The Classic

A Plan for a More Effective Federal and State Health Administration

Frederick L. Hoffman LLD

Published online: 28 July 2009

Abstract This Classic article is a reprint of the original work by Frederick L. Hoffman, LLD, A Plan for a More Effective Federal and State Health Administration. An accompanying biographical sketch on Frederick L. Hoffman, LLD, is available at DOI [10.1007/s11999-009-1001-9](https://doi.org/10.1007/s11999-009-1001-9). The Classic Article is ©1919 by the American Public Health Association and is reprinted with permission from Hoffman FL. A plan for a more effective federal and state health administration. *Am J Public Health*. 1919;9:161–169. The article can also be accessed on the American Journal of Public Health web site at <http://www.ajph.org/cgi/reprint/9/3/161-a>.

© The Association of Bone and Joint Surgeons® 2009

Read before General Sessions, American Public Health Association, at Chicago, Ill, December 10, 1918.

Richard A. Brand MD (✉)
Clinical Orthopaedics and Related Research,
1600 Spruce Street,
Philadelphia, PA 19103, USA
e-mail: dick.brand@clinorthop.org

It is not only desirable but an essential prerequisite of social progress that inquiry shall be made from time to time concerning the present value and further perfection of existing methods or instrumentalities ministering to human welfare and human wants. Health is so obviously of the first importance that its protection and more or less effective conservation have from time immemorial been made at least a matter of individual, if not collective, concern. Most of the so-called health legislation from the earliest times to the present day, however, has been concerned with the correction of ascertained sanitary or related imperfections, rather than with anticipatory action having for its purpose the prevention of disease and premature death. Much of what is called preventive medicine, even at the present time, is in the direction of prevention of further damage and harm rather than of a character deliberately designed to preclude the occurrence or inception of dangers which so frequently, and practically continuously, threaten the individual and collective welfare in what, for want of a better term, is comprehended as the vast field of public hygiene. The fact must not be overlooked that in its origin,

every modern public health organization rests primarily upon the principle of quarantine as applied in the case of recognized infectious or contagious diseases, and the, if necessary, drastic exercise of the police powers on the part of the government, the states, and the civil subdivisions thereof.

Probably the earliest quarantine legislation in this country was adopted by the General Court of Massachusetts in 1647 or 1648, to prevent the introduction of the plague (probably yellow fever) “which was then devastating the West Indies.” Unquestionably, and in a large measure, effective quarantine regulations, whether maritime or local, constitute, however, but a fraction of modern health legislation, which has gradually been extended from communities to persons and which now comprehends every conceivable sphere or function of individual and social life. Even an enumeration of the subject-matter of modern public health activities would unduly enlarge upon the present discussion, which is chiefly concerned with future possibilities rather than with past achievements. What is today understood as health conservation concerns largely such anticipatory

action as by general consent seems feasible of enforcement, if not in the form of specific statutory requirement, at least in the nature of improved personal conduct in matters concerning both personal and public hygiene. In the broadest sense, therefore, modern health activities have become largely educational, with a view of securing on the part of each and all concerned a better understanding of the principles which govern in the attainment of better health and greater freedom from disease, a more perfect adaptation of the human organism to its environment, and a substantial prolongation of life. The acceptance of this principle has enormously increased the sphere and the function of public health administration and made perfectly obvious the inadequacy of existing methods, whether federal, state or municipal, to effectively serve the true interests of all the people. What in former years, when the nature of epidemic diseases was not understood, was a necessary exercise of the police powers has in modern times become of rather secondary importance. All that is generally comprehended under so-called sanitary legislation, such as the burial of the dead, the control of nuisances, the protection of water supplies, sewage, drainage, etc., is no longer within the realm of debatable public consideration, but is accepted as a paramount necessity of and the rightful prerequisite to a wholesome community life. Even though the principle has not as yet been generally accepted that failure in these matters on the part of the responsible authorities should constitute an indictable offense, it is nevertheless a safe conclusion that such a view is gaining ground, and a number of court decisions seem to settle the question that every community is in duty bound to furnish pure water, to abate dangerous nuisances, to prevent the further spread of communicable diseases, etc. But practically all that concerns the health of the individual and his or her own physical well-being, is still considered primarily and essentially a matter of personal concern only.

