possibilities. Here we introduce briefly four other theorists whose theoretical contributions could fruitfully inspire medical education research.

- Through his research, Bruno Latour has shown how scientific facts are created (Latour and Woolgar 1986 [1979]) and suggested a methodology for studying scientists (Latour 1987). He emphasises the role of rhetoric in the scientific community and in the processes of adoption of scientific innovations (Latour 1993).
- Ian Hacking, who is a philosopher of science, argued that a "looping effect" transforms patients and medical diagnoses, particularly in the case of mental health (Hacking 1990; Hacking 1998), and forced social scientists to reconsider what they mean when they say that something is "socially constructed" (Hacking 1999).
- The international, comparative research of John W. Meyer, Francisco Ramirez and colleagues at Stanford University provides a compelling theoretical framework for the investigation of diffusion processes in higher education as in other organisational fields (Drori et al. 2003; Frank and Meyer 2007; Meyer et al. 1997).
- Sandra Harding is a feminist pioneer in studies of science. Harding (1986) asked: can the sciences, with their Western, bourgeois, masculine history and worldview, ever serve women? She also argues that Western science has led to the development of Western society and culture at the expense of those she calls "others" (Harding 1991): developing world peoples, women, the poor and nature..

Hot topics of social scientific study in medical education

The hidden curriculum

As noted in a key text by Hafferty and Castellani (2009, p.16), the hidden curriculum can be both a theoretical framework and a "particular process of student learning" characterised by the socialisation into particular attitudes, values, beliefs and behaviours.

Early studies of the hidden curriculum included Haas and Shaffir's (1982a) study of student socialisation and Hafferty and Franks' (1994) discussion of ethics teaching within medical education. The former notes the import of relationships in the development of students' sense of competence. The latter conceptualises medical training as "a process of moral enculturation, and that in transmitting normative rules regarding behaviour and emotions to its trainees, the medical school functions as a moral community" (Hafferty and Franks 1994, p.861). Sinclair (1997) highlights the socialisation process inherent to medicine, the learning of attitudes, values and behaviours, most particularly the loss of idealism and the acceptance of a ritualised professional identity.

Hafferty and Castellani (2009) argue that two main factors led to the rising interest in the hidden curriculum as a theoretical framework among medical educators in the 1990s: first, new information technologies enabled different studies of healthcare quality and medical training; second, a way to be critical of the old way of doing things that would not alienate the old guard needed to be found. The hidden curriculum framework suggested that even if the formal curriculum were of high quality, something *else* was being taught in medical education. Several studies have shown how medical students are indoctrinated into a culture that makes them more cynical and less caring or empathetic when they graduate than they were when they started, most particularly in how they see or relate to patients (Anspach 1988; Becker and Geer 1958; Mizrahi 1986; Newton et al. 2008). A study of when and where values are taught within an internal medicine training programme highlighted the importance of informal learning spaces: those outside the structured teaching times such as rounds and lectures (Stern 1998). Two studies suggest that clinical learning is particularly to blame for this loss of idealism: White et al. (2009) note the conflicting messages medical students receive through the formal (pre-clinical) and informal (clinical, via role modelling) curricula; Hojat et al.'s (2009) longitudinal study confirms that the "devil is in the third year". Other studies emphasise the import of the student-teacher relationship in the transmission of the hidden curriculum of medicine (Haidet and Stein 2006) and find gendered patterns of appreciation of role models: men were valued for their knowledge, professional power and authority, women for their tolerance, integrity, respectfulness and support (Lempp and Seale 2004).

Professionalism

The literature on professionalism in medicine and in medical education is large and spans several decades. Freidson (1970), in *Profession of Medicine*, argued that professionalism is as much a function of the knowledge and skills of practitioners as it is a function of the environment within which professionals learn and practice. While technical definitions of professionalism have been broadly used and, while educating "professionals" could be seen as merely a technical challenge, a few

sociologically inspired studies have forced medical educators to step back and consider the assumptions built into their research and practice.

