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Orthodox Medicine and the Health Reform Movement in the Maritimes, 1850-1885

ON 6 MAY 1861 THE HALIFAX MEDICAL SOCIETY met to consider a case of quackery involving its one-time Vice President, Frederick William Morris. A graduate of Edinburgh Medical School and resident physician at the Halifax Visiting Dispensary, Morris had published letters in local newspapers extolling the virtues of a Micmac remedy for smallpox and vouching for its effectiveness. At his hearing Morris told members of the Society that he had acquired the bitter tasting and slightly aromatic herb from an Indian named John Thomas Lane and had proceeded to give it to seven of his patients with advantageous results. Few of the doctors present were convinced. They found no real evidence that Morris had employed the remedy except in cases already seen to be mild; there was even some doubt that all were cases of smallpox. Nor was Morris able to explain the *modus operandi* of the drug, suggesting only that in the opinion of the Micmac Indians "it killed the disease". At a subsequent meeting on 3 June 1861, Morris was expelled from the Society, but upon his promise not to use the remedy in the future, he was maintained in his position at the Visiting Dispensary and allowed to continue his private practice.[1]

The Morris case was particularly unsettling for the medical profession in the Maritimes because it occurred at a time when the classical therapeutic techniques of the regular medical profession were falling into disfavour. During the third quarter of the 19th century, moreover, the traditional demarcations between orthodox practice and sectarian and folk medicine were becoming increasingly blurred. In a recent and brilliant analysis of the relationship between medical therapeutics and professional identity, John Harley Warner has outlined the assault on the rationalist underpinnings of early 19th century medical thought by a generation of practitioners committed to clinical inquiry and empirical observation. By the 1860s, although the empiricist pruning of speculative medical systems had served to remedy many past errors, it had also failed to provide a new system of therapeutics.[2] The 1860s and 1870s were thus years of therapeutic confusion, widespread medical individualism, and waning profes-

1 Minutes of the Halifax Medical Society, 6 May, 3 June 1861, MG 20, vol. 181, Public Archives of Nova Scotia [PANS]. Phyllis Blakeley, "Frederick William Morris", *Dictionary of Canadian Biography*, vol. 9 (Toronto, 1976), pp. 573-4.

2 John Harley Warner, *The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885* (Cambridge, 1986).

sional confidence. This uncertainty affected mid-Victorian medical practitioners in the Maritimes as they confronted both the individualism of their orthodox colleagues and the challenge provided by other competitors in the larger marketplace of medicine and health.[3] Indeed, because of this uncertainty and the challenge posed by those who advocated less heroic forms of treatment, Maritime physicians were compelled to borrow from the techniques of their competitors. Ironically, by emulating some of the practices of their critics, the regular profession was able to strengthen its claim to pre-eminence in the medical marketplace.

The prevailing approach to therapy in the early 19th century was decidedly interventionist. Rooted in the belief that disease involved an imbalance of the body's humours, traditional or heroic therapy was directed at regulating the body's secretions and restoring its rightful equilibrium through such techniques as bleeding, either by venesection or leeching; counter-irritant therapy or blistering; and the use of purgatives such as calomel or tartar emetic. This approach to therapy was also essentially antiphlogistic or anti-inflammatory, directed at lowering levels of inflammation by bloodletting or purging. Doctors and patients alike shared in the hope that these techniques of fluid depletion would alter the course of illness. It is fair to say, however, that in many instances the cure was worse than the disease itself.[4]

By the 1850s a reaction against antiphlogistic or anti-inflammatory treatment was beginning to set in. At Edinburgh Medical School — where the vast majority of Halifax's doctors had received their medical education — a classic confrontation emerged between Professor Thomas Laycock and William Alison on the one side and James Hughes Bennett on the other. Laycock and Alison defended the traditional antiphlogistic practices of bleeding, blistering, and purging. Bleeding, they believed, removed morbid material from the blood and decreased the amount of congestion in inflamed parts of the body. Blistering, which could be created in various ways — often by applying boiling water, a white hot iron, or iodine or mustard plasters to the skin — created a counter-irritation which drew off excess blood from diseased and engorged organs. Bennett disagreed with this interpretation, arguing that the accumulation of blood in the diseased part was not the cause of inflammation, but rather the natural attempt of the body to increase growth by cell formation. Convinced that bloodletting impeded rather than stimulated recovery, Bennett assaulted

3 See also Colin D. Howell, "Elite Doctors and the Development of Scientific Medicine: The Halifax Medical Establishment and Nineteenth Century Medical Professionalism", in Charles G. Roland, ed., *Health Disease and Medicine: Essays in Canadian History* (Toronto, 1983), pp. 105-22.

4 Charles Rosenberg, "The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth Century America", in Morris Vogel and Charles Rosenberg, eds., *The Therapeutic Revolution: Essays in the Social History of Modern Medicine* (Philadelphia, 1979), pp. 3-25.

the antiphlogistic system with all his strength.[5] Alexander Reid who studied with Bennett in the late 1850s and later became a leading figure in the professionalization of medicine in Nova Scotia found Bennett a vehement opponent of bloodletting and calomel. "It is amusing to go round the wards with Dr. Bennett", Reid remarked, "as he never allows a chance to escape without uttering a tirade against mercury and bloodletting".[6]