It is of the utmost importance that this distinction should be kept clearly in mind in all discussions of a broader national and state health policy. It may then be said that instead of the individual of today being concerned chiefly in the efficient performance of an important but limited state function regarding himself or his family, the modern conception is rather the reverse in that the government or the state is profoundly more interested in the most successful adaptation of each and every individual to his or her environment, be that what it may. Once that this as yet but very imperfectly conceived principle is generally approved, the urgency of a complete remodeling of our federal and state health organizations becomes self-evident. In answer to the argument that such a change would be revolutionary and opposed to traditional conceptions of the freedom of the person, the reply is that, quite to the contrary, a much lesser degree of public and private interference will

become necessary, once that the required coöperation of *all* the people in the furtherance of collective health measures is secured. As has been well said by one of the very foremost American authorities on the theory of the state and in defense of decidedly higher conceptions of human society, properly conceived as an incorporated association, inclusive of all the persons composing it,

“It has been found out by experience that *the whole*, by its superior organization, can do some things to which individuals are unequal”; and furthermore, “Will it be said that by such state action individuals are not alike benefited, and so there is a sort of injustice in it? The ready answer is that this is unavoidable, and that no one of these modes of action ought to pertain to society and the state which on the whole does not contribute to the common good. When courts are instituted for the redress of wrongs, multitudes go through the world who may never have been wronged, and yet were there no courts they might have been wronged daily. Public roads are of no direct good to those who never travel. Great breakwaters and a system of lighthouses help shippers only, in the first instance, and men complain of taxes for such constructions, forgetting that, apart from humanity aiming at the safety of sailors, the prices of imports would be affected by the greater risks of vessels.”

Substitute in these illustrations the health of the community as represented by the wide range in the physical well-being of the vast multitude which compose it, any one or all of which are affected to a varying degree by the measures adopted as likely to benefit or improve it, and the parallel is reasonably exact. In other words, the health of the individual, his physical well-being, his strength of disease resistance, his immunity to infectious or contagious diseases, his successful adaptation to ever-changing environmental conditions, etc., should be made the primary concern of the future state instead of being often a matter of mere incidental consideration, as is practically the case at the present time.

Under such a conception the modern health department would assume the functions of a general health *administration* concerned with all the matters which affect the health and physical welfare of the people, and not merely a function sustained almost exclusively by the police powers of the Federal government or the state, and limited in its actual effective operation to a comparatively small, however supremely important, group of activities. No plan as yet proposed by anyone concerned with these matters rests upon such a new principle, or set of principles, but, one and all, the proposals for changes or reforms are merely a modification of a thoroughly restricted theory of health control; conditioned chiefly by the principle of public

quarantine and the control of the person under the police powers when found to be afflicted with some contagious or infectious disease, and, the control of the environment in matters of obvious public nuisances menacing the health of the people in more or less clearly perceived directions.

