Beyond *The Role of Medicine:* McKeown as Medical Philosopher

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The Role of Medicine is probably destined to be one of those books more often referred to than read. It may also serve to reinforce a public estimate of McKeown's work as primarily contributing an historical footnote to the contemporary literature of therapeutic nihilism.[1] But either assessment would be unfortunate, for *The Role of Medicine* is not just one more monograph questioning the value of modern medical treatment. It is the latest statement in a comprehensive philosophy of health care developed by its author over a long career in social medicine and it deserves to be read carefully against the larger background of McKeown's thought (McKeown, 1961a, 1961b, 1965, 1968a, 1969, 1970, 1973; McKeown and McLachlan, 1971; McKeown and Lowe, 1966).

The importance of reading *The Role of Medicine* within the context of McKeown's work as a whole can be illustrated by considering some of the apparent difficulties in McKeown's argument in this single volume. As its full title makes clear, *The Role of Medicine: Dream, Mirage, or Nemesis?* is not just a scholarly historical discussion, but a morally charged proposal for social policy. It is understandable, therefore, that seemingly minor technical difficulties and inadequacies should elicit interest or provoke controversy.

Foremost among the problems that have drawn attention is McKeown's use of mortality figures as the principal index of health and his virtual neglect of morbidity (Lever, 1977; Ingelfinger, 1977). While this procedure may be partly understandable (there is far less data available on morbidity than on mortality),[2] this narrow

[1]Typically, Ivan Illich (1976) employs a reference to McKeown, among others, to ground his contention concerning the uselessness of medicine.

[2]McKeown offers surprisingly little justification for his substantial neglect of morbid-

focus seems to vitiate McKeown's basic contention that personal medical diagnosis and treatment has played a relatively small part in the improvement of "health." For health certainly means more than prolonged life, and in the public mind, at least, many of the most striking achievements of modern medicine have to do not only with saving life, but with the relief of serious suffering. The impact of antibiotics on painful or disabling infectious diseases is a case in point.

Are we to assume, then, that McKeown has failed to perceive the technical inadequacies of his relative neglect of morbidity? Or is he unaware of the public estimate of this area of medical accomplishment? More disconcerting, is it possible that he disagrees with this estimate and places relatively little value himself on the relief of suffering or the provision of episodic care to individuals? If this last possibility underlies his neglect of morbidity, many of us, I suspect, would be prepared to fault not his historical scholarship but his moral judgment.

A related criticism is raised by McKeown's failure to use age-specific mortality figures where identifiable diseases are involved, or, more broadly, to make the effort to determine the impact of medical measures on the ages at which people die from specific diseases. Emphasis on mortality alone tends to obscure the morally important factor of increased survival with an incurable or repeating disease (diabetes and pneumonia are examples of incurable and repetitive diseases where age at death is significant) (Lever, 1977). Few persons would disparage medicine's ability to provide years of additional productive life to individuals who may eventually succumb to a disease they have borne.

Finally, there is the obvious criticism of McKeown's long-term perspective, which has the effect of diminishing the importance of recent marginal gains to health. McKeown is right, of course, in stressing the substantial improvement in health effected by better nutrition, hygiene, and housing before the advent of most personal treatment or immunization. In view of these large-scale secular declines in mortality, he is also right to stress the proportionately smaller contribution modern services have made. But this reduced contribution is not a full measure of the worth of these services since even the marginal role of personal health care remains vitally significant. After all, these proportionately smaller recent gains have

ity other than the absence of data and his belief that mortality and morbidity are closely associated. See p. 92, and McKeown and Lowe (1966: 40).

been made against less tractable health problems, many of which might have persisted despite improvements in nutrition or hygiene. For example, even if we concede McKeown's point that better food, housing and reduced numbers of active cases of tuberculosis have played a major role in lowering the incidence of this disease, there are certainly some residual cases that can be eliminated only by immunization or chemotherapy. Are we to believe, then, that these marginal gains are so unimportant, the lives spared and illness relieved so inconsequential, that we can dismiss them from our consideration? A similar question can be raised in connection with polio, a disease often more prevalent in well-nourished populations. While it is true that polio has not been a mass killer, can we fail to appreciate the scientific and medical achievements here that have saved some children's lives and that have spared many others severe disability? In short, would McKeown, allow an emphasis on mass measures and aggregate achievements to diminish our concern for the single patient or small groups of patients whose life and health depend on advances in high-technology, scientific medicine?

