Public health and the practitioner

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Public Health and the Practitioner

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INTRODUCTION

Does it seem to you that the public health services are gradually displacing the practicing physician from the field of his livelihood? Do you think the public health services are gradually working into what eventually might prove to be State medicine, the physician becoming merely an employee in the state machinery?

These are questions which I intend to answer for myself and for you if already you have not come to recognize the situation as it obtains. These questions are answered by too many of the men in our profession in the affirmative. This is only with little weight of the relationship which actually exists and opportunities for relationship which might be developed. Understanding seems to be the key work to the situation as long as the above conclusions are made without openminded consideration of the actual aims of public health services.

In determining the material to include in this thesis I asked one question of many men in our professional field. "What do you think of public health services?" The answers were, nearly all of them, very thoughtless. "Oh, they're all right - let them take
Introduction
care of their business and I'll take care of mine."
"Oh, just like any government work; dabble here and
there in everybody's business." "Just State medicine
sooner or later." "I don't have a thing to do with
them. They've already taken away a lot of our practice."
"Oh, I don't know. I have all I can do to take care
of my sick patients." "I don't know yet. They might
be all right some day but I'm going to wait until they
are sure of their dope."

Seemingly, these same men are unaware of their
own public health efforts, however feeble they may be.
Not a one denied that he had even vaccinated, innoc-
ulated, or protected against disease; that he had
used anti serum; that he had sent a blood sample to
the city laboratory for a complement fixation test.
These are steps in the right direction however un-
conscious they may be. No doubt they are unaware also
of this fact: the two, public health and practicing
physician, appearing to take two distinct pathways
have as their end a common one - community health and
happiness. (Perhaps those who fail to realize this,
those who are the most distinct oppressors are the same
as those who hold too intimately the goal of a fat
income.) These pathways leading to the same goal also
Introduction

cross in innumerable places, the interdependence at such points being a matter of recognizing and understanding the wealth of opportunity.
PUBLIC HEALTH AND THE PRACTITIONER

Success of many a practitioner under the present order contemplates two major factors, plenty of illness, and that illness among those able to pay. (1) No wonder there is some friction with the public health movements. Public health trends are toward less illness and maintenance of health with the key note of prevention. This is just one of the arguments against public health.

No one who understands will question the desirability of having every child immunized against diphtheria, typhoid fever and small pox; and this is a type of work in the performance of which both the public health officer and the practicing physician have parts to play. It is to the public health officer's advantage to secure the participation of the private physicians to the fullest possible extent. I feel that every practicing physician could greatly enlarge his practice, while at the same time be rendering valuable service to his patients and to the public, if he would instruct mothers to bring their children to him soon after birth for observation at regular intervals; if he would tell them positively and
definitely that he would immunize the children against diphtheria at the age of six months, vaccinate them against smallpox at 12 months and protect them against typhoid at the age of 2 years. (2) (3)

And, this is just one indication that public health service is not trying to dominate the picture—selfishly. Our course may at times seem to conflict and what in the darkness of lack of understanding would lead to disputes, becomes in the light of better acquaintance, a mutual benefit toward gaining over common end. (4)

I wish to step back of the present and relate some of the historical points.

"As far back as history carries us, and in fact, in prehistoric times we find evidence of those in authority among the Egyptians, Greeks, and Romans having had some conception of the necessity for sanitary laws. One cannot run over the wonderful code Hammuraki, King of Babylon, compiled 2,200 years before Christ, and which was unearthed in the Acropolis Mound at Susa in 1902, without feeling that he, too, had a full appreciation of the importance of hygiene. However, we have no record of these conceptions of the necessity for sanitation having been codified
until Moses handed out his sanitary regulations about the beginning of the 16th century B. C. (5) (6) The three cardinal principles of this sanitary code were - personal cleanliness, isolation of the sick and efficient safeguarding of the food supply.

These sanitary codes were excellent and were, for the most part, well administered, especially as regards personal cleanliness and the care of the food. It is more than probable that the comparative immunity of the Hebrews from epidemic diseases and plagues, as compared to the early Christians, Greeks, and Romans, was, in a large measure, due to personal cleanliness. This was particularly true of the Pharisees, who, as a religious rite, carefully washed their hands before partaking of food, believing as they did, that the eating of food with unclean hands defiled a man. (5) (7) Medical officials were appointed in Rome 435 B.C. They were placed in charge of districts and the sanitary measures carried out under their supervision were in many respects, commendable. Tradition tells us that the Cloaca Maxima was constructed under the direction of King Tarquiniius Priscus, 616-578 B.C. and is still used in the drainage of Rome and receives many branches between Capitoline, Palatine, and other
Historical, doctrinal delusions. 

hills. It is formed of three consecutive layers of enormous stone, one above the other, in concentric rows. The inside measurement is approximately 13 feet square. These, with the aqueducts, three of which are still in use, are marvels of engineering skill.

However, the superstition and doctrinal delusions of the early ages, that disease and pestilence were a direct visitation of Divine wrath, caused them to turn their attention from prevention measures to the building of hospitals, alm shrouds, etc. It was this, no doubt, that Ruskin had in mind when he said that, "Any regulation which tends to improve the health of the masses is viewed by them as an unwarranted interference with their vested rights in inevitable disease and death." For these delusions they surely have paid the penalty in the early and middle ages, even down to quite recent years, blaming Providence for disease for which they, themselves, through ignorance, superstition, and incredulity, were responsible. It would be difficult to conceive of any greater reflection on our intellect than retaining in our burial service "The Lord giveth and the Lord taketh away." Is this not libelous on the Almighty?
Historical, Psalms.

