Oliver Wendell Holmes: 
The Professor and Autocrat 
Addresses Medical Matters

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Oliver Wendell Holmes, the physician, poet and novelist, was a frequent and at times outspoken commentator on the practice of medicine. His speeches and writings reveal Holmes's remarkable wit and facility in addressing such topics as medical education, drug prescription and medicine in society. Although delivered in the previous century his comments often seem to retain remarkable relevance in the current medical forum.

Oliver Wendell Holmes enjoyed a unique combination of diverse medical as well as literary achievements. His preeminence as a poet and lecturer enhanced his effectiveness at the medical podium. Though best remembered as the poet of "Old Ironsides" fame, the medical accomplishments of Holmes are no less notable than his literary ones. After preparing at Harvard and Paris, he journeyed to Dartmouth to teach anatomy and physiology. At age thirty he returned to Boston for a brief sojourn in urban practice at the Boston Dispensary. Soon thereafter he re-entered the academic medical world, first at the Tremont Medical School, then accepting the Chair of Anatomy and Physiology at the Harvard Medical School. In later years he served as Dean of the same school. His early essay, The Contagiousness of Puerperal Fever, remains a medical landmark.

In his time Dr. Holmes was regarded as perhaps the most brilliant conversationalist in Boston. Even those in his Saturday Club, including such intellectual elite as Emerson, Hawthorne, Whittier, Lowell and Longfellow, would not deny him this distinction. That he was able to transform his conversational wit and intellect into printed word is obvious to any reader of The Breakfast-Table Series. Holmes was regularly assigned to deliver the final morning lecture to the Harvard medical students because he alone could rouse their somnolent minds and rise above the borborygmi.

A veteran of the lyceum lecture tours, Holmes was never timid on the dais. Such topics as medical education and drug prescription, subjects for animated debate today, were frequent targets of his addresses to his students and colleagues. His comments were not always quietly received. His 1860 address to the Massachusetts Medical Society prompted the Fellows of the Society to pass the resolution:

Resolved, "That the Society disclaims all responsibility for the sentiments contained in this Annual Address [1, p. 2]."

Though this disclaimer was later repealed it nevertheless indicates that his subjects were at times controversial and his remarks less than universally accepted.

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While infrequently read today, some of Holmes’s more notable presentations were published. The following essay contains excerpts from these medical speeches of Oliver Wendell Holmes. The subjects selected are those which continue to concern the medical profession. The ideas of Dr. Holmes, the autocrat, professor and poet, still seem remarkably pertinent.

ON THE FRUSTRATIONS OF THE MEDICAL STUDENT

The amount of medical knowledge to be assimilated by the physician is vast. The anxieties of the medical student are assuaged by his instructors’ statements that four years of education are merely preparing him for entry into a profession rather than attempting to provide him with the whole of medical knowledge. The student, however, inundated by the mass of facts, is apt to cry out for relevance from beneath his load.

As an educator Dr. Holmes was aware of the frustrations of students. This insight is revealed in his address to the entering class at Harvard in 1867:

Some years ago I ventured to show in an introductory Lecture how very small a proportion of the anatomical facts taught in a regular course, as delivered by myself and others, had a practical bearing whatever on the treatment of disease. How can I, how can any medical teacher justify himself in teaching anything that is not like to be of practical use to a class of young men who are to hold in their hands the balance in which life and death, ease and anguish, happiness and wretchedness are to be daily weighed [2, p. 17]? This question as posed has doubtless crossed the minds, if not the lips, of teachers and students of both the nineteenth and twentieth centuries. Dr. Holmes goes on to answer the question:

The reason why we teach so much that is not practical and in itself useful, is because we find that the easiest way of teaching what is practical and useful. If we could in any way eliminate all that would help a man to deal successfully with disease, and teach it by itself so that it should be as tenaciously rooted in the memory, as easily summoned when wanted, as fertile in suggestion of related facts, as satisfactory to the peremptory demands of the intelligence as if taught in its scientific connections, I think it would be our duty so to teach the momentous truths of medicine, and to regard all useless additions as an intrusion on the time which should be otherwise occupied [2, p. 18].

The ideal so established, Holmes counters with reality:

But we cannot successfully eliminate and teach by itself that which is purely practical. The easiest and surest way of acquiring facts is to learn them in groups, in systems, and systemized knowledge is science . . . Scores of proverbs show you can remember two lines that rhyme better than one without the jingle . . . If the memory gains so much by mere rhythmical association, how much more will it gain when isolated facts are brought together under the laws and principles, when organs are examined in their natural connections, when structure is coupled with function, and healthy and diseased actions are studied as they pass one into the other [2, pp. 18–19]!

There is a great and accelerating accumulation of medical facts today. Yet it may be somewhat presumptuous to assume that the intellectual task now confronting entering students is much more formidable than the challenges of a century ago. Remember that the facts of today have merely superseded the “facts” of the past. The
medical student in the 1860's was confronted, as is his present-day counterpart, by a mountain of medicine.

Dr. Holmes offers reassurance to the student who is chagrined at finding that recently acquired facts too often pass into mental crevices sheltered from recall:

To the student I would say, that however plain and simple may be our teaching, he must expect to forget much which he follows intelligently in the lecture room. But it is not the same as if he had never learned it. A man must get a thing before he can forget it. There is a great world of ideas we cannot voluntarily recall,—they are outside the limits of the will. But they sway our conscious thought as the unseen planets influence the movements of those within the sphere of vision . . . Some of you must feel your scientific deficiencies painfully after your best efforts. But every one can acquire what is most essential [2, p. 32].

Holmes shows that though now a teacher he retains an understanding of the student. Indeed the good physician must always remain a student of medicine. To Holmes the study of medicine is not to be a study in frustration and exasperation; there should be pleasure in the acquisition as well as in the application.

ON CURRICULUM REFORM

Within the last decade the format of medical education has been altered significantly at many institutions. The proponents of clinical expertise have tipped the educational scale from basic sciences to clinical experience with opportunities for earlier exposure to the clinical disciplines. Now in a period of reflection there are cries from some of the most competent clinicians for increasing the proportion of basic science and lecture time. Indeed a number of the more venerable institutions have decided to revert to some of their previous methods of education.

New reforms supplant old reforms, but reform itself is not new. Although certain major revisions of the medical curriculum have perhaps set the cadence (e.g., the reforms begun at Johns Hopkins early in this century), the pendulum of controversy has long been in motion. Holmes, himself a lecturer in anatomy and physiology, notes in 1867:

The idea is entertained by some of our most sincere professional brethren that to lengthen and multiply our Winter Lectures will be of necessity to advance the cause of medical education. It is a fair subject for consideration whether they do not overrate the relative importance of that particular mode of instruction which forms the larger part of these courses . . . whatever might be gained, a good deal would certainly be lost in our case by the exchange [2, p. 3].

Although now a basic science lecturer, Holmes has not lost the perspective of his time as a practitioner.

The most essential part of a student's instruction is obtained, as I believe, not in the lecture-room but at the bedside. . . [2, p. 3]

. . . I think it has many advantages of its own over the winter course, and I do not wish to see it shortened for the sake of prolonging what seems to me long enough already [2, p. 23].

It is difficult to speculate how Oliver Wendell Holmes would have reacted regarding the "new" curricula of today, but he doubtless would have had something to say.
ON MEDICAL PRACTICE AND DIVERSIONS FROM MEDICINE

The young physician will find that the practice of medicine requires sacrifices. He desires to achieve excellence in the practice of medicine and receives satisfaction from his efforts. Yet these efforts may become all consuming. While the physician may not regret these efforts per se, he might justifiably regret that they preclude his participation in other nonmedical pursuits. Can a balance be achieved between vocation and avocation?

Oliver Wendell Holmes was both an accomplished professor of anatomy and a widely read poet and writer. While one would never consider Holmes ordinary, surely one might think that he did achieve an equilibrium between his various pursuits. Yet in 1871, at the age of 62, his advice to “The Young Practitioner” is:

I warn you against all ambitious aspirations outside of your profession. Medicine is the most difficult of sciences and the most laborious of arts. It will task all your powers of body and mind if you are faithful to it. Do not dabble in the muddy sewer of politics, nor linger by the enchanted streams of literature, nor dig in far-off fields for the hidden waters of alien sciences. The great practitioners are generally those who concentrate all their powers on their business. If there are here and there brilliant exceptions, it is only in virtue of extraordinary gifts, and industry to which very few are equal [3, p. 432].

At first Holmes may appear to be giving practical advice for the majority while considering himself one of the “brilliant exceptions,” but this is not entirely the case. Holmes realized his own limitations in medicine. Although briefly a Boston practitioner he was primarily a teacher. While universally considered a great professor, Holmes himself made no claims to being a great practitioner. In fact he derided the academician who continued to dabble in practice.

“I suppose I must go and earn this———guinea,” said a medical man who was sent for while he was dissecting an animal. I should not have cared to be his patient. His dissection would do me no good, and his thoughts would be too much upon it. I want a whole man for my doctor, not a half one. I would have sent for a humbler practitioner, who would have given himself entirely to me, and told the other—who was no less a man than John Hunter—to go on and finish the dissection of his tiger [2, p. 25].

The goal of most university medical centers is to achieve excellence in both medical research and clinical practice. Yet it is a rare physician who is as adept in the clinic as he is skillful in the laboratory. Holmes comments further on this conflict of interest within medicine itself. To those who choose “the lofty pursuits of science for its own sake,” Holmes admonishes, “Take down your sign or never put it up [2, p. 30].” The physician’s “patient has a right to the cream of his life and not merely to the thin milk that is left after ‘science’ has skimmed it off [2, p. 30].” Dr. Holmes, of course, took down his sign after accepting his academic appointment at Harvard. As noted he regards it a difficult task to combine the study of basic medical science with the active practice of medicine without sacrificing the total commitment he thinks the latter demands.

Concerning nonmedical pursuits Holmes warns:

It is often a disadvantage to a young practitioner to be known for any accomplishment outside of his profession. Haller lost his election as Physician
to the Hospital in his native city of Berne principally on the ground that he was a poet. In his later years the physician may venture more boldly [2, p. 30].

Holmes was well known as a poet in his early years, his first collection of poetry being published in 1830 at the age of twenty-one. Yet his first volume of nonmedical prose, The Autocrat of the Breakfast-Table, did not appear until twenty-eight years later. Indeed most of Holmes’s lay prose was written after the age of forty-nine when he could “venture more boldly.” The intervening years were occupied by dissertations on medical subjects. Fortunately his colleagues were a bit more understanding than were those of Haller; Holmes continued to write poetry throughout his lifetime.

In addition to publishing three novels, numerous poems and essays, biographies and the remarkable Breakfast-Table Series, Holmes was instrumental in the founding and support of the Atlantic Monthly. Yet at times he seems to regret his diverse interests. In a letter to S. Weir Mitchell, the renowned neurologist (perhaps Holmes’s Philadelphia counterpart since Mitchell was also a prolific poet and novelist), Holmes writes in March, 1871:

I have often regretted not having forcibly trained myself to the exhaustive treatment of some limited subject, and if I should live to be a hundred years old, I would devote ten years of the time, as it is, to such specialized study [4].

Then slipping into a more typical humorous hyperbole he adds,

You remember the story of the grammarian who had given his entire life to the study of certain nouns, and who regretted on his death-bed that he had not restricted himself to the consideration of the genitive case . . . But my nature is to snatch at all the fruits of knowledge and take a good bite out of the sunny side—after that let in the pigs [4].

ON DRUG USE AND ABUSE

Proper treatment of diagnosed illness is the raison d’être of the medical profession. Often optimal therapy relies upon the use of various pharmaceutical agents. Of these agents some may be quite specific and effective whereas others may be of questionable efficacy. The present pharmacopea is undoubtedly more extensive and, in a great number of instances, more effective than that at the disposal of Dr. Holmes and his contemporaries. Holmes, famous for his fiery attacks on homeopathy, is also quite vocal regarding the use and abuse of pharmaceuticals. His questions on drug efficacy, toxicity and overprescription continue to confront the medical profession.

The reason for medication is to try to reverse or retard a disease process or at least to provide relief from the symptoms. A patient comes to his physician in pain, often in desperation, expecting to receive medication or treatment of some sort. As Holmes notes,

There is nothing men will not do, there is nothing they have not done, to recover their health and save their lives. They have submitted to be half-drowned in water, and half-choked with gases . . . to have needles thrust into their flesh, and bonfires kindled on their skin, to swallow all sorts of abominations, and to pay for all this as if to be singed and scalded were a costly privilege, as if blisters were a blessing, and leeches were a luxury. What more can be asked to prove their honesty and sincerity [3, p. 427]?

There are several fronds that fan the fires of over-medication. Addressing the Massachusetts Medical Society in May, 1860 Holmes states that a
... portion of the blame rests with the public itself, which insists on being poisoned. Somebody buys all the quack medicines that build palaces for the mushroom, say rather, the toadstool millionaires ... The popular belief is all but universal that sick people should feed on noxious substances [1, p. 20].

Of no small consequence was the practice in Holmes’s time of physicians charging for, and profiting directly from, the supplying of prescribed medication. Undoubtedly the financially motivated physician could find patients willing to swallow his most elegant (and expensive) elixirs.

The practitioner himself strongly wishes his patients to improve and recover; however, this also may contribute to the problem.

Part of the blame of over-medication must, I fear, rest with the profession, for yielding to the tendency to self-delusion, which seems inseparable from the practice of the art of healing [1, p. 18].

After dispensing medication physicians too often fail to retain (or regain) their objectivity. They succumb to what Holmes calls “the inveterate logical errors to which physicians have always been subject ...” [1, p. 18]:

The mode of inference per enumerationem simplicem, in scholastic phrase; that is counting only their favorable cases ... The post hoc ergo propter hoc error: he got well after taking medicine; therefore in consequence of taking it [1, pp. 18–19].

In the effort to obtain improvement in an ailing patient the consideration of toxic effects of a medication may be discharged prematurely. Holmes cautions,

... every noxious agent, including medicines proper, which hurts a well man, hurts a sick one [1, pp. 35–36].

Indeed too often the toxicity of a drug is attributed to the disease or goes unrecognized.

... the injuries inflicted by over-medication are to a great extent masked by the disease [1, p. 38].

Unfortunately at times both the drug and the disease may conspire against the patient.

The need for current medical literature on new treatment modalities is acknowledged. Yet Holmes notes that undue emphasis on innovation may foster confusion.

Add to this the great number of Medical Journals, all useful, we hope, most of them necessary, we trust, many of them excellently well conducted, but which must find something to fill their columns, and so print all the new plans of treatment and new remedies they can get hold of, as the newspapers, from a similar necessity, print the shocking catastrophes and terrible murders [1, p. 28].

In the scramble to find a remedy too little attention may be paid to determining the cause.

As noted, Dr. Holmes often cries for caution and moderation in the prescription of medicines. Yet his admonitions are not at the expense of his humor, as when he states,
. . . that if a shipload of miscellaneous drugs, with certain very important exceptions, . . . could be sunk to the bottom of the sea, it would be all the better for mankind and all the worse for the fishes [5].

Again his wit surfaces with his wisdom.

Holmes could not have known what medicinal agents were needed to treat tuberculosis, syphilis or epilepsy properly, yet he was aware of the need and astute enough to realize the ineffectiveness of the then current treatment. In retrospect his insight is laudable. Some of this Holmesian doctrine would not be wasted on the medical profession today.

**ON THE ROLE OF SOCIETY IN MEDICAL AFFAIRS**

Today those in the medical profession find themselves under ever increasing scrutiny. The pressures for peer and social regulation of medical practice seem intense. Young physicians now may envy physicians of the past who seemingly could engage in medical practice unbeseiged by social clamor. But, as Holmes acknowledges, medicine in his time also was not practiced in a vacuum.

The truth is, that medicine, professedly founded on observation, is as sensitive to outside influences, political, religious, philosophical, imaginative, as is the barometer to the changes of atmospheric density [1, p. 9].

In *The Positions and Prospects of the Medical Student*, the Boylston Lecture delivered in 1844, Dr. Holmes states,

You are to enter upon your professional duties at a time which offers some peculiarities affecting your interests and comfort. Society is congratulating itself, in all its oration and its periodicals that the spirit of inquiry has become universal, and will not be repressed; that all things are summoned before its tribunal for judgement. No authority is allowed to pass current, no opinion to remain unassailed, no profession to be the best judge of its own men and doctrines [6].

Holmes does not withhold his scorn for those "who are drunken upon the alcohol hot from the still of brainless philanthropists; who are raving with the nitrous oxide fresh from the retort of gaseous reformers"[6]. Indeed he resists direct confrontations with these would-be reformers, not wishing to

. . . gratify their demand for publicity by throwing a stone into any of their nests. They welcome every cuff of criticism as a gratuitous advertisement; they grow turgid with delight upon every eminence of exposure which enables them to climb up where they can be seen [6].

He alludes in the above lecture to the "hydrostatic paradox of controversy," which is later more eloquently presented in *The Autocrat of the Breakfast-Table*. The Autocrat attributes the thought to the "Professor" in obvious reference to Holmes's Boylston Lecture.

You know, that, if you had a bent tube, one arm of which was of the size of a pipe-stem, and the other big enough to hold the ocean, water would stand at the same height in one as in the other. Controversy equalizes fools and wise men in the same way,—and the fools know it [7].
Yet Holmes does recognize the need for reform in the profession. In his belated retort to the Massachusetts Medical Society's cool reception of his address *Currents and Counter-Currents in Medical Science* he notes:

> One thing is certain. A loud outcry on a slight touch reveals the weak spot in a profession, as well as in a patient [5].

Although Holmes was not deaf to the social clamor that was present, he often was mute to entreaties for public replies. Believing that those educated in medicine could best determine the proper course of medical practice, he made his speeches to his colleagues, tubes of equal caliber.

The concerns of the medical profession are in many ways recurrent with changing contexts. Many of the issues for Dr. Holmes remain areas for fervent debate today. The preceding passages illustrate the unequaled facility with which Oliver Wendell Holmes addressed these concerns. That he stopped to "linger by the enchanted streams of literature" is reflected in his words. Whether lecturing to anatomy students or to a medical society or chatting with Emerson or Motley, Holmes's delivery made the message memorable. As he states in *The Poet at the Breakfast-Table*:

> I don't despise reputation, and I should like to be remembered as having said something worth lasting well enough to last [8].

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