

Two rural communities have appreciated the needs of their people and have come forward and asked for special legislation to enable them to construct a tuberculosis hospital. This broad-mindedness was first exhibited by Hampshire County, which, containing only one city (Northampton), asked and received permission to build, and has built a hospital for the tuberculosis cases in its county. This group of towns had a population of about 63,000 persons. This year Barnstable County (the Cape Cod towns) was given permission to construct a hospital for tuberculosis and a hospital for contagious diseases; and Cape Cod has only about 30,000 inhabitants, scattered in small villages from Provincetown to the canal. Certainly these people should be an inspiration to other communities to look after the sufferers within their boundaries.

In a few instances it is a hardship for a small city to build a hospital which will be difficult to run economically. It is a recognized fact that an efficient hospital unit is about forty to fifty beds; below that number the overhead charges are too great for economy; and above that the general service soon has to be doubled to make for efficiency. In some instances, such problems may best be met by arranging a hospital for a group of towns combined with the city in question; and in other cases, by having two or more neighboring cities unite to build a hospital in common, or by having a contract made between the city building the hospital and its neighbors whereby they agree for a rental and a definite per patient cost to send their patients to the hospital. The city of Malden has expressed a willingness to accommodate in this manner one or two of her neighbors.

Here, however, comes difficulty in regard to municipal jealousy and distrust, and such combinations are going to be difficult to arrange; and if this idea of combination is to be carried out, some further legislation will have to be enacted, giving somebody (probably the Public Health Council) power to arbitrarily combine cities and towns into groups for the construction of hospitals for tuberculosis patients.

There is need of these hospitals at once. There are patients already for the beds. There are long waiting lists at all the state sanatoria. Patients not unfrequently pass from the incipient and early stage before they can be admitted to the institutions that are especially designed for the cure of the early case. These state sanatoria have done good work, but never the work which they are capable of doing, because they have not had the truly early case to deal with exclusively.

The reporting of cases of tuberculosis, which is a part of your duties as physicians, is not carried out as it should be. Recently, I was told by a physician in a city of about 35,000 inhabitants and having 25 doctors, that there were approximately 60 cases of tuberculosis reported in that city, of whom a quarter had been reported

by himself. He did not believe that he had that proportion of the tuberculosis work of the city. In too many towns and cities the reported cases are yet fewer than the number shown by the mortality statistics. This should not be; the town and city officials and the State Department of Health should know of the extent of the disease throughout the state. It is your duty to see that this law is carried out; and it is only when the extent of the problem is known that the laymen and city officials will be ready to meet this important problem.

Let every physician realize that Massachusetts has a state-wide policy regarding tuberculosis, that it has been carefully considered and devised to meet the needs of the political life of the state, and that this policy should be enthusiastically supported in its general lines, and that any amendment should be to meet certain specific difficulties rather than to consider any change in its general construction.

## VII.

### SYPHILIS.\*

By ABNER POST, M.D., BOSTON.

As affecting the public health, syphilis must be considered as a great deal more than simply a venereal disease. It is a communicable disease, chronic, lasting many years, intermittent, disappearing for a time so completely as to simulate a cure, only to reappear later in some cases in more serious forms. (In fact, certain pessimists affirm that it is incurable.) It is infectious in its earlier stages. Later stages are hardly communicable at all. In fact, it was believed some years ago by many that its later or tertiary stages were never communicated. The continued existence of its microscopic entity in tertiary disease is now positively known, and, in consequence, the possibility of infection; but practically the cases of infection from tertiary disease are very rare.

From the standpoint of preventive medicine it is very necessary to distinguish between the dangerous cases and those practically harmless. If the recent infectious cases can be rendered innocuous the spread of the disease will be wonderfully diminished.