We are responsible in failing in our duty properly to apply our knowledge we possess of the cause of disease and how it is transmitted. Let us place the blame where it belongs and remove many of the obstacles to efficient health administration. " (5)

"It would seem as if David, King of Israel, foresaw great possibilities in the sanitary laws of Moses. In the Psalms of which he is credited with having written part, at least, he, with prophetic vision, must have been peering into the future of preventive medicine when he said, "Thou shalt not be afraid for the terror by night nor the destruction that wasteth by noonday, nor the pestilence that walketh in darkness." One cannot but be impressed with the apparent conception that the writer must have had of the control of malaria and yellow fever, "the terror by night" (through the snophes and the stegomyia mosquito), the control of venereal diseases, "the pestilence that walketh in darkness" and the control of wasting diseases of middle life in the "destruction that wasteth at noonday." Malaria was comparatively common in Italy as early as the second and third centuries and was probably brought over by the soldiers of the
Historical, sanitation and national strength.  9.

Carthagean mercenaries during the second and third Punic Wars. At that time the Roman Empire aspired to extend to the most remote parts of the world, but diseases and pestilence of plagues reduced the population to one quarter to a half. The same was true of Greece, Athens, and other cities of Europe and Asia. It was obviously, not the Gauls or Vandals that conquered Rome out the plague and malaria." (5)

Rome had not realized that public health was a national problem and was the foundation on which rested the strength of the nation. It is interesting to note that after the outbreak of the plague in different parts of the country - in brief it was obvious that they were associated with poverty and all that attends it, environments most favorable for rodents, vermin and insects.

After thumbing through a few pages of this past we could just as well point out the great steps in preventive medicine. This came at the beginning of the bacteriological epoch. Here we began to understand the way disease affects the masses of mankind. (8) The establishment by Pasteur of the germ causation of disease brought to light knowledge of the dissemination of infectious disease. (9)
Thus new knowledge of infectious diseases and their modes of transmission has emphasized the work of the public health official. Health departments at once became responsible for pure water supplies and pure milk supplies, for the disposal of sewage, for the control of foods, and for the study and control of food handlers. The development of the knowledge that tuberculosis might be spread by contaminated sputum spread about carelessly in public places, the knowledge that water from a contaminated well might bring on in the community a devastating typhoid epidemic, the knowledge that an infected milk supply might mean thousands of cases of septic sore throat, made the public aware of the fact that it needed the protection of its health against careless and irresponsible members of the community. Health officers were given policy powers for controlling those who too lightly carried their individual responsibility. Most of us can remember the time when the public health official was more a policeman than a scientist, when he travelled about with a club and a star forcing the closing of wells, forcing the straining and pasteurizing of milk, forcing isolation and quarantine of infectious diseases. (10)
Historical, immunity and immunization.

Gradually, in connection with the development of our knowledge of immunity, came the possibility of immunization against infectious diseases of various types. Before immunization could be applied on a mass scale to human beings, it became necessary to teach them the importance and significance of these measures. The campaign for vaccination against small-pox, the first of the important measures for immunization, was not difficult in its early stages, primarily because a vast majority of human beings feared small-pox more than any possible results that might come from vaccination. Once the nations of the world realized the value of vaccination against smallpox, it was not difficult to obtain in most countries legal measures to make vaccination against smallpox compulsory. It is perhaps significant that in the United States today our incidence of smallpox is far greater than that of many other civilized countries because of the number of unvaccinated. The reason lies no doubt in the fact that smallpox has been brought largely under control by rather general vaccination and compulsory quarantine. There are philosophers who believe that it might be worth while to relax our efforts temporarily in order
Historical, preventive medicine.

to strike fear again into a generation that is unaware of a lesson of the past. Victor Heisser, M. D., in his "The American Doctor's Odyssey" relates similar psychology which worked on the natives of the Phillipines. "In provinces where violent objections were encountered, the vaccinators were as a rule withdrawn at once. We bided our time. In six months an unvaccinated public would turn its eyes enviously from its own sick to the fortunate neighboring pueblo where tiny arm scars had taken the place of horribly disfiguring pocks, blindness, or death. The chief men in the unvaccinated pueblos would themselves request that the vaccinators return." (11)

Upon such a foundation began to be built the system of preventive medicine. Comparatively early, however, far seeing men grasped the principle of prevention in a way which now, in retrospect, seems marvelous. (12) These men were not physicians.

In 1849 the Massachusetts Legislature appointed a commission to study the question of public health and to bring in recommendations. This commission was called the "Shattuck" commission after Lemuel Shattuck, one of its members. The commission brought in a report which stands today - stands out as a great
human document and is worthy of the careful study of every citizen. Two of the most important recommendations made were those to establish a state board of health and a local board of health; it was twenty years later before a state board was established.

Quoting the preface of the report:

"We believe that the condition of perfect health, either public or personal, are seldom or never attained, though attainable; that the average length of human life may be very much extended, and its physical power greatly augmented; that in every year, within the commonwealth, thousands of lives are lost which might have been saved; that tens of thousands of cases of sickness occur, which might have been prevented; that a vast amount of unnecessarily impaired and physical debility exists among those not actually confined by sickness; that these preventable evils require an enormous expenditure and loss of money, and impose upon the people unnumbered and immeasurable calamities, pecuniary, social, physical, mental and moral, which might by that means exist, within our reach, for their mitigation or removal; and that measures for prevention will effect infinitely more than remedies for the cure of the disease." (6)
Do you see that these discoveries and developments are transforming medicine from an art to a science, changing the fundamental aim of the profession from the cure to the prevention of disease? That this shift in purpose is obtaining more or less unconsciously does not affect the certainty of the fact.