Bennett's failing confidence in antiphlogistic treatment reflected both his growing distrust of theoretical or metaphysical approaches to medicine and his concomitant orientation toward therapeutic humility and empirical observation. In the future, Bennett suggested, doctors should be guided by rigid observation and experimentation rather than by received hypothesis, and by careful attention to individual symptoms, the use of clinical tests, microscopic analysis, stethoscopes, and the specula in diagnosis. Gradually the newly emergent institutions of 19th century medicine — the hospital, the clinic, and the asylum — would embody this new discourse, emphasizing the importance of the particular make-up of the patient rather than the application of classical theory. This emphasis on clinical observation, moreover, reflected a belief in the possibility of building a rational or scientific discourse around the individual or the discreet, a belief not unrelated to 19th century conceptions of economic and political liberalism.[7]

The transition from speculative medicine to clinical inquiry created serious problems for the profession as it tried to distance itself from its competitors in the larger medical marketplace. As traditional therapeutic techniques were called into question, many doctors began to take refuge in a universal skepticism about the action of drugs, and instead left everything to nature, adopting what in France was called the "expectant treatment" and in Germany "Nihilismus".[8] The collapse of traditional medical theory also tended to encourage excessive medical individualism and propelled many physicians like Morris into the realm of natural cures or other idiosyncratic forms of treatment, thereby rendering the

5 John Hughes Bennett, *Clinical Lectures on the Principles and Practice of Medicine* (2nd ed., Edinburgh 1858), pp. 260-72.

6 Alexander Reid, "A Student's Letter, No. 5", *The Medical Chronicle or Monthly Medical Journal of Medicine and Surgery*, vol. 5 (1858).

7 Michel Foucault, *The Birth of the Clinic*, trans. by A.M. Sheridan (London, 1973), pp. 62-4, 89. Compare with Thomas Haskell, *The Emergence of Professional Social Science* (Urbana, 1977), pp. 47, 57-8. Haskell notes the "consolidating, organizing, institution building thrust" of the mid-19th century that developed out of "the collapse of confident belief" in the older transmitters of explanation, the family and the church. Unlike Foucault who saw the clinic as an embodiment of a new concern for the individual and the discrete, Haskell sees the rise of the professions and the institutions they created as a reaction to the individual practioner's inability to provide convincing explanations of scientific phenomena.

8 Bennett, *Clinical Lectures*, p. 9.

earlier distinctions between the regular profession, irregular sects such as the homeopaths or eclectics, various forms of folk medicine or self-help traditions, and outright quackery, less easy to identify than before. Unable to establish a coherent and workable system of therapeutics that separated them from their competitors, regular medical practitioners in the Maritimes sought refuge in institution-building, creating medical societies, hospitals, and medical schools which at one and the same time symbolized professional respectability and provided a setting in which a new therapeutic consensus might be fashioned.

In Nova Scotia the first significant attempt by the medical profession to organize an institutional affirmation of its authority came with the establishment of the Nova Scotia Medical Society in 1854. Like most associations of this type the objectives of the Society extended beyond economic matters such as fee schedules to include the promotion of scientific standards of medical practice and the eradication of quackery. One of the first undertakings of the new Society was to initiate a weekly medical column in the Halifax *Acadian Recorder* in November 1854. The columns, written by Drs. Jennings, Allan, and Crane, were intended to assert the scientific competence of the regular profession and to contrast it with the pervasive and destructive influence of the quack. Readers were introduced to the important recent advances in pathology and physiology emanating from chemical investigation and research, the use of galvanism in difficult obstetrical cases, and the harmful effects of a variety of patent medicines whose advertisements were prominently displayed in the same newspaper's pages.[9] While these columns reveal a growing need on the part of the profession to confront its competitors in the medical marketplace, they also suggest that many physicians at mid-century still approached treatment from an interventionist perspective. The suggested treatment for scarlet fever, for example, included the free application of leeches to the lateral part of the external fauces and behind the ears. At the same time patients would engage in the frequent inhalation of the vapour of warm water, employ mild detergent gargles, and ingest brisk purgatives (usually mercuric solutions). Treatment in the latter stages of the disease consisted of nourishment with arrowroot and a little wine stimulant. In addition, local bleeding was followed by counter-irritant blistering behind the ears. Finally, the patient would be required to gargle a solution containing twelve grains of capsicum, an ounce of vinegar, or a carbonate of ammonia with some aromatic mixture.[10]

This mid-century traditionalism in therapy accompanied the tendency of many orthodox practitioners to rely upon theoretical principles in order to distinguish medical science from the activities of the quack. In a lengthy article entitled "Medical Science as Opposed to Quackery", Dr. Samuel Denison of

9 *Acadian Recorder* (Halifax), November 1854 — February 1855.

10 *Ibid.*, 3 February 1855.

Newport, Nova Scotia argued that while not all diseases could yet be explained by reference to physiology, pathology, and chemistry, physicians could not draw any rational deductions as to the cause of disease without the aid of these sciences. Unlike the quack who lacked any understanding of the disease process, physicians understood the relationship between the outbreak of disease and "heat, light, electricity, variated states of the atmosphere arising from the decomposition of animal and vegetable matter in the presence of heat and moisture, and the vicissitudes of temperature". It followed, of course, that if diseases could only be treated on scientific principles, it was "highly culpable and dangerous to entrust our lives and health to boasting ignorant pretenders". Unfortunately, the orthodox profession remained trapped by its continuing inability to demonstrate a relationship between theoretical knowledge and therapeutic efficiency. Despite Denison's apparent confidence in the orthodox profession, he nevertheless was forced to admit that "medicine is a metaphysical science and cannot and is not capable of positive demonstration".[11]