Several authors have noted how conceptualisations of professionalism do not connect clinical practice with the abstract concepts they advocate for, such as altruism, duty and honesty (Wear and Kuczewski 2004). Too abstract, these attributes of the "truly professional doctor" – what Whitehead (2011) calls "the Good Doctor" – are not anchored in actual behaviour. To complicate matters, according to Connelly (2003), professionalism applies both to medicine as a whole and to individual practice. Wear and Kuczewski (2004) use discourse analysis to reflect upon a decade of medical school efforts at developing professionalism among their students. They note the arbitrariness of curricular efforts and suggest that relationships (between doctors across professions, with patients) be the focus of professionalism education in an effort to transform abstractions into ways of doing.

Martimianakis, Maniate and Hodges (2009) write: "professionalism is an extremely value-laden term with societal, institutional, historical and contextual expectations built into it" (p. 830). Understanding, as social scientists, that a construct such as "professionalism" is an interactional process inextricable from the political, social and economic dimensions of medicine broadens its scope– in terms of how it can be researched and taught. For example, as argued by Wear (1998), certain symbols of medical professionalism – the white coat in particular, a symbol of care hierarchies, of social and economic dominance and of exclusivity – carry meaning with them. Hodges et al. (2011) also use discourse analysis to identify dominant notions about professionalism. They found that discourses varied along two main dimensions: epistemology (positivist-objectivist and subjectivist-constructivist) and scope (individual, interpersonal and social or institutional). Each perspective thus identified was found to be fruitful in illuminating certain elements of professionalism and potential means of assessment.

Globalisation of medical education

The social sciences have paid scant attention to the globalisation of medical education to date. One exception comes from Bleakley, Brice and Bligh (2008, p.266; see also Chapter 12 in Bleakley et al. 2010), who invite medical educators to consider their attempts to spread "Western curricula, educational approaches and teaching technologies" in light of postcolonial theory. Similarly, Hodges et al. (2009, p.910) argue that globalisation discourse and its claim to universality have to be reconsidered given the "differences and discontinuities in goals, practices and values that underpin medical competence".

For decades now, researchers have documented gaps between the discourse of adoption of Western medical education standards and actual practices (Gallagher 1988; Gukas 2007; Rao 2006). Altbach and Knight (2007) contextualise these findings and discuss how internationalisation efforts are borne out of academic capitalism (Slaughter and Leslie 1997) and provide a regional overview of initiatives around the world. An Australian study by Hawthorne et al. (2004) highlights the impact of globalisation on medical education and notes how changing financial imperatives have dramatically changed the composition of the student body, raising several questions about the content and delivery of medical education.

A recent review of the broader education literature by Dolby and Rahman (2008) reviews six different approaches and unearths their historical roots, assumptions, strengths and weaknesses. It will also serve as a great introduction to this growing field.

Future research

The role of the social sciences in medical education research is to broaden the discourse, to suggest alternative ways of viewing the world, to situate today's reality within a social, cultural and historical perspective, and to problematise and make strange the world that medical educators, students and clinicians have come to take for granted. We believe that future research would benefit immensely from more theoretically-driven research studies.

Some areas where social scientific approaches would be most valuable have been noted above. Yet we would like to suggest others. First, contributions of the social sciences to our understanding of medical school culture and its impact on diversity will become more important as institutions move to recognise the chilly climate experienced by students and faculty who are women or who come from racial, ethnic, religious or sexual minorities. Time has come to re-open the black box of medical student socialisation and of harmonising forces. Second, studies of medical education that build upon the broader higher education research literature would add some important contextual elements and fresh theoretical perspectives. Third, international, comparative studies of medical education would yield interesting insights into cultural beliefs and assumptions, including with respect to the rise of new technologies, and help develop locally-appropriate approaches to medical education. Finally, studies that put front and centre issues of power within medical education – among faculty, among students, as well as

between faculty and students, among ways of knowing (epistemologies) and ways of doing, across disciplines and types of disciplinary expertise – would be of high import.

Conclusions

- The social sciences have a critical role to play in the re-conceptualisation of medical education as a dynamic space where history, culture and social processes come to define medicine, health and illness.
- Using sociological theory enables researchers to ask different types of research questions and to see the world differently.
- Seeing medicine and medical education as social constructions helps deconstruct their apparent objectivity and unavoidability.
- Sociologically-inspired studies are particularly well suited to discuss issues of power: between areas of knowledge; among students or faculty; or between students and faculty

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