The sad part of this is: public health has developed along certain technical lines while the physician has in large been content to attend the ill and practice his bit of public health in a quite medical way. These doctors have in main been carrying on an ambulance service - picking up the injured. Relatively little in the way of prevention. This was unavoidable up to a few decades ago when the obscure sources of many diseases began to be known. (13) (14) But, this permits the formation of a general plan for health conservation that would accomplish the results which are possible today. Thus public health has slipped gradually from the hands of the physician. (15)

The responsibility which rests in the hands of the medical profession is very great. We are charged with the responsibility of participating in the production of an enlightened public opinion. (16) No group can compare with the physician of a community in affecting public sentiment in this regard. (17)
We are charged with the obligation of recognizing that a field which was once our own has been specialized near to the point of independence. (15) Our contentment is being disturbed. We must change our attitude toward the practice of medicine; entwine our tactics with prevention in mind.(16) Reposes the situation. We are charged with the responsibility of lending our cooperation in the creation of facilities for the production of soundly trained men. (19) (20)

Of recent it seems that in the program of general welfare, the popular demand is more acute, and there is developing throughout the country, at an increasing rate, an intelligent conception of the relative and absolute importance of the service for the conservation and promotion of the public health. (18) Thus the public health service, developing rapidly in recent times, appears in line with present and coming conditions, looming large with wonderful possibilities. Falling behind, at least not keeping pace is the medical profession - charged with the responsibilities suggested in the preceding paragraph. (21) (22)

The practicing physician, however, is the all important factor in the protection of the public health. All the others must (23) rely on him for a great
Historical, physician the individualist.

measure of their results. But, I repeat, he has not risen to the full measure of his opportunities. The physician is, by training, an individualist. He thinks in terms of family rather than community. His doctrine on medical matters is accepted as final by many of his patients and, of course, listened to with respect by all. The many details of private practice tend to concentrate his attention on the cure of the ailment of his own clientele, and he takes it for granted that his brother practitioner is doing the same for his clientele. The foreground is so sharply defined that the background is lost sight of. It means a vast number of units working independently of each other and with very little correlation. (21)

The interests of the man who is paying his is all important in the practitioner's eyes.

Can we define clearly what should be the relative duties of physician and boards of health in this matter of public protection? In the first place, the law lays upon the boards of health the duty of making regulations and enforcing such regulations for the protection of the public. (24) This includes control of quarantine and isolation and its termination has,
one might say, nothing to do with the practicing physician. These matters are the functions of the board of health. The board of health is, however, dependent upon the hearty cooperation of the family physician. Unfortunately, in many cases, either because of feelings of professional jealousy or differences of various kinds, the physician supports in a very unstable manner or actually opposes the board of health. Adequate isolation and quarantine are not enforced and focal of disease are established, to stamp out which may take much money and time, and may even result in the loss of lives. (22) (8)

"Public sentiment condemns the physician who endangers the lives of the community in failing to report a communicable disease as a means of curry ing favor with his individual patrons." (10)

Now let me leave the pages I have been scanning the past few minutes to look over the situation much as it obtains today.

For all practical purposes we have four factors to deal with; the people, their private physicians, the local board of health, and the State Department of Health. Or, arranged a little differently, the family physician and his clientele; the local board of health
Today, factors of a health system.

and the people and physicians of the town; the State Department of Health and the different boards of health, physicians and the people of the state.

The public - the most important part of all, naturally - determine who shall be their physicians, their boards of health and ultimately their State Department of Health. The local boards of health are entrusted by the people with the power to make and enforce reasonable regulations for the protection of the public health, and their regulations are binding on laymen and physicians alike. The State Department of Health plays the role of expert adviser. It accomplishes its results, as a rule, by persuasion and argument, rather than coercion. (3) (25)

"The health officer should make every effort to win the confidence, friendship and approval of the organized medical body of the community. Misunderstandings will arise between the health officer and practicing physicians concerning health department policies. Mistakes will be made. Feelings will be injured. These conditions are not rectified by hostility and lack of sympathy. The medical society should have a special public health committee. This committee should deal directly with the health officer, should
Today, the health officer and the practitioner.  19.

aid and advise him in his problems, and should interpret
his policies and activities to the medical profession.
The health officer should go out of his way to aid
physicians individually and collectively.  He should
give them every consideration and all the recognition
to which they are entitled."  (25) Experience has
shown that best relations can be established by the
health department with the medical profession, if the
health officer himself is a physician.  (26) This is
not the only criterion.

" There still prevails the idea that the physician
is qualified to serve as health officer merely by
virtue of his professional education and experience.
There are still occasional unfortunate instances of
the use of the health officership as a haven for the
aged or needy doctor;  but the ranks of qualified
specialists in the distinct art of preventive medicine
are gaining so rapidly that there is no longer any
justification for the assumption that the health
officer is in any way the man who has failed in the
practice of medicine.  The man who becomes a health
officer because he is old, because he is decrepit,
because he is financially crippled or because he has
failed other lines of work will almost invariable fail
Today, conflict and understanding.  

to measure up to the standards of public health service, while the practice, once very common, to combine private practice with public health officership as illustrated in the part time health offices, is rapidly being abandoned as impractical and inefficient.  

It is exceedingly difficult and embarrassing for the health officer to carry out the duties imposed upon him fearlessly and affectively when he himself is engaged in practice in competition with other physicians and such a health officer is likely to fail in his public obligations because the demands of his private practice may be greatest just at the time when he should devote his undivided attention to the public welfare. " (10)  

It is better to say, then, that he should be abreast of the times clinically, should be a member of the local medical society and should take an active part in the affairs of the organization. (27) The membership of the Board of Health should always contain one or more representative, public spirited physicians.  

The courses of the health officer and the practitioner may at times seem to conflict and what in the darkness of lack of understanding would lead to disputes, becomes in the light of understanding and better
acquaintance, a mutual benefit toward gaining their respective ends.