A quick reading of *The Role of Medicine* in separation from McKeown's other work naturally raises sharp questions of this sort and provokes the suspicion that McKeown personally subscribes to some kind of utilitarian viewpoint oriented more to mass benefit and cost-effectiveness than the welfare of single individuals. Nor are these suspicions eased by McKeown's conceptual analysis of the determinants of human health, a discussion that betrays strong Darwinian overtones. McKeown maintains that, given the operation of natural selection and the conditions of human evolution, we might suspect that most who are born alive, who are adequately nourished, and who are protected from environmental hazards will survive and reproduce. This seems to be true of animal populations and there are reasons for believing it is true of human beings. The reduction of mortality through improved nutrition and the substantial proportion of residual problems traceable to environmental or behavioral dangers (war, accidents, pollution, lack of exercise, poor eating habits, and smoking) suggest that free of hazards of this sort the large majority of individuals would fare very well throughout life with little or no personal medical treatment. Properly nourished and protected, as McKeown puts it, "most of those who are born well will remain well, apart from minor morbidity, at least until late in life . . ." (p. 174).

But, of course, the key word here is "most." For even if we

grant McKeown's premises concerning natural selection, there are whole classes of individuals who, though free of apparent congenital defect, might be expected to die young or experience severe disability throughout much of their lives. These include individuals with an inherited disease or susceptibility to disease that does not seriously interfere with reproduction either because it is compatible with marriage and childrearing or because serious symptoms tend to manifest themselves only after the onset of the reproductive period (diabetes can exemplify both possibilities). In farm animals, of course, these problems of a minority are unimportant. But human beings are not farm animals. Thus, we are returned to the kinds of question already asked. Can we neglect that minority of persons who will suffer from or succumb to a disease despite the past workings of natural selection and our best efforts at environmental protection? Is McKeown really advocating an aggregative, mass-benefit approach to medical care that would simply turn its back on the suffering or death of those individuals who presently form the object of our best and most intensive medical efforts?

I have sharpened these questions and tried to present McKeown's argument in its least favorable form not to criticize him but to emphasize how important it is to connect up his argument in this book with the interests and aims of his larger work. For McKeown's consistent purpose throughout all of his writings is not to minimize the importance of care for afflicted medical minorities, but rather to direct our attention to those substantial minorities whose care and treatment have often been forgotten in the quest for more sophisticated medical achievements. Specifically, McKeown would have us relax our grip on the levers of scientific medical treatment because he wants us to reach out to classes of persons, including the mentally subnormal and handicapped, the mentally ill and the aged sick, whose medical needs, he believes, have been insufficiently attended to in the past.

Even a cursory reading of McKeown's other writings evidences his preoccupation with these classes of patients. His first published monograph, for instance, deals with alternative ways of providing higher quality medical care to the elderly in Britain's chronic hospitals (McKeown et al., 1951). Later writings extend this concern to other groups whose care has traditionally been more custodial than therapeutic or rehabilitative, especially the handicapped and emo-

tionally disturbed.[3] It is perhaps indicative of how central these problems are for McKeown that he has repeatedly insisted that the measure of a modern health care system is how well it deals with the problems of mental retardation, mental illness, and the aged sick (McKeown, 1965: 159; 1969: 272).

Although these categories of illness and disability bulk very large in McKeown's concern, the reader of *The Role of Medicine* can be excused for not perceiving their central place on McKeown's agenda, since the historical argument here seems to dominate his discussion. Nevertheless, a careful reading of *The Role of Medicine* reveals that McKeown has not abandoned his interest in these health problems. His conceptual analysis of the conditions of human health provides an illustration. On the one hand, this discussion serves to buttress his case, made on historical and demographic grounds, that where nutrition is good and external hazards are reduced, personal health services can be expected to make a relatively minor contribution to health. On the other hand, there is the less noticeable intent of this discussion to emphasize what McKeown believes to be the major residual health problems once the historic reasons for illness are eliminated. Not surprisingly, these turn out to be the very problems long at the center of McKeown's interest: problems created by lingering environmental and behavioral hazards and the special problems of what McKeown believes to be neglected patient populations, the handicapped, mentally ill, and elderly.