Over the next two decades the profession's confidence in traditional therapy increasingly waned, but not its attack upon irregular practice and quackery. In his presidential address to the Nova Scotia Medical Society in July 1869 Dr. Benjamin DeWolfe Fraser attacked the province's empirics, cancer doctors, itinerant eye doctors, bone-setters, and homeopaths, and denounced "the encouragement that is given by almost every class in the community to those who deal in...quackery". At the same time Fraser admitted that regular doctors often offered little more to their patients than "confidence, tranquility, and hope to the doubting and enfeebled mind, and comfort to the wasting body". The remedies provided by medical doctors in a number of diseases, he noted, were "inert at most. They are palliates and though they may give comfort cannot prevent the fatal issue".[12] Fraser's reservations about the therapeutic effectiveness of orthodox medicine were reiterated in August 1875 when Dr. LeBaron-Botsford of Saint John delivered his presidential address to the Canadian Medical Association. Suggesting that irregulars and quacks seemed to be as successful in their therapeutic approaches as regular physicians were in theirs, he explained this troubling situation as an expression of the "enormous force" that the mind exerted over the body and its health. "We shall be obliged to admit", he noted, "that the same diseases have been equally well-cured by the interposition of the gods — by witchery and priestcraft — by the most sanguinary and antiphologistic and by the most mild and expectant treatment; by remedies founded on the rational pathology of the disease; by the infintessimal parts of nothing; by peppermint water and bread pills".[13]

11 *Ibid.*, 20 January 1855.

12 Nova Scotia Medical Society, Annual Meetings, Minutes, 20 July 1869, PANS.

13 Canadian Medical Association, Annual Meetings, Minutes, "Presidential Address of Dr.

The limitations that the profession faced with respect to effective treatment led them in two directions during the 1860s and 1870s. The first was towards a reliance on clinical experimentation in the environment of the general or public hospital. The second was towards a therapeutic design based upon the healing powers of nature. In the hospital the profession could observe the action of the disease under controlled surroundings, and — since the patients were drawn from the margins of society — doctors were provided with the opportunity for unregulated therapeutic experimentation. The faith in nature's healing powers, on the other hand, allowed the profession to incorporate the therapeutic techniques of its competitors, including home remedies and natural cures, into its professional repertoire. In the process the regular practitioners embellished the traditional cures of the non-professional health reform movement with a patina of scientific authority.

The first general hospital in the Maritimes was the Halifax City Hospital, established in 1859 and renamed the City and Provincial Hospital in 1867. Like most 19th century hospitals, this institution not only was intended to provide care to the sick and indigent poor, but provided doctors with a laboratory for clinical experimentation within which their control over the therapeutic process could be exerted without broad public resistance. Over its first 20 years of operation the City and Provincial Hospital admitted 11,155 patients, most of whom came from the lower end of the social scale. Of the 533 patients admitted in 1878, for example, there were 164 sailors, 149 domestics, 74 laborers, 26 of no occupation, 17 fishermen, 15 prostitutes, and 8 farmers. The remainder were usually tradespeople such as bakers, blacksmiths, shoemakers, and tailors. The most prevalent diseases treated included the various forms of venereal disease (88 cases), tuberculosis (45 cases), rheumatism (45 cases), and alcoholism (24 cases).[14]

The prostitutes, alcoholics, not-so-Jolly Jack Tars, unwed mothers, and syphilitics that doctors encountered in the public hospitals added greatly to the clinical experience of the medical profession in the Maritimes. At the same time, however, the profession found itself faced by continuing confusion and division over what were the most appropriate surgical and therapeutic techniques. Although certain standard procedures were usually followed in the Hospital, including the examination of urine for traces of albumen and sugar and the application of percussion and auscultation to the chest cavity, the nature of the treatment a patient received was a function of the individual preferences of the physician who had his own assumptions about how to proceed therapeutically. But to say that the hospital merely served as a locus for continued idiosyncratic

Botsford, St. John, N.B.", August 1875, National Archives of Canada [NAC].

14 City and Provincial Hospital, *Annual Report*, in Province of Nova Scotia, *Journals of The House of Assembly* (1878), Appendix 3B.

treatment and unregulated therapeutic experimentation is not to say that physicians were opposed to the creation of a new therapeutic orthodoxy. Indeed, in the hope of contributing to the mutual improvement of clinical medicine and surgery and of establishing a standardized approach to therapy a number of Halifax physicians formed the Clinical Society of Halifax in October 1869. The members of this society decided that the first meeting of each month should include a discussion of recent literature in medical journals, the second a discussion of a particular therapeutic agent or class of remedies, the third a presentation of cases and pathological specimens, and the fourth the discussion of a particular disease.[15] These meetings reveal the deep sense of confusion that practitioners experienced as a result of the collapse of traditional medical theory. In particular they disclose in some detail the divided opinions of doctors on a number of issues including antiseptic surgery and the germ theory, the desirability of counter-irritation, the use of cathartics, expectorants and opiates, the virtue of bloodletting, and the healing power of nature.

