The preparation of a syllabus in social medicine: McKeown revisited

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Abstract

This article revisits Thomas McKeown’s classic 1957 article regarding the difficulties involved in teaching, and preparing a syllabus in, social medicine. The present article assesses McKeown’s perspective for the teacher designing a syllabus in social medicine for contemporary medical learners in the U.S. The three principal goals that McKeown identifies for such a syllabus—coherence, realizable learning objectives, and accessible presentation—remain just as important and perhaps just as elusive today. The article surveys some of the difficulties involved in positioning social medicine themes and content within dominant conventions in U.S. medical curricula. The article focuses especially on difficulties posed by a wide and interdisciplinary evidence base, the perceived irrelevance of priorities and interventions important in virtually any informed concept of social medicine, and how these priorities and interventions can be presented within the framework expected by and familiar to medical learners in the U.S.

In 1957, the Journal of Medical Education published an article by Thomas McKeown titled “The Preparation of a Syllabus in Social Medicine.” The article is significant both because of its content and because McKeown wrote it. Trained as both a physician and a demographer, and holding a faculty position for several decades at the University of Birmingham as a professor of social medicine, McKeown is a critical figure in the social medicine field. Arguably, his most significant contribution is the development of the McKeown Thesis, which generally posits that one of the largest recorded gains in life expectancy in the Western world had little to do with either organized clinical medicine or public health interventions. Instead, he claimed, rising standards of living and improved nutrition caused the health transition in Great Britain from 1600 to 1940. This argument, which McKeown and a number of colleagues developed over several decades, sparked a firestorm of controversy that continues to the present.

Yet while there is much that is contested in McKeown’s work, what is comparatively uncontested remains critical for contemporary social medicine: the general insignificance of clinical medicine to improvements in population health. That is, while scholars have effectively undermined McKeown’s claim that public health interventions and social safety net policies had no effect in reducing morbidities and mortalities, McKeown’s additional claim, that clinical medicine had little role in causing the stunning health gains in Great Britain, has emerged relatively unscathed. As Simon Szreter, one of McKeown’s most vigorous critics, has put it:

[The McKeown Thesis] effectively demonstrated that those advances in the science of medicine forming the basis of today’s conventional clinical and hospital teaching and practice, in particular the immuno- and chemo-therapies, played only a very minor role in accounting for the historic decline in mortality levels. McKeown simply and conclusively showed that many of the most important diseases involved had already all but disappeared in England and Wales before the
earliest date at which the relevant scientific medical innovations occurred.\(^2\)

Especially insofar as it grounds the distinction between population health and health care services, one that is foundational to both historical and contemporary models of social medicine, the McKeown Thesis is a lodestar for the field. This renders McKeown’s views on the structure and content of education in social medicine worthy of reexamination. The present article adopts a comparative perspective to such reexamination, using McKeown’s 1957 paper as a basis for understanding the author’s experiences in preparing a social medicine syllabus for a U.S. medical school in 2011. Such an historically minded comparison can shed important light both on key themes and ideas in social medicine from the past to the present, and on the myriad obstacles to instruction in social medicine in contemporary U.S. medical education. The aim in focusing on the U.S. is not for the U.S. to colonize social medicine pedagogy. Rather, as there is ample evidence that the global North, including the U.S., bears significant culpability for the devastating health inequities across and within international political order, First World nations such as the U.S. have both greater means and greater responsibility to ameliorate these inequities.\(^4\) Insofar as training the next generation of social medicine practitioners can contribute to the discharge of this obligation, incorporating a social medicine perspective in U.S. medical education is a means of emphasizing the U.S.’s moral responsibility for social injustice.

McKeown structures his 1957 article by articulating three principal goals a syllabus in social medicine should pursue: coherence, realizable learning objectives, and an accessible presentation. Each shall be considered in turn.

Three principal goals of a syllabus in social medicine

Coherence

McKeown notes that a syllabus in social medicine “should provide the coherent conception of the subject which the student cannot provide for himself.”\(^5,6\) But as to what qualifies as coherent in a syllabus, McKeown admits that “teachers [of social medicine] are by no means agreed about it.” He observes that syllabi often include units on subjects as diverse as “epidemiology, medical statistics, administration of medical services, human genetics, control of infectious diseases, and social complications of illness.\(^7\) In part, McKeown is expressing the well-documented difficulty of presenting an interdisciplinary approach in a pedagogical world carved up into disciplinary modalities. This is indeed an archetypal problem for social medicine pedagogy.