Considering that all organized Federal and state health activities are of comparatively recent date; that the earlier boards of health were chiefly concerned with the temporary control of great epidemics; that even so advanced a state as Massachusetts has had a state board of health only since 1869, reorganized in 1886, and that our present Federal public health service dates only from 1903, when broader health activities were recognized in the act excluding immigrants affected with loathsome or dangerous contagious disease, and subjecting such immigrants to medical examination, the progress which has been made is profoundly gratifying, however regrettable it may be that a thoroughly worked out plan, resting upon new principles of personal and public hygiene, should not long since have come into existence. Yet it has been properly pointed out with reference to the first state board of health of Massachusetts, that the same was commanded to take “cognizance of the interests of health and life,” and that it was only made a secondary function of the board to study the causes of disease and death. As stated by Professor Whipple in his work on “State Sanitation,” “The order in which these subjects are named is not without significance. Health is a great issue, and health is something more than the absence of disease. Health demands not only freedom from disease but a clean environment, comfortable and enjoyable conditions of life, suitable food, satisfactory provisions for work and play and the raising of children,” but health is infinitely more than this. Professor Whipple himself was under the influence of the earlier conception that the functions of a state department of health are primarily concerned, as of course they had to be, with the control of the environment in its relation to the present. The view, however, to be emphasized, and as far as practicable to be supported by the required evidence, maintains that the primary duty of the modern state is to concern itself with the welfare of the person and the successful adaptation of each to his environment, be that what it may; for the wide variations in environmental conditions make absolute uniformity in law, and legislation of rules and regulations of so-called standards frequently undesirable. It has been said in this connection, though, of course, subject to qualification, that, as regards the health of the individual, “The question of muscular strength, of girth of chest, of size, has naught to do with health, the sole test being the adaptability of the body to continue under the circumstances of life in which it is placed—*i.e.*, under its environment.” Just because it is so easy and convenient to live by a good rule rather than by trained intelligence and in the light of a

thorough understanding of bodily functions, their limitations, their possible impairment, exceptional strength or weakness in individual cases; existence by a hard and fast rule is as likely to prove disastrous as, conversely, by the disregard of common sense requirements applicable to one and all. For, as said by Dr. A. E. Bridger, in his treatise on “Man and His Maladies or the Way to Health,”

“It follows as a necessary corollary that there can be no general arbitrary standards such as our one-idea men are so fond of assuming, no one perfect diet, no one perfect mode of life, no one fixed amount of ozone in the air, which would, had man but the grace to follow their wise counsels, regenerate mankind, and make all men healthy, wealthy and wise; and that no one fixed combination of these would, or could, ever suffice to that end; and this simply because, as no two men coincide precisely in construction and in the amount, variety, and distribution of forces within the body, no one set of conditions can possibly be adaptable to the whole mass of humanity.”

There is a profound truth contained in the foregoing sentence which has, broadly speaking, been ignored in most of the educational efforts carried on during recent years in public health activities, in which, in theory, an average man or an average human type is assumed, although, as a matter of fact, such a concept is merely statistical or philosophical but never real. *Man* defies analysis and subjection to the rigid principles deduced from a study of collective phenomena. After all, every man or woman is, first and last, an individual, and though by means of statistical methods certain average types are clearly to be differentiated from other average types, yet nevertheless there is nearly always a major portion of similarity, at the one extreme, and a major portion of pronounced variability, at the other. In the words of Prof. Alfred C. Haddon, in the introduction to his admirable treatise on “The Study of Man”:

“It seems strange that man should study everything in heaven and earth and largely neglect the study of himself, yet this is what has virtually happened. Anthropology, the study of man, is the youngest of the sciences, but who will say that it is the least important? We may, perhaps, find one reason for this neglect in the peculiar complexity of the subject and the difficulty there is in approaching it from a dispassionate point of view; there are so many preconceived opinions which have to be removed, and this is always a thankless task. Even now the scope and significance of anthropology have scarcely been recognized.”

The health service of the future, I am fully convinced, will rest more upon the teachings and practical conclusions

of anthropology, and particularly physical anthropology, as chiefly concerned with the ascertainment of the normal human physique, normal physical standards of bodily proportions and growth, and observed departures therefrom, especially during the early years of life. In brief, I believe that a rational health administration, concerned primarily with the health of the individual, must have its beginnings in a thoroughly well worked out department of physical anthropology, devoted to the eminently practical task of supervising the growth and development of the nation's childhood, and continued through the period of early and late adolescence, inclusive of the entrance into industry or whatsoever vocations or pursuits or activities may be followed prior to the attainment of complete maturity.¹

In 1904 a classical report was made by an exceedingly able Departmental Committee appointed by the British Government to inquire into the subject of physical deterioration. The recommendations made by that committee, however, were contemptuously disregarded! Had they been followed, there would be less anxiety today concerning the future physical well-being of the people of the United Kingdom. The conclusions advanced by that committee are applicable to every civilized and more or less industrially developed country. Among the principal recommendations of the committee were (1) the suggestion for an anthropometric survey, which should have for its object the periodic taking of measurements of children and young persons in schools and factories; (2) a register of sickness not confined to infectious diseases; and (3) an advisory council "representing the Department of State, within whose province questions touching the physical well-being of the people fall, with the addition of members nominated by the medical corporations and others whose duty it would be not only to receive and apply the information derived from the anthropometric survey, and the register of sickness, but also to advise the government on all legislative and administrative points concerning public health in respect of which state interference might be expedient."