The development of the germ theory of disease and Joseph Lister's experiments in antiseptic surgery resulted in especially widespread confusion and disagreement among doctors in the Maritimes, as it did elsewhere. The first discussion of these issues before the Clinical Society was held on 27 October 1869 and led to a lively debate that carried on into subsequent meetings. Not surprisingly, the discussion centered more upon the use of carbolic acid in the disinfection of wounds than upon the broader principles that rested beneath its use. Nevertheless, the attitudes of most of those present towards the germ theory and the value of antiseptic surgery are easy enough to discern. At first, most members were suspicious of Lister's conclusions. Dr. Edward Farrell, for example, believed carbolic acid to be an excellent antiseptic but did not think that it could produce the results claimed for it by Lister and his disciples. The study of pathology, he argued, had taught doctors much about the laws governing the process of suppuration, and he believed that they should not be ignored. He suggested that suppuration depended upon something behind the local sore, upon vital changes acting through vessels and nerves of the part, modified by the condition of the vital force and also the condition of the sore or injury and by the condition of the external air. Insofar as carbolic acid might effect a change in the condition of the sore or act upon the air coming into contact with it, it could have a beneficial local effect. Although Farrell believed that carbolic acid could destroy the "poisonous influences" of hospital air and thus was helpful in preventing septicemia, he was not convinced that Lister's treatment of wounds would seriously alter post-operative mortality.[16] Dr. John Somers agreed with Farrell, believing carbolic acid "a good disinfectant and little more". Somers

15 Clinical Society of Halifax Minute Book, 2 October 1869, 9 February 1870, PANS.

16 *Ibid.*, 27 October 1869.

drew a distinction between disinfectants which he defined as those agents which destroy noxious matters, and antiseptics which he believed "prevented further changes from taking place in putrefying or decomposing substances". Carbolic acid, he suggested, was not an antiseptic and would not destroy the lower forms of animal life. Nor did Somers accept the germ theory. He pointed out that the supporters of the theory had not been able to demonstrate the existence of germs. Somers continued to hold steadfastly to the two more prevalent explanations of the origin of disease: that of spontaneous generation which saw disease as a chemical process involving the fermentation of the blood, and the miasmatic theory which regarded disease as a product of the decomposition of organic matter in the atmosphere.[17]

On the other side of the debate stood doctors like Alexander Reid who admitted to using carbolic acid frequently. Reid disagreed with both Farrell and Somers, arguing that Lister made a strong case for antiseptic surgery, especially in compound fractures. Pointing out that severe injury to joints often took place without suppuration as long as they were not exposed to air, Reid believed that Lister through his use of antiseptic pads and bandages "converted an ordinary wound into a subcutaneous one, and thereby prevented suppuration". Others, like Dr. H.A. Gordon, accepted the existence of germs, while maintaining an allegiance to the miasmatic theories of disease origin. Gordon argued that miasmatic fevers were caused by vegetable organisms taken into the body, while typhus and typhoid were due to animal organisms or germs. Still other practitioners used carbolic acid in ways that Lister had never intended: Dr. Alfred Woodill used it internally in order to treat diphtheria, while Dr. Thomas Trenaman used it to treat excema.[18] The indiscriminate use of carbolic acid as a therapeutic agent is hardly surprising, however, given its success in treating compound fractures. Elsewhere in Canada doctors used it in the treatment of everything from toothache to acne.[19]

During the 1870s the profession remained divided upon the germ theory and Lister's antiseptic procedures, but the ranks of its supporters increasingly swelled. In addition to Reid, Drs. Alexander Lindsay, George Sinclair, and John Stewart became vocal advocates of the new antiseptic orthodoxy. Stewart, who had studied with Reid at Dalhousie Medical School, travelled to Edinburgh in

17 For Somers's classification of disinfectants and antiseptics see Halifax Medical Society, Minute Book of Scientific Business, 19 December 1871, PANS.

18 For the position taken by Reid, Trenaman and Woodill see Clinical Society, Minute Book, 27 October 1869, PANS. For that of Gordon see *ibid.*, 30 March 1870, and Minute Book of Scientific Business, 19 December 1871, PANS.

19 Debate about the applicability of Lister's antiseptic principles and the therapeutic value of carbolic acid raged in Canada during the 1870s. For an analysis of the broader Canadian debate, see Charles G. Roland, "The Early Years of Antiseptic Surgery in Canada", in S.E.D. Shortt, ed., *Medicine in Canadian Society: Historical Perspectives* (Montreal, 1981), pp. 237-53.

1874 to study with Lister, and worked with him successively as dresser, clerk, and house-surgeon before accompanying him to King's Hospital, London in order to demonstrate antiseptic methods to London surgeons. In the fall of 1878 Stewart returned to Nova Scotia to spread the gospel of Listerism in his native province.[20] By the 1880s — both because of the acceptance of Listerism by leaders in the profession in Britain and North America and the proselytizing work of Reid,Lindsay, and Stewart — resistance to this message was beginning to wane. Dr. Edward Farrell admitted in July 1880 that he was becoming "more convinced of the benefits Mr. Lister had conferred on surgery" and was willing to accept the good results accompanying surgical cleanliness.[21] There would be continuing debates over the virtues of antisepsis, of course, but it is fair to say that by 1885 antiseptic surgery and the germ theory of disease were almost universally accepted by the medical profession in the Maritimes.[22]

The response of Society members to counter-irritation or blistering was another example of the prevailing therapeutic uncertainty of the 1860s and 1870s. Discussion of this topic emerged in response to a paper by Dr. Ainstie of London in an issue of *The Practitioner* in the fall of 1869 which questioned the traditional principle of depletion upon which blistering was based. Ainstie suggested that any usefulness of blisters was short-lived and a product of an immediate reflex action. In a meeting of the Clinical Society on 13 April 1870, Dr. Edward Farrell noted that he was inclined to believe that Ainstie's paper would help prevent the indiscriminate use of blisters. Most other members believed that blistering was an effective therapy, but could not agree either upon how blisters worked or the way in which they should be applied. Dr. John Somers, who argued strenuously against laboratory investigation and believed that clinical experience was the foundation of medicine, spoke of the sympathetic action between the skin and mucous membranes as evidenced by the gastritis that often followed burns and scalds, and believed there was an unbroken chain of superficial nerves and vessels that affected mucous production in the body. Somers particularly liked blisters for the treatment of bronchitis, where they acted as revulsants, clearing the bronchial tubes of excess fluid. Arthur Woodill was not an advocate of blisters, but when he used them he applied boiling water to the body at a considerable distance from the seat of the disease. Dr. H.A. Gordon advocated blistering immediately over the location of the disease. In treating a case of chronic congestion of the spinal cord which was attributed to excessive masturbation, for example, Gordon raised continuous blisters by means of a white-hot iron. Dr. William McKeagheny on the other