One principle must be kept in mind. The fundamental purport of both the physician and the health department is the same. They are both striving for the better health and thus greater happiness of the community. (28) The goal is the same, though it is reached by different paths. These paths cross one another frequently. (25)

"The daily work of the physician covers a scope of works which are related directly or indirectly to almost every part of the health department program. The health department makes many requests of the physicians. These requests are not unreasonable. They represent obligations which the physician assumes when he enters medical practice, and which should be performed as a public duty. (25) On the other hand the health department has much to offer the physician in exchange - the ultimate being an arrangement of mutual assistance and mutual advantage.

The exact value of these points of intersection is a matter of recognizing and understanding the wealth of opportunity.
Vital Statistics - Birth and Death Reports

It is an important public duty and an enormous duty too of each physician to report promptly to the health department all births and deaths that occur in his practice. It is important that the standard forms be filled out with the greatest care and precision.

Most practitioners despise clerical duties, and those who conscientiously engage therein do not enjoy them any more than those who neglect this feature of their work. It is a mistake to fancy that literary proclivities or scholarship lessen the tedium of making out forms and that only the practical surgeon, aurist, or bacteriologist feels the drudgery of clerical work. The young and ambitious physician is particularly prone to resent the necessity of preparing returns of births and deaths and reporting cases because he does not appreciate that it is as much his duty to report his work well as it is to do good work. In one case a little benefit is individually wrought for the many, in the other a great deal is accomplished for a limited number of individuals.

Very few of us enjoy making a urinalysis and certain digital examinations are distinctly distasteful,
but the satisfaction of a correct diagnosis and the glory of a cure depend on exhausting every means of securing all necessary information on a case. Anything less is not scientific high grade medicine. As a nation we must hasten the time when our knowledge of the nation's health will be derived from a registration area representing 100% of the population. Whatever may be a doctor's individual talent in mustering to individuals he cannot be considered an all around man, a fully functioning organ of the profession to which he belongs or of the body politic, unless he discharges his obligations to the country as a whole. If our practicing physicians cannot furnish full reliable data to those who tabulate, interpret and apply them for the general good, we fall short of being in the aggregate a scientific body of men. There is no question of one's ability in this respect. Have we, then the will to perform our modicum of drudgery, in order that the experience, the effort, the success of all may be fully utilized for the good of all? (31)

For guidance in determining classification of causes of death, all physicians should be furnished copies of the "International List of Causes of Death." Many local governments compensate physicians to some
degree of payment of a small amount for each birth or
death certificate. (24)

Having completed the Birth and Death Registration
areas we are confronted with another problem, raising
the qualificative level of the reported material to
the point where it will be of value beyond its function
of identifying an individual as to date of birth or
the fact and cause of death. While the public health
service is encouraging medical research and the improve-
ment and extension of medical science in every way
possible, it is doing relatively little to improve the
understanding of practicing physicians of the contrib-
ution which they might possibly make through more
careful and more complete medical reports. (32)

Tuberculosis is another item of major appeal to
the cooperation of the public health and the practicing
physician. Much more is this a fact because this is
a disease which could be largely stamped out.

The principles involved are education of public,
physicians and public health officials. How many
cases of tuberculosis pass beyond the stage from which
recovery is possible because of neglect to consult the
doctor from time to time for general checkup, but the
number must be great? Those who are in a position to
know most upon this subject will agree that more than fifty per cent of such cases are found among the incurables. That among these incurables every grade of "home remedies" to the more dangerous patent or proprietaries, have been employed for months before the doctor is ever consulted. Often these forms of "treatment" have been supplemented by the still more dangerous treatment by a mail order quack.

Among the fallacies regarding tuberculosis the public need instruction as to the limitations of climate in the cure of this disease. A too ready belief that certain climates alone can affect cures, and that little regard need be paid to the other important agencies now recognized as essentials in the treatment of even the advanced cases if the patient can only get transportation to the "Land of Promise"; which, it unfortunately proves to be in too many cases. A much more sound conservation is now manifested by the profession in this respect, and while there seem to be climates which do have advantages over others in the treatment of tuberculosis, it is well known that climate along, however good it may be, does not compensate for good food, strict medical supervision, and the restfulness and peace of mind so
Today, the family doctor on the firing line. (34)

"Another well grounded error strangely entrenched in the lay mind is that tuberculosis is hereditary; that the fact that no near relative has died from tuberculosis offers evidence of immunity, and that it is incredible that it may find a victim in a family in which the parents and all other near relatives have lived to good old ages, the contagiousness of the disease being entirely ignored. An active and persistent campaign against this error is imperative, and if waged with energy by doctors wherever opportunity offers, will result in marked improvement of the tuberculosis situation." (32)

In spite of much popular education the majority of cases of tuberculosis are not discovered until the disease is already well advanced. Williams and Hill (34) who studied the experiences of 11,499 patients in tuberculosis sanatoria, found that 12% on admission were classified as minimal tuberculosis, 43% were moderately advanced and 45% were far advanced.

The family doctor is on the firing line. Here is an enlarging field, opportunity, not displacement for the physician. The early symptoms of tuberculosis are usually indefinite and the patients first of all
Today, diagnosis.

consult the doctor "around the corner." We cannot, however, always charge the delay in making a diagnosis to the doctor. More frequently the patient is himself responsible for the delay, or the disease itself may be so insidious as to cause no alarming symptoms until the advanced stage has been reached.

Tuberculosis organizations gave repeatedly given forceful publicity to the early symptoms of tuberculosis including the urgent advice to "let your doctor decide". Such publicity almost invariably calls forth from certain laymen the criticism that the doctor is incapable of deciding. It behoves the physician to get to work. It raises the question as to how promptly the diagnosis is made by the physician, once the patient comes to him. On one side of the picture we find that 43% of a certain group took more time being aroused to their need of physical advice than the physicians took in deciding. On the other side 16% or more of the patients had to wait a year or more before they were told they had tuberculosis.

What is the hope of discovering early tuberculosis among patients who come complaining of no symptoms but simply for a health examination? The danger signs are frequently overlooked, perhaps because doctors are
Today, doctor, do you know?

not always "tuberculosis conscious." Remember early
signs are only vague and indefinite, and really early
there are no signs we can depend upon. Also, remember
"Syphilis and Tuberculosis" for these are the two
great simulators of other diseases. You can neither
diagnose or exclude tuberculosis by symptoms. (John
Allen, M. D. - lecture.)

To be "tuberculosis conscious" is particularly
necessary when examining youngsters in their late teens
and early twenties. The dramatic rise of the tubercu-
culos is death rate in this age period, 15-25, contrasted
with the low rate during early childhood, suggests that
adolescence is far many the transition period; indeed
the critical period for many who develop tuberculosis.
From the 5-15th year reinfection disease 5-15
thousand cases x-rayed to pick up one disease. After
15 for every 500 skin positive about one reinfection
disease. Variable in the college age up to 40 5-15 %
reinfection disease in skin positives - and the highest
mortality in this group. (John Allen, M. D.)

Most cases of adult type tuberculosis represent a
superinfection on previously infected soil. In the
adolescent period the sleeping embers of tuberculosis
burst into flame within a relatively short time.
Then, it is that we should be unusually alert for any danger signs of developing tuberculosis. Nor should it be forgotten that certain types of tuberculosis progress rapidly, as for example the subapical type in which the disease seems to develop acutely in the lung region immediately below the clavicle. From that focus it may spread or gradually chronic, and the suspicion of some is that apical type generally considered to represent very early pathological involvement, is but the remains of a subapical acute process. Other forms of acute development are the miliary and broncho-pneumonic types.

Pulmonary tuberculosis may exist without any suggestions of ill health. While the history at best can be only suggestive, a careful history-taking is important. Underweight is no measure of the presence of tuberculosis, although rapid loss of weight is suggestive. Of great significance is any suspicion that the patient has been in contact with a case of tuberculosis. The constitutional symptoms such as cough, expectoration, hemoptysis, pleurisy, focus our attention on the lungs. Hemoptysis and pleurisy with effusion are strongly presumptive. If there is one typical symptom it is fatigability. The more obscure the
Today, making your diagnosis in tuberculosis.

Fatigability is, the greater is the suspicion of tuberculosis.

Skill in interpretation of physical signs of tuberculous lesions in the lungs depend on an understanding of the pathological mechanism. The variations are too many to discuss here. One general principle is that rales in the upper segments of the lungs warrant the presumption of pulmonary disease, probably tuberculosis. The rale whether fine, crepitant, or moist, any rale that persists after a patient coughs should excite the suspicion. (34)

The time has passed when we wait for the finding of tubercle bacilli before venturing a diagnosis. The sputum should be examined repeatedly, but a negative finding in no way excludes the presence of early tuberculosis. (John Allen, M. D.)

Should the tuberculin test be included? It is known that a positive reaction is more prevalent as we approach older groups so a positive alone is of scant significance but a negative reaction speaks volumes provided minimal and maximal doses have been used. (John Allen, M. D.)

In all instances where chest examination reveals abnormal signs, in all where there are suggestive
Today, tuberculosis is a group disease. Symptoms or history, even with negative physical signs, a radiographic study should be made, for some early lesions can be discovered only in this way.

Tuberculosis should be regarded as a group disease. Hence, when a case of tuberculosis has been discovered the entire family should be examined, not only at the time of discovery of the active case but also periodically thereafter. The examination of the children should include skin test, and if positive, a radiograph. In examining contacts, one should not omit the older persons. It happens only too often that grandmother with "summer cough" or "chronic bronchitis" harbors in her fibrotic lungs tubercle bacilli, coughing forth millions of them for a period of years without knowing about it. (34)

Periodic examinations should be one of the best case finding methods known. (35) Who said the principle of public health services encroached upon the field of the practitioner?

The practicing physician and the public health program will come in no closer relationship that it should in a venereal disease program. In summing the situation it may be said that the administrative control methods include search for and control of infectious
persons, examination of contacts, and follow up work of both cases and contacts. Satisfactory results, both from a preventive and clinical point of view can be secured best through early diagnosis and adequate treatment of the individual case. A cooperative relationship between the health department and physicians may be developed in dealing with these diseases. This program should be of mutual advantage to the health department and the physicians. To be successful, all cases should be reported promptly. The health department should offer the physician all necessary laboratory facilities which serve for early diagnosis as well as a check on effectiveness of treatment. "The health department may also offer a purely diagnostic clinic service for all who may apply. It may admit patients to the clinic that are referred by their physicians for consultation, and may offer facilities for treatment to those individuals who cannot afford to pay a physician and who are referred, by their own doctor to the health department clinic for treatment." (25)

Such a system, so simply stated, is just as in its inauguration.

"A comparison of the rates for syphilis and gonorrhea with those of other communicable diseases
Today, syphilis and other communicable diseases is of great interest. In the year 1935, 202 new cases of syphilis and 141 new cases of gonorrhea were reported to the Virginia State Health Department per 100,000 population. Rates per 100,000 population for other communicable diseases are not available for 1935 but 1934's are presented below.