There can be no entirely effective Federal or state health administration which continues to ignore the physical facts of individual life and which does not concern itself with the conclusions derived from collective investigations concerning physical progress and physical well-being; yet, broadly speaking, in not even the most advanced civilized countries are efforts being made to first ascertain the true physical status of the population and the variations in health and growth from time to time, whether towards

physical improvement or physical deterioration, as the case may be. Furthermore, and still more lamentable, is the fact that in not even the most advanced countries are such fragmentary data as exist intelligently utilized, but, quite to the contrary, are contemptuously disregarded as needless to the higher requirements of an intelligent policy of government resting upon the declared principle of general welfare.²

A beginning has fortunately been made in this country through the United States Children's Bureau to initiate a plan for the systematic measurement of children of pre-school age, subsequently, no doubt, to be followed by the introduction of systematic measurements of children during the teaching period from the primary grade to the university. It is true, of course, that vast numbers of children are being measured in school or out, and that equally vast numbers of measurements are made of young persons in industry, in the military service, etc. The lamentable fact, however, is that these measurements are, in the first place, crudely made; in the second, the prevailing standards of normal height and weight, chest expansion, etc., are seriously deficient in scientific accuracy; and in the third place, the ascertained deficiencies, or departures from the normal are not made a matter of serious concern on the part of the school or the parents, or the medical profession, or all combined. Now, a modern state, resting its claims for preëminence upon a thoroughly healthy population, can be such only if standards of physical health and well-being are correctly ascertained and then properly applied to the correction of errors or deficiencies in growth or development in the very earliest stage of cognizable departures from the normal. It serves but a very limited, if any, purpose to ascertain such errors after they have become thoroughly established and possibly been incorporated in the mature development of the body. What is here said of the simple requirements of physical anthropology applies, of course, with much greater force to the broader needs of physical examinations. By physical examination is meant an amplified medical examination, which cannot be made properly by the physical examiner, governed too exclusively by the special requirements of physical anthropology. Unless, however, physicians are trained in making physical examinations they are just as likely to arrive at erroneous conclusions, most of all when, as is usually the case, the physical examination is made in a perfunctory manner and the judgment is guided by more or less misleading standards, as when medical conclusions are arrived at by

¹ Some exceptionally valuable data on physical growth and development are included in the first three chapters of Prof. G. Stanley Hall's treatise on "Adolescence," New York, 1905.

² For additional observations of my own on this important question see article on "Some Vital Statistics of Children of School Age," the School Review, December, 1913; see also my address on the "Physical Care of Children," Medical Review of Reviews, April, 1916.

physical anthropologists.³ All such examinations, as, for illustration, those for defects of vision, hearing, dentition, spinal curvature, etc., require extreme care if latent tendencies towards future serious defects and possible deformities are to be disclosed. There is, therefore, the utmost urgency that this aspect of modern health administration should receive prior consideration if the future health of the nation is to rest upon a strictly scientific as well as thoroughly practical foundation.