20 David L. MacIntosh, "Dr. John Stewart", *Dalhousie Medical Journal* (1940), pp. 6-11.

21 Clinical Society, Minute Book, 20 July 1880, PANS.

22 Howell, "Elite Doctors and the Development of Scientific Medicine", pp. 116-9.

hand, disliked boiling water or white hot iron blisters, noting instead the successful application of mustard over the stomach for insomnia, the good effect "due to direct absorbtion [*sic*] of the mustard by the stomach".[23]

Just as divisive as the debate over the germ theory and over blistering was the conflict over the dosing of patients with cathartics (i.e. purgatives, laxatives or drastics); with expectorants such as iodine or the carbonate of ammonia; or with anodynes or stimulants such as opium, codeia, chloral hydrate, or alcohol. In general, the discussion centered upon whether general practitioners should experiment upon their own patients with drugs, or leave the experimentation to laboratory physiologists who would test these remedies on animals and establish appropriate principles for their use. Dr. Walsh pointed out that doctors rarely understood the effect of the drugs they prescribed. Of over 200 remedies available to doctors, he suggested, physicians only had an approximate idea of the action of a few, and only in a handful of cases did the alkaloids of various chemicals represent the drug in its original form. Dr. McKeagheny agreed with Walsh. He argued that GPs should confine themselves to those drugs of which they knew the action, leaving experimentation to researchers with the time to devote to this work. On the other side of the issue were the traditionalists, Drs. Farrell, Somers, and Slayter. Somers preferred the experience of medical men in general practice to that of the experimental researchers, because the latter recorded the effects of remedies on animals or at least on healthy human beings whereas on the sick results could be quite different. "Experience", Somers argued, "is our only reliance". William Slayter favored GPs experimenting for themselves, as did Edward Farrell who was convinced of the inapplicability of the definite laws of chemistry to the human organism. Curiously enough, all the traditionalists were concerned with the unnecessary dosing of patients, believing, as Dr. Somers did, that the abuse of these medicines derived from the substitution of drugs for venesection or leeching as a way to rid the body of its "peccant humours".[24]

By the early 1870s the medical profession in Halifax — as was true elsewhere — revealed a growing skepticism about the use of drugs and relied increasingly upon the healing power of nature. Dr. Daniel MacNeill Parker, a graduate of Edinburgh University in the 1840s who had practiced in Halifax for 25 years before returning to Scotland in 1871 for further training, noted in November 1873 that he was "inclined to think that patients left without medication did as well as others".[25] Employing the expectant system, Parker believed that the

23 Clinical Society, Minute Book, 13 April 1870, PANS.

24 *Ibid.*; see also 23 February, 9 March 1870.

25 "Obituary: Hon Daniel McNeil Parker, M.D., LRCS (Edin)", *Maritime Medical News*, XIX, 11 (November 1907), pp. 438-40; Halifax Medical Society, Minute Book, Scientific Branch, 21 November 1876, PANS. Parker had expressed similar reservations about surgical interventions

most useful approach was merely to use drugs to relieve the symptoms of disease and to build up the patient's recuperative powers. Dr. Charles Rigby took a similar position. During a diphtheria epidemic in 1876 Rigby noted the superiority of contemporary treatment over that provided 20 years before, attributing the greater fatality of the 1856 epidemic to "the heroic plan of treatment including the heavy use of calomel, blistering and bleeding". His present treatment instead was constitutional, emphasizing appropriate diet, bed-rest, and fresh air.[26] As this new emphasis on rest and diet emerged during the 1870s, many physicians in the Maritimes turned away from traditional depletion techniques to the employment of various stimulating and strengthening regimens including alcohol or galvanic therapy. These new techniques allowed physicians to maintain an active role in the treatment of disease, thereby maintaining a certain measure of professional control which physicians regarded as essential to the doctor-patient relationship.

Alcohol therapy had long been employed, especially in fever diseases, but during the 1860s and 1870s it became more widely used in order to prevent what Dr. William Bayard of St. John called "the waste of tissues".[27] Most of Bayard's colleagues in the New Brunswick Medical Society saw great value in alcohol therapy in those years. Dr. Coleman of St. John thought it particularly useful in cases of haemorrhage or low fevers where the constitutional powers needed to be revived. Others had somewhat less scientific reasons for employing it: Dr. Hamilton of St. John simply thought that his former practice of drinking two whiskeys per day had made him healthy. In a similar vein Dr. T.D. Walker provided numerous examples of alcohol's good effect from his days as House Physician at Edinburgh, but only as a prelude to attacking temperance advocates and societies as "unmitigated curses".[28] In Halifax Dr. R.S. Black had come to a similar conclusion about the continuing value of alcohol therapy. Black noted that while alcohol was beginning to fall into disuse in medicine "from his own experience and observation he still thought there were circumstances where nothing answered like alcohol".[29] Indeed, of the 11 patients Black handled at the Victoria General Hospital in 1875, eight received alcohol as part of their therapeutic regimen.[30]

Another alternative to traditional drug therapy which gained favour during the 1860s and 1870s was galvanic therapy. Galvanism was used in a number of

particularly in cases of breast cancer. He was inclined to believe that "patients often lived longer by being left alone". *Ibid.*, 7 February 1871.