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<tr>
<th>Communicable Diseases</th>
<th>Rates per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarlet Fever</td>
<td>124</td>
</tr>
<tr>
<td>Tuberculosis, pulmonary</td>
<td>159</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>81</td>
</tr>
<tr>
<td>Typhoid and paratyphoid</td>
<td>32</td>
</tr>
<tr>
<td>Poliomyelitis</td>
<td>3</td>
</tr>
<tr>
<td>Smallpox</td>
<td>1</td>
</tr>
</tbody>
</table>

It is to be noted that syphilis occurs 50 per cent more frequently than does scarlet fever and almost seven times as often as typhoid and paratyphoid combined. Syphilis occurs 30 per cent more frequently than tuberculosis. In view of this consider the expenditures by the State Health Department for the control of these diseases in comparison with the relative effectiveness of present day treatment from a public health standpoint. An allocation of funds on the basis of the prevalence of communicable diseases may not be a method
Today, Sweden's control of syphilis.

which is entirely justifiable, yet adequate provision for a comprehensive program to control is a basic principle in "the organization of every efficient health department." (36)

It is not my purpose to expound on the various venereal disease control programs. Nevertheless, I wish to digress sufficiently to point out the inadequacy of our systems - in comparison to that little country Sweden. They have adopted a system that shows some seriousness and which is producing results. It may be summarized: (37)

"1. Every person suffering from venereal disease must submit to treatment by a physician and must follow his directions.

2. Every such person has the right, irrespective of the size of his income, to obtain free medical treatment and medicine, in case he is not being treated by a private physician. This includes free injections, free serologic examinations, as well as free certificates required by the public health authorities as to complete recovery as continued treatment. Hospitalization in a special general ward is also furnished free of charge.

3. Every physician treating a new case of venereal disease must try to obtain information about the source
of the infection.

4. Against patients, who do not properly follow up their treatment, and against individuals indentified as the source of infection but unwilling to come to treatment, certain compulsory measures may be taken.

5. A person who knows that he or she suffers from venereal disease and who by carelessness causes its transmission, is subject to punishment of a severity up to forced labor.

6. Every marriage partner prior to obtaining a marriage license has to sign a statement certifying his or her freedom from venereal disease in a contagious stage.

7. The local public health authorities must publish information about the existence of clinics for the treatment of venereal diseases.

This system was begun in 1913. In 1934 11,500 new cases of gonorrhea were reported, 431 cases of syphilis and 100 of venereal ulcer. This means a reduction to one-half of gonorrhea; to less than one-tenth for syphilis and one-thirtieth for venereal ulcer. (37)

Also to compare this with some place closer to home. The population of Sweden is more than 6,000,000 and
they report 431 new cases of syphilis in 1934; New York (upstate) with approximately the same population reports more than 11,000 new cases of syphilis. (38)

This seems to be a major plague without proper concern.

The reason I have made this digression to point out the program of Sweden is to impress the fact that the disease is in a great measure controllable by cooperation of public health service and the practicing physician. The health service by virtue of its lawful support has influence which aids the physician; (24) the physician by his professional capacity aids the health service.

To raise to this expectation the physician has an opportunity to prevent the transmission of syphilis from the pregnant woman to her unborn child which almost equals the prevention of the transmission of the acquired infection in the early stages of the disease. It has been demonstrated that if treatment is started before the fifth month of gestation and is continued until the end of the term, and consists of a minimum of ten doses of one of the arsphenamines and accompanying heavy metal, the transmission of the disease to the fetus can be prevented in 9 out of 10 cases. (39)
Today, public health proposes.

The physician's other opportunity to rise is the treatment of the disease in its early and infectious stages. It is known that the administration of antiluetic treatment terminates nearly immediately the course of communicable lesions.

A serious drawback of the elaborate system of control as used in Sweden has been financial support. It is obvious that such a system would demand the free distribution of many medicines and services. (37)

It seems that there is an answer in sight. The recently enacted Social Security Act of the Federal Government authorizes an appropriation totaling $8,000,000 for allocation to State and local health departments. It is proposed that this sum be used to assist in the establishment and maintenance of more adequate public health services. (40)

In response to this a special committee was chosen by Surgeon General Parran to summarize the present knowledge and point out the most salient features in an effective program of venereal disease control. This control program - the one used in Sweden. Much stress is put on education of the personnel, recommending modification of curriculum of medical schools, subsidies to medical schools and post-graduation instruction to
Today, the doctor complains. Physicians and the circulation of informative literature to physicians. (41) (40)

In anticipation of its success we have to look at Sweden. As might be expected, also, doctors feared that the system would ruin their own practice. This, of course, did not prove to be the case. On the contrary the patients now were compelled to get complete treatment and they usually do their best to do so under complete protection against official interference. Patients who can pay the doctor, in general, are treated by private physicians in order to avoid the publicity of taking treatment at a clinic. The free clinics, at the same time that they erected a protection against excessively expensive private treatment, also created a number of salaried positions for specialists in venereal diseases. (37)

This is a good place to bring up the laboratory service. As has been mentioned the health department offers the physician all facilities of laboratory procedures for the diagnosis of communicable disease. This has been greatly appreciated by the physician and has been one of the bands which have drawn the medical profession and health department together. (25) The laboratory results should be accurate, and should be
Today, the laboratory at your service. reported to the physician as promptly as possible. The health department should not attempt to do urinalysis, microscopic blood work, blood chemistry, or any other purely clinical laboratory procedures, but should limit its scope to those diagnostic laboratory procedures, which have a public health bearing; efficient serologic laboratory procedures; dark field, precipitation and agglutination reactions; diagnostic smears and cultures.

Material for shipping and handling is even furnished the physician.

The laboratory has offered an additional service of great value to the physician in many states through furnishing biological products of all types for preventive work to physicians. In some states the health department also furnishes physicians with free therapeutic biological products for their indigent patients.

It is believed that the general cooperation of the medical profession will improve in proportion to the individual physician's increased understanding of the public health aims in every program. This depends in turn on participation.