The questions involved in this suggestion have received the serious attention of the Committee on Race in Relation to Disease (Civilian Records), of the National Research Council. That committee has recommended a standardized form of measurements and medical examination, with a due regard to the racial antecedents of the person examined, chiefly, for the time being, limited to persons employed in industrial establishments. The committee clearly realized the importance of accuracy and thoroughness in the physical examination of adult applicants for employment, a sound physique being a prerequisite for the best possible results in industrial establishments. In other words, the same conclusions which apply to infants and children of pre-school age which are recognized by the Children's Bureau as applicable to children of school age and post-school age and enforced in many schools, public and private, and made mandatory in some by the use of

school inspectors, etc., are equally applicable to vocational training and to vocational activity, but particularly so during the years of late adolescence or just before complete maturity has been attained. A national and local health administration, resting its beneficent activity upon such a basis, cannot but achieve measurably higher results than have been secured under the decidedly more restricted functions of public health and state medicine as followed at the present time.⁴

The second prerequisite for a rational and effective public health administration is *the accurate and complete registration of all serious illnesses*, whether in private practice or in institutions under medical supervision and control. What has properly been called the "wasted records of disease" constitute, by their non-use at the present time, an indictment of the public health authorities and the medical profession as indifferent to the most vital facts which concern national health and well-being. The conclusions drawn from mortality statistics are naturally of a very high order of intrinsic value, but after all they serve rather historical or retrospective purposes, and quite frequently the lessons drawn therefrom are no longer applicable to a possibly completely changed state of affairs. The statistics of communicable or transmissible diseases are frequently limited chiefly to the acute infectious diseases of infancy, as to which the enforcement of drastic quarantine regulations is least difficult. The reporting of such a disease as tuberculosis is still far from having attained even a reasonable degree of approximate accuracy, so that for practical purposes most of the data are useless and misleading. That much can be done in the direction of broadening the plan and scope of such disease reporting has been made evident by the gratifying results in the state of Mississippi, where trustworthy returns are now being made by over 90 per cent of the physicians throughout the state. The reluctance on the part of the medical profession and the unwillingness frequently shown to completely fill out certificates of communicable diseases and to promptly forward the required information to the central office of the state or local board of health are but further evidence of a failure on the part of the medical profession to clearly realize its public status and semi-official relations to the government. As perhaps the most conspicuous illustration of unwillingness or indifference in this respect mention may be made of the failure of a large number of physicians in practice in the Sacramento Valley

³ The Standard Child Labor Bill as recently introduced with slight modifications in West Virginia provides for "a certificate signed by a medical inspector of schools or public health officer stating that the child has been examined by him and in his opinion has reached the normal development of a child of its age, and is in sound health and physically able to be employed in the occupation in which the child intends to engage." With reference to proof of age a certificate is required, "signed by the public health physician or a public school physician, specifying what in the opinion of such physician is the physical age of the child," and that "such certificate shall show the height and weight of the child and other facts concerning its physical development revealed by examination and upon which the opinion of the physician as to the physical age of the child is based. In determining such physical age the physician shall require that the school record or the school census record showing the child's age be submitted as supplementary evidence." But as a matter of fact there are not, strictly speaking, as yet any trustworthy physical standards of age, growth or vocational fitness. Such standards can be developed only out of the data which are now being collected, but which will be seriously misleading unless the tabulation and analysis and resulting averages are with a due regard to the racial antecedents of the child, or, more precisely, the race of the father or the mother or the races of both.

It may be suggested here that the term nationality in investigations of this kind is grossly misleading and scientifically of no value. The nationality of a naturalized Italian is American; the nativity of an Italian, irrespective of citizenship, is *Italy*; the race of an Italian is with few exceptions the same as the nativity, but the race of an American-born child of Italian parentage is Italian, and not American. The most difficult complications arise in the correct racial differentiation of the immigrant stock from certain central European countries, where nativity and race are frequently confused. The term nationality should never be used in investigations of this kind.

⁴ In a collection of papers on Army Anthropometry and Medical Rejection Statistics (Newark, N. J., 1918, Prudential Press), I have brought together a considerable amount of useful information from American and foreign sources, not generally accessible. The address emphasizes the urgency of much more rigid conformity to strictly scientific requirements, if results of really practical and lasting value are to be secured.

of California to promptly and accurately report current cases of malaria at a time when the increasing frequency of the disease, in consequence of the extension of irrigation and rice-growing projects, constitutes a serious menace to the present and future health and welfare of the people of the state. Equally lamentable is the apathy on the part of the state health authorities to bring about the drastic enforcement of the official rules and regulations which require such reporting but which are often treated with official indifference little short of contempt.⁵