26 *Ibid.*, 21 November 1876.

27 New Brunswick Medical Society, Minutes, 1 June 1881, New Brunswick Museum [NBM].

28 *Ibid.*, 15 June 1881.

29 Clinical Society, Minute Books, 16 November 1880, PANS.

30 Victoria General Hospital Records, RG25B (closed), sec. 3-3, PANS.

situations, from the treatment of headache to the inducement of labour, but in the new era of stimulation was most often used to strengthen the depleted nervous system in cases of neuralgia, neurasthenia (nerve weakness), and in sexual maladies such as spermatorrhea or impotence. During the second half of the 19th century, physicians had become increasingly preoccupied with the idea of nervous exhaustion which they believed accompanied the advance of civilization, and in turn led to serious sexual and psychological dysfunction, symptomized by dysmensorrhea in women and spermatorrhea in men.[31] *The Canada Medical Record*'s treatment of the latter condition provides a revealing example of the new commitment to both the healing power of nature and the use of stimulation. The therapy consisted initially of cold sponge baths in the morning, and sitz baths three or four nights a week at which time cold water should be "thrown into the rectum". Exercise was important as well and should be vigorous, abundant, and fatiguing. Finally, there was the application of electricity. On the first day of treatment an electrode of an electro-magnetic battery would be attached to the urethra, another to the fourth lumber vertebrae. On the second day an electrified wire brush was run over the inside of the thighs and about the perineum. These treatments would be alternated daily and in the second week a rectal electrode would replace that attached to the urethra. The remainder of the treatment included a mixture of aphrodisiacs and tonics, including quinine sulfate, a tonic of capsicum, and sherry wine. On the whole, however, these treatments were expected to be only of temporary utility. The radical cure for these conditions was marriage, "for nothing will relieve the abnormal congestion of the genitals so much as moderate sexual intercourse" with one's spouse.[32]

Even more widespread than the use of electricity was hydrotherapy, or the employment of water as a therapeutic agent. Cold water baths in cases of typhoid fever, sitz baths, turkish baths, sprays, and rectal and vaginal douching became commonplace therapies during the last third of the century.[33] In November 1869, for example, the usually conservative Dr. Farrell called the members of the Clinical Society's attention to the cold bath treatment which was widely employed by German physicians, and noted that he was keeping the Hospital wards at a low temperature and spraying his patients with cold water.[34] Dr. R.S. Black also made use of cold baths slightly below body temperature in

31 John S. Haller and Robin Haller, *The Physician and Sexuality in Victorian America* (New York, 1974) call the 19th century the "nervous century", noting its preoccupation with nervous debility. The apparent relationship between nervous energy and electrical energy often resulted in treatment by electrical gadgetry.

32 "The Treatment of Spermatorrhea and Impotence", *Canada Medical Record* (January 1878), pp. 118-20.

33 Jacqueline S. Wilkie, "Submerged Sensuality: Technology and Perceptions of Bathing", *Journal of Social History*, 18, 4 (Summer, 1986), pp. 649-65.

34 Clinical Society, Minute Books, 3 November 1869, PANS.

febrile diseases, and hoped that although the water cure was often employed by unlicensed therapists "the Profession will not abandon it to the pretenders".[35] Even as late as the 1890s doctors such as Clara Olding, J.H. Scammell, and James Christie of Saint John were praising the therapeutic benefits of water. "Water", Dr. J.H. Gray suggested, "is the only remedy which has stood the test of time".[36] In turning to hydrotherapy, however, the profession was drawn closer to the therapies of their competitors who for years had relied upon natural cures of various types.[37] These competitors ranged from homeopaths and eclectics, to unlicensed phrenologists, hydropaths, physical culturalists, mesmerists, mechano-therapists and herbalists. Of these, the homeopaths and eclectics were licensed, while in most cases the rest were not.

Homeopathy gained considerably in stature during the 1870s. Based upon the doctrine of the German physician, theorist, and medical educator, Samuel Hahnemann (1755-1843), homeopathy involved treating patients with minute doses of a drug which would cause the same symptoms as the disease being treated, along with the prescription of fresh air, bed rest, proper diet, sunshine, and personal hygiene. In a paper presented to the Scientific Branch of the Nova Scotia Medical Society in February 1877 Dr. George Sinclair praised homeopathy for its emphasis on natural healing.[38] In this he was supported by Dr. Andrew Cowie, a graduate of the University of Pennsylvania who had come into contact with homeopathy during his medical training. Cowie argued that homeopathy had made an important contribution "by showing how much nature can do to cure disease", and in discussing the merits of minute dosages he concluded that "the profession should endeavour to procure...results, by the minimum amount of medicine".[39] Another of Sinclair's supporters was Dr. H.A. Gordon, a New Brunswick native and a graduate of the University of Edinburgh who came into contact with homeopathy during a visit to Montreal

35 Presidential Address of Dr. R.S. Black, 17 June 1874, Nova Scotia Medical Society, Annual Meeting, Minutes, PANS.

36 Saint John Medical Society, Minutes, 14 November 1900, NBM. The minutes include a description of Olding's paper entitled "Water as a Therapeutic Agent". *Ibid.*, 6 November 1895, 19 February 1896. See also R.F. MacFarlane, "Theory and Practice of Hydrotherapeutics", *Albany Medical Annals*, 13, 1 (January 1892), pp. 1-9.

37 John Harley Warner, " 'The Nature Trusting Heresy': American Physicians and the Healing Power of Nature in the 1850s and 1860s", in Donald Fleming, ed., *Perspectives in American History* (Cambridge, 1978), pp. 291-324. Although the reliance upon nature's recuperative powers can be initially discerned during the 1850s and 1860s as Warner suggests, it was not until the 1870s that this orientation became commonplace among doctors in Maritime Canada.

38 Nova Scotia Medical Society, Minute Book, Scientific Branch, 6 February 1877, PANS.

39 "Reminiscences of Dr. A.J. Cowie, Wolfville, N.S.", *Nova Scotia Medical Bulletin*, 3, 8 (September 1924), pp. 16-9; Halifax Medical Society, Minute Book, Scientific Branch, 6 February 1877, PANS.

in the late 1860s. Gordon, in fact, had become embroiled in a controversy during the early 1870s as a result of his use of minute doses of the patented drug chlorodyne in the treatment of whooping cough. Gordon had been attacked at that point not only for his use of a patent remedy but also for his homeopathic approach to treatment.[40] In Saint John, Dr. Henry C. Preston was another leading homeopathic practitioner. An erstwhile editor of the *North American Homeopathic Journal*, Preston followed a therapeutic regimen similar to that of many of the nature trusters within the regular profession. In treating diphtheria, for example, Preston suggested a regular gargle and wash for the throat, beef tea and bread, and two glasses of port wine each day. He thought that alcohol "neutralize[d] the diphtheric poison better than any of the washes or gargles ever recommended" and that it could be used in association with other remedies such as Quinine or Cholorate of Potash. At the same time, he believed that "those who ignore the homeopathic law, and deny the efficacy of infinitesimal doses and their universal success in the treatment of disease will continue to grope blindly in the dark for any and every adventitious remedy that may be recommended, and lose their patients or not as the chances may happen".[41]

Not all doctors considered homeopathy effective or reputable. Edward Jennings, a long time opponent of irregular practice, complained that "the profession was descending into the expectant system" which would leave it indistinguishable from its competitors. To Jennings, homeopathy was "an absurdity — founded on absurdity and produces no effect where there is a substantial disease". Another leading figure in the profession, Alexander Reid, was also unconvinced of the benefits of homeopathy. Reid, who had great faith in experimental medicine based upon laboratory investigation, pointed out that he had yet to see any homeopathic improvement referred to in scientific journals and therefore concluded that homeopaths were not "active explorers in scientific medicine".[42]

As traditional drug therapy came increasingly under fire during the 1870s, doctors turned to a number of alternative forms of treatment including hydrotherapy, mesmerism, body massage, and physical exercise, and the employment of tonics, alcohol stimulants, and dietary regimens of various sorts. Many of these, of course, were aspects of a broad self-help oriented health reform movement that existed apart from the orthodox profession, and which had a lengthy history of its own. This natural or self-help tradition at once reflected a Victorian preoccupation with the healthy body, and a concern about the individual's perfect relationship with the total environment.[43] Many of these

40 Halifax Medical Society, Minute Books, Scientific Branch, 7 May 1872, PANS.

41 *Acadian Recorder*, 2 March 1878.

42 *Ibid.*, 6 February 1877.

43 Bruce Haley, *The Healthy Body and Victorian Culture* (Cambridge, 1978); James Whorton, *Crusaders for Fitness: The History of American Health Reformers* (Princeton, 1982); Gunter B.

reformers believed that good health involved a spiritual dimension, arguing that it was the individual's responsibility to work towards physical salvation and pure-mindedness by following the physiological laws of nature. This "religion of healthy-mindedness", with its suspicion of the claims of science and the authority of the "expert", was at odds with orthodox medicine which attempted to make unhealthy individuals supine or passive in the face of the doctor's expert ministrations, thus taking from people the ability to engage actively in their own physical purification.[44]

Central to these self-help regimens was a belief in the need to acquire physical and mental equilibrium through a serious approach to diet, an avoidance of gluttony, the employment of a purposive physical regimen, and the development of a hygienic environment. Sylvester Graham, the American health reformer and inventor of the Graham cracker, for example, opposed excessive indulgence of any kind, championed a vegetarian diet, and preached the virtues of a well-ventilated environment.[45] This was also true of the noted phrenologist Orson Fowler who periodically visited the Maritimes and Newfoundland to advocate his holistic approach to physical and mental well-being. Like Graham and other health reformers, Fowler stressed the importance of both physical exercise and appropriate nourishment to the body. In a lecture to a Saint John audience he derided the "many so-called clever men who could write a long string of letters after their names, who had no better idea of eating than a hen that gobbles beans without chewing them".[46] In another lecture in Halifax entitled "Means of Success and Causes of Failure", Fowler told an immense audience that each individual had control over his or her mental, moral, and physical development. The point to be observed, Fowler argued, was proportion, "without which man can never be that finely developed and symmetrical creature that it is his privilege to be". Fowler warned particularly against the forced education of children, especially in the absence of appropriate physical activity, and showed how often a bright, smart boy was "struck by brain fever" because of overstudy. These children were literally "educated to death".[47] Fowler regularly saw proof of the evils of over-education in students like A.C. MacKenzie, a student at the Halifax Medical College who succumbed to brain fever attributed to excessive study and overwork.[48]

Risse, Ronald L. Numbers, and Judith Walzer Leavitt, eds., *Medicine Without Doctors: Home Health Care in American History* (New York, 1977).

44 Whorton, *Crusaders for Fitness*, p. 4. The phrase "religion of healthy mindedness" was coined by William James.

45 Stephen Nissenbaum, *Sex, Diet, and Debility in Jacksonian America: Sylvester Graham and Health Reform* (Westport, Conn., 1980).

46 *Daily Sun* (Saint John), 2 May 1882.

47 *Acadian Recorder*, 9, 10 May 1882; *Morning Herald* (Halifax), 10 May 1882.

48 *Acadian Recorder*, 10 May 1882.

This need for an appropriate balance between mental and physical activity and the impulse toward the symmetrical development of the body's parts were also essential components of the various physical culture programmes that emerged as part of the 19th century health reform movement. In search of both personal and social improvement most health reformers advocated physical exercise programs to encourage graceful movement and good health. One of the most influential of these was the "New Gymnastics" developed by Dr. Dioclesian Lewis of Boston and based upon Swedish and German exercise systems.[49] In Halifax, James S. McKay of the Hall of Health, a Sackville Street gymnasium, introduced a "scientific" program of exercise based upon Lewis's principles, replete with measurement of various parts of the body to ensure that they were in appropriate proportion.[50] In addition, McKay taught physical culture at several Halifax schools. He had, student Mary McGregor explained, imbued the girls at her school with a new respect for the healthy body.[51]

The physical culture movement was particularly significant because in bringing the language of science to the tradition of physical and mental self-improvement it tended to bridge the gap between medical orthodoxy and the larger health reform movement. Many of those in the forefront of the physical culture movement, such as Lewis, Dan Sargeant, Edward Hitchcock, William Anderson, and Charles McIntyre, were licensed physicians. Like their fellow practitioners in the Maritimes, they stressed the need to introduce exercise programmes in public schools in order to alleviate mental strain, counter the evils of sedentary work, and correct physical imperfections such as poor posture. Such physical education, regular physicians emphasized, was best taught by a physician trained in physical culture or, in lieu of that, by a trained educator who dispensed exercise prescriptions under medical supervision.[52] The Saint John Medical Society debated the question in the late 1890s. Dr. Clara Olding echoed the words of Orson Fowler a decade and a half earlier when she criticized the educational system and the excessive training of a bright young mind "with a body physically incapable of sustaining it". While some doctors disagreed — Dr. G.B. Addy suggested that the dust stirred up in schoolrooms would be even more harmful than no exercise — most physicians concurred with Olding's suggestion that schools provide physical education and that

49 See Michael Smith, "Graceful Athleticism or Robust Womanhood? The Sporting Culture of Women in Victorian Nova Scotia, 1870-1914", *Journal of Canadian Studies*, 23, 1 (Spring-Summer 1988), pp. 119-37.

50 *Acadian Recorder*, 29 March, 20 May, 7 June 1887.

51 *Ibid.*, 5 July 1880.

52 Patricia Vertinsky, "God, Science and the Marketplace: The Basics for Exercise Prescriptions for Females in Nineteenth Century North America", *Canadian Journal of the History of Sport*, XVII, 1 (May, 1986), pp. 38-45.

physicians should be employed as sanitary inspectors.[53]

By the 1890s the cry for physical regeneration through appropriate exercise and the recognition of the healing power of nature had become a standard part of the vocabulary of the medical doctor. Within newly emerging ideas of sanitation, for example, lay traditional self-help notions of personal hygiene, bathing, and ventilation. In 1884 Dr. Bayard expounded on the need for natural cures by advocating fresh air, good water and a healthy though non-vegetarian diet in order to maintain a strong and balanced system.[54] Edward Farrell in a similar manner now spoke forcefully of the virtues of physical culture and the "harmonious development of soul and body".[55] What was once the province of the unlicensed proponents of natural healing, therefore, was being gradually appropriated by the regular medical profession. Near the turn of the century the American humorist Mr. Dooley noted this development and commented wryly that "if the Christyan Scientists had some science, an' the doctors more Christyanity, it waddn't make anny diff'rence which ye called in — if ye had a good nurse".[56]

The changing character of therapy in the Maritimes from 1850 to 1885, then, tends to bear out many of the conclusions that John Harley Warner has reached in *The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America 1820-1885*. There are some differences, however, between Warner's findings and those outlined here. Warner argues that the new orientation towards the healing power of nature that accompanied the transition from speculative medicine to clinical experience was more rhetorical than real, and he thus places great emphasis upon the growing belief in laboratory experimentation in order to explain the subsequent triumph of the profession over its competitors. Laboratory investigation did ultimately help to secure the authority of the orthodox profession, but the profession's emphasis on the healing power of nature was an equally important part of the process of professionalization since it allowed orthodox practitioners to absorb the techniques of their competitors in the name of science. In the years leading up to World War One, of course, the authority of the regular profession would increase even more. Indeed, as the profession became more committed to disease prevention through the public health movement, as work in the laboratory increasingly demonstrated the virtue of scientific research, and as doctors married notions of personal well-being and degeneracy to the rhetoric of social regeneration and

53 St. John Medical Society, Minutes, 20 December 1899, NBM.

54 *Daily Sun*, 19 July 1884.

55 "Dr. Farrell's Address to the Graduates of Dalhousie University", *Maritime Medical News*, VII, 5 (May 1895), pp. 113-4.

56 Quoted in "Physical Therapeutics", *The Boston Medical and Surgical Journal*, LXLV, 4 (July 1901), pp. 102-3.

reform, orthodox medicine began to emerge as the first resort solution to illness and its domination of the larger medical marketplace increasingly became a fact of life.