The father of social medicine, Rudolf Virchow, insisted on the tight relationship between macrosocial structures and the distribution of health in human populations.\(^5,6\) If politics is medicine on a large scale, as Virchow suggests, then it follows that a truly social medicine must incorporate education, training, and ultimately action addressing the large-scale factors that determine health. Virchow well understood “the stark fact … that most disease on the planet is a result of the social conditions in which people work and live.”\(^7\) This is why, in his seminal report on a typhus epidemic in upper Silesia, Virchow emphasized the need to ameliorate the destitution of the miners who suffered a disproportionate toll of the epidemic. The kind of medicine Virchow had in mind was, obviously, a social medicine, one directed not merely at the pathogens that caused active typhus, but at the macrosocial structures of class, income, education, and occupation, etc., and the accumulated social disadvantages that rendered the miners so vulnerable to disease and premature death.\(^5,6\)

Thus, while McKeown is undoubtedly correct in pointing out the multifaceted and interdisciplinary nature of social medicine, if anything he underestimates the multiplicity and complexity of the various evidence bases and knowledge modalities that might be critical in preparing a syllabus in social medicine. For example, although McKeown notes the importance of material and learning objectives related to epidemiology, for the current student in social medicine it is vital to understand the increasing criticisms of the traditional dominance of clinical risk factor epidemiology and the concomitant development of social epidemiology.\(^8–11\) These criticisms typically argue that as significant as clinical epidemiology is, it misses the larger “fundamental caus-
“preventive services” of disease by focusing on more proximal risk factors that shape illness and, in so doing, makes the unit of analysis the individual rather than the macrosocial structures that multi-level modeling suggests are prime determinants of health and illness.

While it is impossible to imagine a contemporary syllabus in social medicine excluding material on epidemiology, there is a very real issue regarding which epidemiologic lenses to use. Moreover, such concerns are integral to McKeown’s concern about coherence, because if the readings and learning objectives in epidemiology focus attention on proximal factors far removed from distal variables and phenomena, such a focus might well undermine the coherence of the curriculum.

However, McKeown arguably takes the emphasis on coherence too far, as he argues that the traditional differentiation in social medicine pedagogy between preventive and curative services should be abandoned. He identifies two reasons for including instruction on curative medical services within social medicine curricula: first, its exclusion “identified the subject of social medicine with matters which most students regarded as unrelated to their probable future work” and, second, the fact that complete medical services properly include both preventive and curative interventions renders the exclusion of the latter “incongruous.” But note that the first reason mentioned merely identifies a very serious problem in social medicine pedagogy: the likelihood that the vast majority of U.S. medical students do not see the consistent delivery of a wide variety of preventive services as within their professional ambit. If prevention is truly critical to improving population health and reducing health inequalities, then the fact that most medical students do not consider preventive services within their purview is hardly a matter to be tolerated. Rather, it is an unfortunate state of affairs requiring intensive and immediate remediation. And yet even this factor invites an additional question that is central to a robust syllabus in social medicine: What is meant by “preventive services”?

As contemporary social medicine scholars have pointed out, the very idea of prevention has largely been captured by the enterprise of acute clinical services; prevention has become preventive medicine. Thus, while the health benefits of primary, secondary, and tertiary preventive interventions vary widely, the life course hypothesis central to any comprehensive model of health and its distribution suggests the significance of what some have termed “primordial prevention,” or intensive interventions that begin extremely early in the lifespan. The multi-generational implications of the life course hypothesis—that social and economic conditions shaping the lives of parents can have dramatic health impacts for progeny not yet conceived—buttresses the idea of primordial prevention. Thus, a curriculum in social medicine ought not be satisfied with instruction on merely any conception of preventive services, but should emphasize a model rooted in the social epidemiologic evidence suggesting that the most effective kinds of prevention must occur very early in the lifespan, rather than being more proximal to the onset of disease.

These factors suggest a critical instructional paradox for educators designing a syllabus in social medicine today: as McKeown warns, learners are very likely to see material devoted to primordial prevention as entirely unrelated to their future work, and yet it is precisely that material that is absolutely vital for learners to receive and process given the robust connection of primordial prevention to health and its distribution in human populations. The likelihood that there are few if any other outlets or spaces for instruction on such prevention in the U.S. medical school curriculum as specified by the American Association of Medical Colleges (AAMC) renders it all the more important that material on primordial prevention not be crowded out by instruction on the kinds of curative services that are the major focus of medical education in the U.S. today.

Perhaps one way of resolving the paradox is through McKeown’s observation that instruction on preventive services should be included alongside instruction on clinical services. This in itself seems innocuous, especially because McKeown’s argument that complete medical services should include attention to the prospects of both prevention and cure is difficult to gainsay. Indeed, there are some recent signs that the AAMC is increasingly empha-
sizing the necessity of giving due attention to prevention. 