The knowledge that syphilis is largely venereal in its origin has led to the attachment of a stigma to all syphilitics. This has made the syphilitic resort to clandestine medication, to advertising doctors and advertised remedies. A curious mental condition in the community has led to the refusal of hospital relief to syphilitics. A feeling that syphilitics are unfit for Christian charity seems to be an underlying sentiment. In addition it has been considered that their condition was the result of their own acts, and their relation to the public health has been ignored. One of the results of this condition of public

\* Read before The Massachusetts Medical Society, June 9, 1915.

opinion has been its reaction on the medical profession. It is one of the diseases which students have very largely been allowed to pick up. In few medical schools has it been systematically taught. Although hospitals have refused to accept such cases, cases have crept in. They are admitted under false diagnoses, and in that manner they falsify the hospital reports. Rheumatism, tuberculosis and cancer are but some of the diagnoses under which syphilitics are admitted. Hospital reports of diseases treated have been greatly reduced in value by the failure to recognize the diagnosis of syphilis. A similar condition exists in private practice. It is a brave man who dares sign a death certificate giving syphilis as the cause of death. All sorts of evasions are resorted to, all of which tend to invalidate vital statistics. The vast number of cases in which the disease is discovered by the Wassermann reaction in the laboratory is strong evidence of neglect of clinical study.

Various remedies have been tried for the control of syphilis:—

1. Registration and license of women of the town is the one largely pursued in European countries. That system is based upon a wrong principle. It is believed by many to be a failure in practice. It is impossible of execution in this community.

2. Expatriation, or the driving out of that class of women who are supposed to have spread the disease, has been tried in various communities. No community can follow that method for any length of time. For to drive them from one place is only to drive them into another. It is also based upon the theory, which is erroneous, that one sex alone spreads the disease.

3. Compulsory registration is proposed and has been tried to some extent. It is too early for such a procedure. With present ideas it could only favor concealment and deceit on the part of doctors and patients alike, and recurrence to clandestine medication, to advertising doctors and advertised remedies.

In this community we have tried neglect and refusal to recognize even the existence of the disease. It has so flourished that it is no longer possible to ignore it. It demands our serious attention. If we can extinguish or control the fresh infections we can safely neglect the later cases, so far as danger to public health is concerned. It is certainly with fresh or infectious cases that we ought to concern ourselves. Fortunately these are the easiest cases to deal with. These cases are rendered harmless, for a time at least, by a single dose of 606—not necessarily forever harmless, nor are they always absolutely cured. But it certainly diminishes their danger wonderfully. A single visit with the immediate administration of 606 is worth a dozen visits otherwise treated with other treatment, so far as danger to the community is concerned. Unfortunately for the State, we compel these patients to pay for their own treatment. This they can-

not always do at a moment's notice. The treatment is postponed and the patient disappears untreated. The State ought to take advantage of the first visit by free and immediate treatment. It is a wonderful opportunity.

Salvarsan is not necessarily the best remedy possible. It will doubtless be supplanted by a drug more easily obtainable. But it has demonstrated the fact that the spread of syphilis is more easily controlled than was possible earlier. If this drug becomes unattainable, some other combination will undoubtedly take its place.

The laws at present on the statute books are sufficient for present control. They obligate cities and towns to care for such cases, and allow no hospital supported wholly or in part by taxation to discriminate against the disease unless by provision of a special hospital. They provide for the arrest and custody of anyone with a disease dangerous to the public health, under the law which permits the removal of any person who is a menace to the community.

Failure to provide medical care for the children who have inherited or acquired syphilis is construed by the courts as cruelty to children, under the physical neglect law.

The retention of all inmates of public institutions while they are a menace to public health is provided by law.

We do not need more laws, but the enforcement of existing laws. A change in public sentiment is already beginning.

The Massachusetts General Hospital has maintained for nearly two years a separate department for syphilitics, with large out-patient facilities and a few beds. The Boston City Hospital has practically done the same thing. The Children's Hospital has changed its policy and now treats children with syphilis. The Boston Dispensary has for many years paid considerable attention to these cases. Worcester has provided a hospital ward for their care. The Psychopathic Hospital has done very much to spread a knowledge of the disease in its cerebral manifestations, and while not called upon to take measures which shall prevent its spread, has been caring most watchfully for those cases which ought to be very largely prevented by such care of earlier cases as has been here recommended. The Massachusetts Medical Society devoted a forenoon to the subject last year. The New York State Medical Society at its last annual meeting instituted a separate section and devoted three days to the disease.

The Post Office has done much to protect credulous sufferers against unscrupulous advertisers, but no one of these agencies has gone so far as to consider it the duty of the town or state to make itself responsible for the curing of the patient. We are still inclined to regard the syphilitic from the viewpoint of the moralist rather than that of the pathologist. We still act as if the disease was communicated by immorality alone and its dangers were confined to the immoral.

From the standpoint of protective medicine and public health, the following matters would seem to be indicated for the present:—

To recognize syphilis as a communicable disease.

That it presents problems for the physician which should not be entirely given over to the eugenist and the moralist.

That cases should be provided with hospital care.

That the best means available for treatment and cure of early cases should be provided by the community for such individuals as are unable or unwilling to provide it for themselves.

That the disease should be regarded as a subject worthy the most careful study of physicians and students.

These means would meet with no opposition. They would go far towards controlling the disease and prepare the way for more vigorous measures later.

#### VIII.

#### CONTAGIOUS DISEASES.\*

By EUGENE R. KELLEY, M.D., BOSTON.

STUDIES upon contagious or communicable diseases and attempts to control them represent the oldest branch of preventive medicine. For all practical purposes, until quite recently, the consideration of "contagious diseases," "general sanitation," and "vital statistics" covered the entire field of preventive medicine. As the bacterial concept of communicable disease transmission became better established the prodigious amount of detailed, technical study and investigation, involved in both the laboratory and administrative side of preventive medicine, tended naturally and inevitably to create a group of specialists. From this it was a most natural development for the general public and the medical profession as well, to consider the whole question as one for the specialists to concern themselves with,—as one that did not affect them at all. Only today are we fully beginning to realize that if the old glib phrase, "contagious disease control" is ever going to be something more than a phrase—is ever going to become an index of fact rather than a figure of speech—we must change about radically and point out clearly and unmistakably to the people that the control of contagious diseases is impossible so long as it is considered a subject which concerns the hygienists and the medical profession alone.

The most encouraging thing about the subject of communicable diseases is the rapidity of the progress that has been made in the fight against them in the immediate past. It is not putting it too strongly to say that until the past half-century mankind made little intelligent advance in the problem of contagious disease control. While

several significant discoveries and advances, one epoch-making, were made during centuries of observation, the true nature of the cause of contagion was still wrapped in impenetrable mystery. Without this fundamental knowledge, all deduction, all epidemiological observation, all the intellectual forces of mankind went hopelessly astray when brought to bear upon the problem. Since the discovery of the bacterial concept of disease by Pasteur, however, real solid advance has been most rapid. For example, in this country since 1880, the first year in which figures for any portion of the United States outside of Massachusetts became available, and the year in which the United States Registration Area was established, the mortality for that portion of the United States admitted to this area from certain prominent communicable diseases has dropped as follows:—

Typhoid .....	50%
Scarlet fever .....	89%
Diphtheria .....	84%
Tuberculosis .....	54%

For the beginnings of scientific disease prevention in America, it has come about that the Massachusetts Medical Society can claim the eternal credit of having been responsible in no small measure through the individual studies and profound foresight of certain of its members and the enlightened stand taken by it as a corporate body.

The question that most concerns us now is—Where does Massachusetts stand in the question of communicable disease control today—what further reductions in the prevalence of these diseases can reasonably be expected of the future—and how can such reductions be brought about?

The achievements of this state in the past twenty years are most striking. The reduction in the main has been steady and consistent; and the bare figures speak louder for themselves than any embellishment can ever do. The fatality rate from typhoid fever has been reduced nearly 75% in twenty years, and the actual typhoid fatalities from 680 typhoid deaths in 1895 to 234 deaths in 1914; the fatality rate from diphtheria has been reduced over 80%, and the actual diphtheria fatalities from 1784 in 1895 to 601 in 1914; the fatality rate from consumption has been reduced nearly 50%, and the actual consumption deaths from 5486 in 1895 to 3362 in 1914. These facts are an enduring monument to solid achievement in true preventive medicine. The cold statistics serve to call up to the imagination of hygienists and physicians the hundreds now living that without this advance would be in cemeteries—the thousands now in the joy of health and strength that otherwise would have suffered from these scourges.

But when we come to certain other common contagious diseases, we do not find the record either so clear or so satisfactory. Scarlet fever,

\* Read before The Massachusetts Medical Society, June 9, 1915.