Objections will be raised to the suggestion that the reporting of serious diseases, including such, for illustration, as diseases of the heart and circulatory system, of the urinary system, of the respiratory system, all forms of tumors, etc., would impose a very considerable amount of additional clerical labor upon more or less overworked physicians in private practice, while, on the other hand, there would be the risk of making public information considered at law entirely confidential between patient and physician. The answer is that the physician would not be required to communicate the name of the person concerned, but only certain essential statistical facts such as age, race, occupation, locality, etc., together with the nature of the disease, the duration of the treatment and the results thereof, conforming, broadly speaking, to the practice which now prevails in private and public hospitals. The only reason why the term "serious disease" is used is that, for the present, no complete list of such diseases as would most urgently require reporting is offered, and to make it clear that there is no intention of imposing upon the medical profession the very considerable burden of reporting all trivial ailments, of slight statistical, medical or economic value. It is precisely on this ground that the most serious objections lie against the compulsory system of health insurance, in that no discrimination is exercised in the form of treatment and that the major portion of time, thought and expense is devoted to trivial and partly imaginary ailments, to the serious disadvantage of patients in urgent need of highly specialized skill, prolonged nursing care, etc. In medicine, as in everyday life, a choice must be made between that which is of major and that which is of minor importance. The same regrettable errors which underlie our public library management impair the practice of compulsory sickness insurance, in that in the former most of the public money is wasted on books or periodicals practically within the reach of any one, while the more costly works of reference, scientific periodicals,

etc., urgently required by earnest students seeking to advance the interests of some one branch of science or another, are generally not available. Neither in Germany nor in England, under social insurance, are those who are most in need of thoroughly qualified medical or surgical skill, prolonged nursing care, surgical or other appliances, high-priced medicines, costly institutional treatment, radium, X-ray, etc., cared for as their condition most urgently demands.⁶ For these and many other reasons it would not seem advisable to require the reporting of minor or trivial ailments such as constitute in everyday practice a large proportion of the cases, having neither much pathological nor sociological significance; but it is insisted that the more serious types of disease should be systematically and accurately reported, so that their respective degree of frequency occurrence may be known and thoroughly understood. No real progress can be made in public health, in the larger sense, until the essential facts of health and physical well-being are made available and practically applied by those qualified to do so.

The third fundamental principle of modern health administration is a thoroughly well worked out limited *state medical service*, including under that term, all of the medical services now rendered in connection with public institutions, poor-law establishments, schools, state and municipal dispensaries, clinics of all kinds, etc. The existing state medical service is already quite considerable and requires only to be amplified and reorganized on a more substantial and well considered plan. The new organization, however, must rest-upon a totally different principle from that of the old one, and that is the clear recognition of the duty of the state to afford the best qualified medical and surgical service to all those who are in need thereof, even though they are unable to pay therefore the usual and not unreasonable charges common in everyday private practice. To overcome the difficulty of the stigma of apparent poor relief the state medical service should be scrupulously kept outside of any general poor relief administration, and, being supported by public taxation, conform in its essentials as a public utility to the same governing principles which apply to the use of public libraries, public schools, etc. Certain practical difficulties, no doubt, would arise at the outset of such a proposed state medical service, but it is the only alternative to the existing chaotic condition, which, in many respects, is in urgent need of radical reforms.

Dr. Hoffman's article will be concluded in the April number of the JOURNAL.

⁵ See in this connection the observations and data on the failure of the U.S. Public Health Service to secure complete returns of malaria morbidity through the cooperation of practicing physicians in the Southern States as set forth in my address on "Malaria in Peace and War," prepared for the National Committee on Malaria, Prudential Press, 1918.

⁶ For an extended discussion of the more involved aspects of compulsory health insurance, see my address on "Facts and Fallacies of Compulsory Health Insurance," Newark, 1918, and a paper on "The Failure of German Compulsory Health Insurance—A War Revelation," read before the Association of Life Insurance Presidents, New York, December 6, 1913.