However, there is no reason to think the increasing attention given to preventive services in medical education is any less susceptible to the same forces that transmuted the concept of “prevention”—which in its modern form is firmly rooted in public health and social medicine—into “preventive medicine.” Therefore, the architect of a syllabus in social medicine for today’s world is tasked with the necessity of including material on both prevention and cure, but also of emphasizing the distinction between primordial prevention and preventive medicine and the possible connections of each to a robust model of social medicine in practice.

Realizable learning objectives

McKeown identifies a second goal for a well-structured syllabus in social medicine as the identification of a primary learning objective, which he offers: “To provide an understanding of the problems confronting us in medicine, and of the means at our disposal for solving them.” This is, of course, impossibly broad as a learning objective. McKeown notes that this aim is “far too ambitious.” For him, the problem that such a vast objective is meant to highlight is that “at qualification, or indeed after, most doctors [do not] have any clear ideas about what medicine achieved in the past, what it can do at present, and what it may hope to do in the future.” McKeown remarks further that the general unwillingness to “address these deficiencies” justifies the inclusion of such a broad goal for social medicine pedagogy.

Even though the problem McKeown identifies is formulated too generally, it is difficult to altogether dismiss his concern. Consider the anomaly that Virchow is both the father of pathology and the father of social medicine, and yet only one of these subjects is generally included in medical school curricula in the U.S. This becomes downright troubling when one considers the abundant epidemiologic evidence, which Virchow himself noted, and which has only been reiterated in the 20th century, that social and economic factors are by a considerable margin the prime determinants of health and its distribution. This is not to suggest that pathology is unimportant, of course, but only that pathologies are perhaps more properly understood as mechanisms by which macrosocial determinants shape health, as proximal causes of injury, illness, and disability. As Link and Phelan put it in their influential formulation, social conditions are fundamental causes of disease, a theory and the evidence for which rest at the core of a truly social medicine, rather than at the core of a focus on cellular pathology. And yet it is social medicine that enjoys little space in medical education, whereas pathology is a required course in every accredited medical school in the U.S.

McKeown seems to raise similar concerns through his example of how a syllabus in social medicine might fulfill the far-reaching learning objective he suggests. He cites the example of rheumatic fever, and notes that while a “conventional” approach in a medical school curriculum might examine “its etiology, incidence, distribution, methods of prevention,” such instruction would be unlikely to address the cost-effectiveness of current treatments. McKeown’s observation seems half-right at the present, in the sense that while contemporary medical education would be very likely to include discussions of treatment possibilities for rheumatic fever, it is unlikely to include any discussion of cost, the traditional neglect of which has in part given rise to the field of health services research.

More interesting than this consideration of the role of cost-effectiveness in medical education, however, are the significant changes in tone and scope evident in what McKeown saw as missing from “conventional” medical education in the United Kingdom in 1957 to what McKeown saw as missing from, and problematic in, medical education, training, and practice in 1979, the date of publication of his last major book, The Role of Medicine: Dream, Mirage, or Nemesis? In the intervening decades, McKeown assembled the evidence and sharpened the conclusions for the McKeown Thesis, and at least as judged by the content of The Role of Medicine, seemed to believe that a great deal more would be needed to fulfill the broad learning objective he identified than a focus on the cost-effectiveness of medical treatments. Indeed, given McKeown’s general insistence that a focus on curative interventions was misplaced due to the epidemiologic evidence—some of which he and his col-
leagues produced—suggesting that social and economic conditions were the “causes of the causes,” it is fair to conclude that by 1979 he believed that a very great deal more was needed to effectively satisfy the broad learning objective he articulated in 1957.

Ultimately then, as McKeown recognized in both 1957 and 1979, some of the questions that must be answered to formulate a syllabus in social medicine lie at the very heart of what it means to practice medicine. These might include questions such as “What is the relationship between medicine and health?” “What drives patterns of disease in populations?” and “How can historical understandings of epidemiologic patterns instruct medical practices in the present?” All of these questions are central to McKeown’s focus in *The Role of Medicine*. They also constitute the three learning objectives the present author selected for a syllabus in social medicine in 2011 (Appendix):

1. To describe the historical origin and central themes behind the social medicine movement;
2. To explain the distinction drawn in social medicine between health and health care; and
3. To identify ways in which social medicine concepts and themes could impact medical practice in the present and the near future.