In many communities health departments, and voluntary health organizations as well, have established
various types of maternal and child hygiene clinics, not for the treatment of illness, but for the promotion of good health. The need for these services was so obvious and so urgent that these clinics have done well from the start. Likewise clinics promoting school hygiene and adult hygiene have been established. The latter is more in the form of consultative aids to the physician in making earlier diagnoses of degenerative disease. (42) (43) (25)

The main thing in all of these projects is to come in contact with the public and make them conscious of health and hygiene matters. Once the idea is established more of the people will report for their periodic examination to their private physician - likewise later the prenatal work and maternal checkup system will be taken over by the physicians in their practice. Furthermore, physicians are ethically bound to refrain from advertising. The health department is not. Therefore, other physicians may speak indirectly its mind to the public through his cooperation with the health department.

Many practicing physicians have felt that clinical work of the mass type is not a normal function of the health department, but represents an encroachment upon
Today, medical activities of public health agencies. the legitimate field of the practice of medicine. (44) In fact the chief complaint brought by the medical profession deals with the so-called medical activities of the public health agencies. The medical profession, at least those who have expressed themselves on the matter, holds that medical activities should have no part in public health work, or, as it is put in a resolution by one of the several medical societies, public health departments should not enter upon "campaigns of treatment of any disease or condition." To do so is considered inimical to the best interests of the public and the profession. (45)

It is argued further, in explanation of how these best interests would come to grief, that the quality of public medical service would be bound to be inferior because of the generally lower compensation paid to workers in the public health service. It is also claimed that the men of brilliance and ambition no longer would engage in medicine for a livelihood when he would have the state for his competitor, and that as a consequence all efficiency and progress in the act of healing would deteriorate, and the public would unnecessarily become the loser thereby.
Today, communicable disease control.

The better understanding of the nature and make of transmission of contagious diseases naturally brought with it changes in the defense measures by which society chose to protect itself. Frequently treatment of the diseased person is found to be the most effective means of dealing with the problem of a communicable disease. The choice of treatment, as applied to contagious disease, does not, therefore, mean a surrender of the principle and purpose of the quarantine. It is merely a change of method, by means of which the final effect, that of protecting the public is attained.

It has been with this understanding that the campaigns against the hook worm, malaria, diphtheria, malaria, smallpox, in all of which the treatment of the individual is recognized as an important and determining factor in the prevention of these diseases, have been developed and have been carried forward. It is safe to say that there are very few, either in or out of the medical profession, who will maintain that the activities of the public health agencies have not been amply justified and worth while in these campaigns. (6)

The inclusion of treatment in dealing with contagious diseases as part of the legitimate and
Today, human life and economic value to the state. Approved activities of public health agencies, should not be difficult, therefore, to understand. There have, however, been developing within recent years, the activities we have just been discussing specifically. In these the justification for action may seem less apparent, since cause and effect are in less immediate and striking relationship to one another as in the case of the contagious diseases.

These activities include child welfare, maternity hygiene, nutritional work, dental and psychiatric clinics, together with all the activities included under the term "school medical inspection," and adult hygiene. (43)

The justification for these inclusions in public health work is based on the conviction that human life has an economic value to the state and that the state, therefore, must be interested in the protection of that life.

The large number of our young men who could not pass the examination for the army during the recent war furnished convincing evidence that there is in this country a great deal of poor physical development. It is, too, quite possible that some defects were overlooked but certainly enough were exposed to show
Today, need of health promotion.

the physical development of Americans is not what is might be or what it ought ot be. The fact that so much degeneracy was shown to exist in persons of the ages of those examined would indicate that there are others older and others younger who are equally at fault physically. The humiliating revelations of these army examinations are an admonition to the country to see that the boys and girls of today have the care that will enable them to meet successfully the tasks of active life. (14)

There is probably a growing interest in the medical profession in preventive measures which is reflected in activities of various states and in that of the general government. The health work of cities, the community nursing, the follow-up work of the hospitals, the new interests in housing - one of the biggest problems - these and many others are educating the public the comprehensive program which will some day come - the medical interest to be handed back to the profession which will be ready then to assume the responsibility. (47)

The thought really is not so extreme as it may appear at first reading. On the theory that an educated citizen makes a better citizen, the state
requires compulsory attendance at public schools operated and maintained by the public. It should not be difficult to understand then a policy under which the health of the body and the soundness of the mind of the child that is sent to school becomes also a matter of concern to the state. If the state has made an investment in the education of the child, it seems only good business that the state should take care that it will realize on this investment by preserving and developing the life of the child, so that in turn contribute to the common wealth to which it owes its education.

Obviously it is to the greatest interests of the community and the state if the health of its citizens is kept at the best possible working efficiency. If this can be secured by timely advice on matters of personal hygiene or even by treatment at public dispensaries, it certainly seems justified both on the grounds of good business and common sense. (47)

Do recalling our question of discussion, as to the right to include some treatment examination and timely advising in the activities of public health agencies, this seems amply justified, both on the basis of reasonableness, as well as public opinion,
which has already approved of these public activities.

It should be understood, of course, that in all these activities, at least at present, service is rendered only to the poor and needy. So long as the service confines itself to the poor and needy, there can be no legitimate grounds on which the medical profession may base charges of having its personal rights and interests invaded. It is true that the term "indigent" is one that gives rise occasionally to dispute. It is just when a case is indigent and deserving medical attention and when not. (9) It is undoubtedly true that the cases are few where people able to pay receive treatment at free dispensaries. In the few instances where they are seeking such unwarranted treatment, it is questionable whether these would be profitable cases for the private practitioner. (47)

With such an unquestionable reason existing, faults can also be given. The clinics with their mass methods of immunization and physical examination offers crossgrain to the manner in which the physician has been trained and his proved practice.

Even recognizing this the physicians have given liberally of their time in clinical work because they have conceded the mass movement has some peculiar
stimulating effect upon the public mind. The results have in some instances been quite disappointing, however. Parents and patients are often misled into believing that the hurried scanning in the clinic was an exhaustive examination. Many children after receiving a certificate of good health have later been found to have something quite seriously wrong by more careful examination. It now seems evident that there has been too much haste in certain times in certain phases of public health work. For instance there is a doubt in many minds whether our elaborate systems of getting corrections of physical defects in school children are effective and economical. There seems to have been a frantic hurry to stimulate tooth brush drills in our schools - even going so far as to give tooth brushes in many instances. The theory was a clean tooth never decays. If the project had been more deliberate, we would have emphasized diet more and been more sane about the recommendations, acknowledging above all that we do not know all about. (48)

Admitting the faults the work of the agencies should in some way point our what is to be done - there is a future meant in it. We say, many of us, that we are against State medicine but do we recognize the
modified form ot it in the form of Industrial Commission cases and Federal relief as we now have it? The onset has been gradual but with our present economic condition and the situation which we are going to face in the future - wouldn't we, the medical profession, be much better off if we get in step and control the situation instead of being forced into it and have the control pass into the hands of the politicians with their endless red tape and delay? (49) (20)

The American Medical Association defines State Medicine as "any form of medical treatment provided, conducted, controlled or subsidized by the Federal or any State Government, or a Municipality, except such service as is provided by the Army, Navy or Public Health Service, and that which is necessary for the control of communicable diseases, the treatment of mental diseases, and the treatment of the indigent sick, and other services as may be approved by and administered under the direction of or by a local medical society." (50)

Do we see that public health and state medicine are different? As I just related unless the physician recognizes the difference and also understands the aims of public health service and gives more hearty and
complete cooperation with projects which are intended to relieve health problems of the country, the power will be taken out of our hands and the situation forced into our hands from another power - that of politicians.

What shall we have? Shall it be socialistic medicine or public health? A few years ago we thought nothing of Industrial Insurance. It seemed quite plausible and a step well taken. We have just been listening to the agitation for old age pensions. We are glad to see them cared for. We are sorry for the old and destitute. What of it? It is just another straw blowing in the direction of state paternalism. (5) First let us glance at England and Germany - two countries operating state medicine.

The English system has been in operation now better than twenty years. It is largely an industrial country and is much more workable on that account. About 38% of the entire population is covered by this form of insurance. The employer pays 3 - 7, the employee pays 3 - 7, and the government pays 1 - 7, in addition to the administration expenses. The whole amounts to about $2.60 per capita; per month which is accumulated into a fund which is available for doctor's fee, the medicine bill, and compensation for loss of time from sickness.
A picture of England and Germany.

or accident. The average fee for a doctor's call is about fifty cents and other services in proportion. This, too, is all very well if all are happy. What makes a doctor happy? A large income the same as other folks. How does he increase his income? By catering to his clientele - just human. He writes lots of prescriptions, sees 40, 50, or a hundred patients a day, certifies their sick every time they want to go fishing, play cricket or just pay compensation and rest. What happened? Sick benefits increased from 41% to 159% in five years. In 1929, of the 15 million insured, nearly half a million were charged with and sent to the regional center for malingering, of those summoned, about 65% refused to be examined and gave up their insurance, and of the 35% examined, only about 11% were found unable to work.

In Germany the situation is quite the same. 32% of the population are insured, and is compulsory in all cases where the income is $900 or less. The malingering is equal to that of England, or worse, In one year, of eight million patients treated, one million three hundred thousand were sent for control examinations. Of that number less than 10% were found
Public health work against State medicine.

51.

to have been disabled. In one case, where fifty employees were laid off, forty-nine of them had sick certificates the next day. It is said that the doctors time is taken up by writing certificates, making records, and addressing communications to the various committees connected with the system, that they very seldom make an examination and that the profession has deteriorated to a very low level. In spite of this it is said that many of the doctors and much of the public too, are quite content. (20) (52) (51)

Would America like this? Doctors prostituting their ancient and honorable profession by certifying to sickness, just to please their patients. And the people degrading themselves to dirty malingers? It may suit us when the spirit, independence, and morale of the American People has completely broken down. (49)

These sentiments do not save us from social trends in medicine but, I repeat it isn't the purpose of public health service to develope into state medicine. Public health work is one of the strongest bulwards against State medicine because the work is carried on by specially trained ethical medical specialists. On the other hand if these specialists in preventive medicine are
Public opinion demands, do we respond?

restrained from their work, public opinion will force its continuation through another channel - that of political influence and thus a vanguard of true State medicine will be established. (83)
CONCLUSIONS

1. Public health services and the practitioner seem to conflict at times but their disputes many times become mutual benefits in the light of better understanding.

2. An educated citizen makes a better citizen, therefore public schools maintained by the public. A healthy citizen makes a better citizen, therefore public health maintained by the public.

3. If treatment of a patient is the best means of controlling spread of disease, in other words if the avenue to the health of the public is through attention to individuals it becomes legitimate responsibility of the public health services to treat that individual.

4. Various programs are for the purpose of breaking ground in fields new to the physician, not to take the fields away from the physician. Fields once opened are returned to the physician to the extent that they prove themselves adequate.

5. Clinical service is rendered only to the poor and needy. Those able to pay are referred to the practicing physician. The unworthy seeker of aid is, after all, of questionable profit to the private
Conclusion

practitioner.

6. Public health is an ethical avenue of advertising through which the private practitioner may work.

7. The exact value of the interdependence of public health services and the practicing physician is a matter of recognizing the wealth of opportunity and a matter of intelligent participation.

8. It is not the purpose of public health service to develop into State medicine. Public health service's efforts are to carry on as specially trained ethical medical specialists. Therefore it is one of the strongest bulwarks against State medicine.

9. The essence of the situation is that if public health work is restrained, public opinion will force its continuation through another channel - that of political influence.
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