McKeown's interest in environmental medicine is clearly evident throughout this book, so I will not dwell on it here. But it is important to emphasize his insistence that once environmental and behavioral dangers are lessened, the most serious residual problems will be determined at or near the time of fertilization or in the prenatal environment. That is, residual problems will either be congenitally determined (various birth defects and the inherited diseases of the post-reproductive years) or the result of intrauterine infection or trauma. Furthermore, while a percentage of these problems are potentially eliminable through prenatal detection and

[3]Virtually every one of McKeown's major writings emphasizes the need for care and treatment of these patient populations. (For specific discussions see McKeown, et al., 1958; McKeown and Leck, 1967; and McKeown, 1967).

abortion, an approach McKeown strongly advocates (pp. 15, 150, 168), the majority of these disorders are likely to defy even sustained efforts at prevention. Thus, McKeown leads us to the conclusion that the major health problems of the future include provision of care and treatment to those with congenital handicaps (especially the mentally subnormal), those suffering from diseases of ageing, and the mentally ill (to the degree that mental illness is not amenable to environmental improvement) (p. 97). In other words, McKeown's conceptual analysis has the effect of focusing our interest on just those medical problems that have consistently been at the center of his own attention.

Read carefully, then, and in the context of his work as a whole, McKeown's position in *The Role of Medicine* is by no means an appeal for the neglect of various medical minorities. Nor is it, like the work of some of the therapeutic nihilists, a denigration of medical services generally. On the contrary, it is an appeal for an active program of medical intervention, though this program might look substantially different from the one we presently know. In a sense, McKeown's title is purposely ambiguous since his aim here is not only to determine medicine's accomplishments in the past, but also its responsibilities and priorities in the future.

If a more comprehensive reading of *The Role of Medicine* removes the sharpest immediate objection to his position, however, it does not ease all the difficulties with this work. For even if we grant the validity of McKeown's concern for individuals or groups who have been relatively neglected in the past, we can still question the adequacy of the program of health care priorities McKeown is advocating. In an ideal world, it is true, intensified environmental efforts and improved care for the handicapped or mentally ill might be provided without any reduction in programs of research or treatment in other areas. But any call for changed priorities in this real world must consider what is likely to be sacrificed. The crucial question, then, for those who understand and appreciate McKeown's reformist intentions is whether his specific priorities are really defensible. If they are not, the value of his provocative challenge to the medical status quo is still questionable.

This point has been stated by critics of McKeown who have asked whether it is wise to withdraw from those areas of treatment and research where medicine has made such striking gains—particularly the study of disease processes and their control—in order to turn to other areas like mental disease where progress has

consistently been less impressive and which seem to resist dramatic advance.[4] For those who argue this way, the relative neglect of mental illness in the past is not the result of some conspiracy on the part of the medical profession but merely a reflection of the complexity of this disease condition and an absence of the kind of technical and scientific breakthroughs experienced in other areas of medicine. The only question, in the minds of these critics, is whether it is really wrong to do what one does best. For those who believe not, and think that medicine, like any endeavor, must seek to advance where the marginal returns are highest, many of the areas favored by McKeown simply do not now promise the best return on the investment of energy and resources they demand. For some, this judgment extends not just to the areas of mental health, rehabilitation, or geriatric care, but, in developed societies at least, to health education and environmental medicine as well.

This objection is important and McKeown's reply to it is complex. In fact, his perspective on this whole matter of health care priorities forms a central aspect of his thought and one that, to a degree, both precedes and explains his concern with the historical determinants of health. But since this full perspective is not often explicitly stated, it must be traced through several levels of McKeown's work. It is important enough, I think, to merit the attention.

On the most superficial level, McKeown's answer to those who maintain that lack of progress justifies neglect of a health area is to insist that just the opposite should be true: slow progress indicates the need for redoubled efforts (McKeown, 1965: 207). This is a reminder that where human health is concerned, we must not regard only our successes or become complacent about our failures. But while this is certainly true, critics might validly object that there are limits to resources. Positive gains must be seized where they can be found, and an area's relative unproductiveness must be taken into account. Moreover, whether mental disease or geriatric medicine are properly considered to be among these less productive areas cannot be resolved by insisting on their importance. Such matters must be settled by an objective assessment of a field's present limits and possibilities, and this can be determined only by the skilled professionals knowledgeable of their discipline.

To this counter-argument, however, McKeown advances a

[4]McKeown is aware of this objection and tries to confront it (1965: 206ff).

penetrating response. Health care systems and systems of medical education and research, he observes, happen not to be governed by pure considerations of fact and a process of impartial rational deliberation. These systems are first of all social institutions shaped by multiple accidents of history and inhabited by fallible human beings often unaware of that history. This means that the information these institutions inherit and produce, the "facts" that information yields, and the priorities these facts support are more often the product of historical contingency than any objective process of rational assessment. As a result, it is frequently impossible to draw unquestioned policy mandates out of this conflux of arbitrary forces. No less here than in moral issues generally, in other words, it is perilous to draw an "ought" (normative policy directives) out of an "is" (historically and institutionally determined interests).

An illustration frequently used by McKeown may help make this point clearer. McKeown himself concedes that progress in the field of mental illness has been slower than in fields like surgery or virology. But why is this so? It would be convenient to say because a firm scientific base for work has been harder to establish here, that the field has been more recalcitrant to medical effort. But can we really say that with any confidence? In fact, McKeown observes, a series of complex historical and institutional factors has compounded whatever intrinsic difficulties there may be in the treatment of mental disease (McKeown, 1965: Ch. 5; McKeown and Lowe, 1966: Ch. 19). To begin with, there is the long history of repugnance to the mentally disturbed. Combined with the need to physically contain dangerous patients, this led to the early physical isolation of mental asylums which, in turn, compounded the difficulties of making progress against mental disease. Isolation of facilities meant a subtle removal of mental illness from the public agenda and from the regard of the best teachers and researchers, who were located in the acute and general hospitals where the most rapid advances were being made. This process has continued up to our own day and continues to be evidenced in the staffing difficulties experienced at all levels by mental institutions. Ironically, it is often the "best" researchers and teachers who shape opinion, both within and without the medical community, concerning which areas of medical effort are most likely to be productive in the future and who also inspire future teaching and research. Thus, the view that mental illness is not a promising area of research or treatment may be less

an objective statement of fact than a prejudice based on a compounded process of historical neglect.

McKeown believes that this same process of neglect, happenstance, and institutional myopia has been operative in the areas of geriatric care and environmental medicine. Geriatric care, for example, suffers from a history of containment and isolation similar to mental illness. In Great Britain, McKeown observes, today's chronic hospitals for the elderly are often linear descendants of earlier Poor Law workhouses and infirmaries (McKeown, 1965: 86ff, 98). Initially, these were second-class institutions because their inmates were wards of the state. With the advent of the National Health Service, age and debility tended to replace income as the key determinant of admission to these inferior institutions, and, with this, the century-old tradition of relative neglect extended itself to a whole category of infirmity: diseases of the ageing. Here, too, of course, institutional isolation has further compounded neglect.

Similar historical contingencies, not rational deliberation, have shaped the estimate and importance of environmental medicine. Ordinarily one would think that for humane and economic reasons prevention should take priority over cure, though where obvious institutional obstacles exist a rational approach may be lacking. Thus, in the United States the fee-for-service treatment system has provided physicians little incentive for health maintenance of any sort. But surely, one would think, no such obstacles exist in Britain where a state eager to reduce its health-care expenditures could be expected to pursue all the possibilities offered by epidemiology, environmental medicine, and health education. In fact, as McKeown points out, an early political decision to delegate treatment responsibility to the National Health Service and public health work to local authorities has tended until recently to perpetuate the tradition of relative neglect of environmental medicine (p. 111f; McKeown and Lowe, 1966: 209).

Thus, despite the appearance of a comprehensive service and perspective, and because of historical considerations and institutional inertia, Britain's approach to preventive medicine has remained almost as backward as that of the United States. Not even substantial social change can easily overcome the effects of past attitudes on future institutional developments. (There is perhaps a lesson here for those who believe that Health Maintenance Organizations promise a rational change of priorities in this country.) But

more important is McKeown's point that any facts or priorities emerging from a context like this are suspect. Judgments against this or that initiative in preventive medicine—including such seemingly difficult tasks as changing smoking or eating habits—are at best premature. For as long as those who form these judgments and whose advice is most respected wear institutional blinders, their views must be subjected to some more exact empirical assessment.

By donning the cap of medical historian, then, McKeown would emphasize a medical sociologist's point: that the most unquestioned facts and priorities are often seriously distorted by institutional pressures and historical accidents. Indeed, in a sense, this observation summarizes the central argument of *The Role of Medicine.* By means of a careful historical investigation, McKeown would have us consider that the prestige of therapeutic medicine may not be entirely deserved and may be itself the product of an historical accident. On the one side, there is the fact that since at least the early nineteenth century we have witnessed an unprecedented improvement in human health. On the other side, there is the fact that this same period has coincided with the rise of scientific medicine, an "engineering" approach to the human body, and the development of the acute hospital. What is more natural to assume than that human health improved as a result of this intensified ability to treat illness? But, of course, it is precisely McKeown's point that this is a false causal inference. If health has improved, it is largely the result of advances in nutrition, housing, and hygiene which substantially preceded the application of scientific medicine. This means that the very prestige of scientific medicine may be a result of historical nearsightedness, and it is thus a double injustice, in McKeown's view, to use this prestige as a reason for perpetuating institutional neglect of environmental medicine and other health care priorities.

This point takes us full circle. McKeown's conceptual and historical argument in *The Role of Medicine,* we saw, aimed first of all at emphasizing the importance of preventive and environmental medicine as well as care for the handicapped, mentally ill, and aged sick. To the objection that these priorities ignore the possibility of greater medical gains elsewhere, McKeown points out the institutional and historical factors that have led to the underassessment of these areas. Finally, still wearing the historian's cap, he calls into question the reputed achievements of treatment-oriented, techno-

logical medicine. Throughout, McKeown reminds us how distorted policy judgments can be by contingent historical and institutional factors. Seen this way, I suggest, McKeown's total work displays surprising consistency and focus. Moreover, his efforts in the area of historical demography, however valuable in themselves, are seen as an important but subordinate part of a total philosophy of medical care.

Of course, understanding McKeown's purpose still does not require one to agree with it, and there is at least one serious objection to his own scale of medical priorities that must be considered. Even if we are persuaded by McKeown that existing priorities are not perhaps as justifiable as some believe, how can we determine which ones should take their place? Are not McKeown's own preferences in as much of an epistemological limbo as those he criticizes? How can we know that environmental medicine, mental health, improved geriatric care and the like are really the best areas, or the most productive areas, for social investment in health care? In fact, how do we begin to establish any priorities at all if we cannot rely on the judgment of those professionals working in existing institutions?

McKeown has a reply to these questions and it can be easily summed up: since irrationalities in a medical care system have an institutional basis, they can only be corrected by institutional reform. With this reply we are led abruptly to an idea which McKeown has developed since the beginning of his career and which, more than any other, I believe, forms the touchstone for his work. This is the idea of a "balanced hospital community."[5]

As McKeown conceives it, a balanced hospital community is a regionally centralized hospital, bringing together on one site under a common staff populations of the multiple facilities—chronic, acute, and mental—that are now usually separated. Within this center, patients are distributed among adjacent facilities on the basis of medical need, so that elderly or mental patients have access to acute care facilities and to high technology medicine when their condition demands it, and other patients, whatever their age, have access to

[5]McKeown only touches on this concept elliptically in *The Role of Medicine* (pp. 117, 135, 176) but it is noteworthy that his closing words in the book make reference to this idea (p. 180). (See McKeown, 1961c, 1965, 1966, 1968b.) McKeown's concrete medical research also evidences the centrality of this idea in his work. See, for example, McKeown et al. (1971).

prolonged care and rehabilitative services if they need them. Finally, though not every center of this sort would be devoted to teaching or research, every major teaching or research facility would be a balanced hosptial community, complementing its traditional use of selected patients with a large representative population drawn from its region.

Some of McKeown's arguments on behalf of this concept have to do with the various economies of scale and the flexibility afforded by a large regional center. But his key defense of this proposal rests on its value as a corrective for the kinds of institutional deficiencies that have impeded a comprehensive approach to health care priorities in the past. In McKeown's view, a balanced community would end the isolation of patient populations that has hampered progress against mental illness, slowed the development of adequate rehabilitative efforts for the handicapped, and prevented comprehensive care and treatment for the aged. It would guarantee individual patients access to the best care for their medical needs and not limit their treatment to the resources of a single institution to which they happen to have been assigned. A balanced community would help insure that clinicians, teachers, and students would have contact with the full range and extent of medical problems, including not just those that are interesting but those that are difficult as well (pp. 130–135; McKeown, 1965: 121). By requiring the hospital to assume responsibility for a representative population, the balanced community would make possible the kinds of epidemiological research that is a precondition for substantial progress in environmental medicine.[6] And, finally, by the very magnitude of its responsibilities, the balanced community would encourage medical interest, at the heart of the teaching center, in the discipline of medical organization. The balanced hospital community would thus support the very discipline which lies behind its formulation (McKeown, 1965: 208ff).

Because of McKeown's unflagging devotion to this idea, it is tempting to dismiss it as the interesting but eccentric proposal of an impassioned social reformer. Or, one might be provoked by some concrete aspect of the proposal—for example, the question of whether a large regional center would really lower costs. But either

[6]The importance of the hospital community in this regard is only hinted at in *The Role of Medicine* (p. 149), but McKeown's own medical research tends to stress the importance of an epidemiological approach based on broader populations. See, for example, McKeown et al. (1959); McKeown and Lowe (1962).

response, I think, misses the importance of this idea. For apart from the reformative purpose of the proposal or its specific administrative strengths and weaknesses, the balanced hospital community is the physical embodiment of McKeown's valuable methodological insight that a health care program will only be rationalized once the institutions that compose it are themselves rationalized, that fragmentation and imbalances in a health care system can be overcome—if at all—only by integrated institutions and by personnel trained within them to see the larger framework of issues and problems.

Understood this way, the details of McKeown's proposal are less important, since other models of institutional reform might be equally or more successful in yielding an integrated approach. In fact, McKeown's own thinking on this matter is not confined to the balanced hospital community. It encompasses, as well, a proposal for the creation of local health centers charged with both primary care and preventive medical responsibilities, and a proposal for a revised form of general practice based on training in the nonconsultant specialities of obstetrics, pediatrics, adult medicine, and geriatrics (McKeown, 1962; 1965: Ch. 10 and 11; McKeown and Lowe, 1966: 219ff). This last idea aims at overcoming the fragmentation of primary care and specialization and the separation of hospital and domiciliary services.

Despite their differences, what is common to each one of these proposals is the effort to overcome the division of perspectives and responsibilities arising from the accidents of history which continue to obstruct a comprehensive approach to health problems. In a sense, McKeown would take us further than a past generation of social reformers who advocated that society assume responsibility for health as a means of extending care to all and of rationalizing services. McKeown has recognized that even a firm social commitment to providing health care does not by itself guarantee the creation of an efficient, rational, or humane system. The inadequacies of the past can live on through institutions to haunt the future. Only continued attention to those institutions—a discipline of medical organization carefully attentive to history—can help create forms of practice and investigation capable of yielding an objective understanding of real health care needs.

If this reading of McKeown's work is correct, he is best understood as an important social philosopher of medicine. His other

professional competences—as medical historian, sociologist of medicine, medical researcher, epidemiologist, and medical reformer—all contribute to the formation of a comprehensive understanding of how we can continue to make genuine progress toward the improvement of human health. At the heart of this understanding is a recognition that the discipline of medical organization, allied with medical history to make possible a critique of existing forms of practice, is in some respects the centerpiece of health policy and health planning.

If I have dwelled on the larger context of McKeown's work, it is because I suspect that the very interest of *The Role of Medicine* may threaten to obscure his more basic contributions as a thinker. Caught up in the details of McKeown's argument, his readers—whether laymen or specialists—are likely to miss his more fundamental point that this historical work is, in his own words, only a "key" to unlock other doors (p. xiii). These doors open to the neglected patient populations that have concerned him since the beginning of his work. More important, they expose a domain of critical thinking about the organization of medical institutions that deserves attention in its own right.

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