Accessible presentation

McKeown identifies the third and final goal of a well-structured syllabus in social medicine as a suitable presentation for medical students. This is a significant problem for social medicine in particular because, McKeown observes, medical students are frequently “intolerant of discussion of such matters as medical-social history, the social services and the organization of central and local government, unless these subjects can be shown to have some direct relation to traditional medical interests.” McKeown’s strategies for handling this problem are to prune all matter that is not strictly essential and to present concepts in “such an order that their relevance to medicine can become apparent.” As to the former, McKeown notes the compelling evidence that housing is a prime determinant of health, and argues that this must be addressed in a syllabus in social medicine, but also that learners need not receive instruction on “criteria of slum property” or on “the measures by which houses are made habitable.” McKeown acknowledges that however vigorous the pruning, some subjects will remain that are unlikely to be of great interest to medical students, and that therefore an account of the relevance of social issues to health should be preceded by a discussion of the immense power of the environment in shaping health. This sequence has the advantage, says McKeown, of piquing medical students’ interest in a subject more accessible to them (environmental health) as a means of facilitating a discussion on the subject that is less obviously relevant.

There is little doubt that the architect of a syllabus in social medicine in the U.S. today faces a very similar challenge. A significant number of the interdisciplinary themes that lie at the core of any reasonable introduction to social medicine sit well outside the purview of most of the current medical teaching in the U.S. Material could justifiably be drawn from social epidemiology, public health, history, law, health economics, and public policy, and could even legitimately be extended to ongoing debates in cultural studies, population-level/public health ethics, and political philosophy. These subjects are thinly represented, if at all, in medical curricula in the U.S. today, and there is little reason to expect large numbers of medical students to evince strong interest in exploring material drawn from disciplines, knowledge bases, and approaches that are at once entirely unfamiliar, have no place in the standard curricula, are not taught or modeled by their teachers and mentors, and seem remote from expected clinical practice. Thus if great care is not taken to connect the material at the core of social medicine pedagogy to medical students’ prevailing training and interests, the chasm virtually ensures ineffectiveness in learning. McKeown concludes: “If it cannot be so related it should not be in the syllabus.”

And yet while McKeown’s recommendation here is reasonable, it is not wholly satisfactory, for it does not resolve the instructional paradox mentioned earlier: what medical students ought to learn in a course on social medicine they may well have little interest in learning, and what medical students
are interested in learning is not what they need to learn in a course on social medicine. Simply conceding that if it cannot be taught in a way to prick learners’ curiosity it should not be taught at all does not resolve the paradox so much as sidestep it, assuming there is some quantum of material that simply cannot be made appealing to medical students, a point that McKeown admits.

The author’s strategy in terms of presentation is to focus on the causes of disease. What could be more basic, and presumably more interesting to medical students, than to ask them to reflect critically on the causes of disease in human populations? Evidence central to social epidemiology and social medicine shows very quickly the limitations of answering this question mechanistically—as medical students are trained to do—which opens a pathway to deeper exploration of themes, approaches, and material central to social medicine.

Conclusion

There is likely no easy and comprehensive solution to the problem of presentation and the instructional paradox it embodies, for this is in truth the central challenge for social medicine pedagogy in U.S. medical schools today. Virtually since its incarnations in the mid-19th century, social medicine has posed a fundamental challenge to dominant canons of Western allopathic medicine that objectify discrete material pathologies as the principal causes of disease and the key loci of medical interventions. The irony, of course, is that the increasing pedagogical emphasis in medical training on pathogens and dysmorphologies rather than on public health movements focusing on social reform began its intellectual dominance at almost exactly the same time in the 19th century.

The clinicopathologic model of disease that characterizes Western allopathic medicine solidified further in medical pedagogy under the influence of the Flexner Report, which instantiated the focus on basic science that remains the core of undergraduate medical education in the U.S. Expansive models of social medicine that emphasize the immense importance of upstream social and economic conditions in shaping patterns of disease have little purchase in the standard curriculum, which highlights for U.S. medical schools the urgency of the instructional paradox McKeown identified in British medical education c. 1957: material and themes central to social medicine pedagogy are literally indispensable if the goals of medicine include the improvement of population health and the reduction of health inequalities and yet such material and themes have little place in current medical school curricula and are likely to encounter at best many uninterested and at worst many hostile learners.

There is little doubt that McKeown’s 1957 prescriptions for addressing these problems of fit and interest among medical learners are also applicable and useful to the architect of a syllabus in social medicine today. The syllabus must:

• Synthesize a wealth of interdisciplinary readings, modalities, and themes to make up a coherent whole;
• Identify realizable learning objectives that neither succumb to the pressure of pruning all material outside traditional canons of U.S. medical education nor burden learners with readings and assignments that will be seen as utterly irrelevant; and
• Present the material in a way that neither alienates learners nor kowtows to their preferences for modalities, approaches, and frameworks that are consonant with dominant traditions in U.S. medical curricula.

The challenges of practicing social medicine in either the global North or the global South are immense because, as social medicine scholars have argued for decades, the priorities set and approaches preferred by the medical-industrial complex in the global North exclude much that is central to the practice of social medicine. Yet McKeown understood full well in 1957 that many of these same institutional and political factors formed impediments to teaching social medicine and training the next generation of social medicine practitioners. There is little reason to believe that these factors have changed enough to render the teaching of social medicine to U.S. medical students any easier. Nevertheless, doing so constitutes a challenge that must be met.
References

Introduction to Social Medicine
Course Syllabus
Spring 2011

Course Meetings:
This course will meet on Tuesdays and Thursdays from 2:30 to 5:00 p.m., room to be determined. The format of the class sessions consists primarily of small group discussion. You will also have an opportunity to work alone or with a peer on an individual topic of interest. All announcements and materials related to the course will be posted on the class website, so be sure to periodically check for updates.

Short Description:
This course introduces students to the concept of social medicine, with a focus on translating a theoretical understanding of the history and content of the movement into an understanding of the movement's practical implications for current medical practice and health policy. The concept of social medicine began in earnest in Europe in the middle decades of the 19th century, but like most features of medical science at the time, quickly spread across the Atlantic to take root in the U.S., especially in northeastern cities like Boston, New York, and Philadelphia. However, unlike in Great Britain, France, and Germany, in the U.S. social medicine themes and ideals largely diverged from clinical medicine beginning in the early 20th century, and instead found a home within the profession of public health. Nevertheless, there still exists a small but vibrant American social medicine movement that seeks to reintegrate ideals and themes of social medicine in medical education, medical practice, and health policy itself. This course examines the history of social medicine in the West, some of its key substantive themes and ideas, and current proposals for integrating social medicine into clinical practice and health policy.

Overall Course Goals:
The overall course goals are (1) to understand the origin and intellectual history of the social medicine movement; (2) to understand the critical distinction drawn in social medicine between health and health care and how that distinction impacts the scope of medical practice; and (3) to identify ways in which social medicine concepts and priorities are relevant to current medical practices.

Learning Objectives:
By the end of the course, students will be able to:

1. Describe the historical origin and central themes behind the social medicine movement;

2. Explain the distinction drawn in social medicine between health and health care; and

3. Identify ways in which social medicine concepts and themes could impact medical practice in the present and in the near future.
Course Assignments & Evaluation:
Class evaluation will be based on the following three factors:

1. Completion of all reading assignments;
2. Attendance and class participation; and
3. A 10–15 minutes research presentation.

The quality of the learning experience in this class depends almost entirely on the preparation and participation of the learners, and thus assignments and evaluation are designed to reflect the importance of these contributions. Because not everyone is comfortable speaking in public, an electronic discussion board moderated by the instructors will be available for seminar participants throughout the course, and credit for preparation and class participation (#s 1 and 2 above) may be earned by contributions to the electronic discussion board.

Regarding the research presentation, learners may select any topic of individual interest, so long as it relates to social medicine. Learners may choose whether to prepare and present the topic individually, or with another participant in the course. Evaluation will be based on the depth and quality of the research, as well as the insight demonstrated in connecting the research to the themes of the class and the learning objectives.

Absence Policy:
Given the compressed nature of these electives, absences are particularly significant and necessitate a conversation with either of the course instructors.

Plagiarism & Cheating Policies:
Plagiarism and cheating contravene the School of Medicine Code of Student Conduct, and will result in disciplinary action pursuant to the provisions of the Code. Please familiarize yourself with the definitions of plagiarism and cheating, and contact your instructors if you have any questions or concerns.

Readings:
All readings will be posted on the class website.

Introduction: What is Social Medicine?
Tuesday, April 4:

History of Social Medicine I
Thursday, April 6:
Appendix (continued)

**History of Social Medicine II**
Tuesday, April 11:

**Themes in Social Medicine I: Health and Health Care**
Thursday, April 13:

Tuesday, April 18:

**Themes in Social Medicine II: Socioeconomic Inequities & Health**
Tuesday, April 20:
- Norman Daniels, Bruce Kennedy, and Ichiro Kawachi, Is Inequality Bad for our Health? (Boston, MA: Beacon Press, 2000), excerpts.

**Themes in Social Medicine III: Discrimination & Health**
Thursday, April 22:

**Seminar Presentations**
Tuesday, April 27:
- No readings.

**Social Medicine, Medical Education, & Clinical Practice**
Thursday, April 29: