

## SOME THOUGHTS WITH RESPECT TO THE DUTIES OF MEDICAL OFFICERS OF HEALTH IN RELATION TO SOCIAL QUESTIONS.\*

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WHILE deeply appreciating the honour paid to me in electing me President for the ensuing year of this important Branch of a most influential and important Society, I must confess that the task of writing a Presidential Address, and the thought that I should have to read it with due solemnity before this assembly, has well nigh made me wish that the honour had been bestowed upon one who would be better able to do these things than I. I feel, too, that I am placed at a distinct disadvantage in that the honour has come to me so suddenly and unexpectedly. I have not, for example, been able to get accustomed to the position by so to speak, living in the shadow of the presidency for the preceding twelve months as Vice-President, nor even had I the advantage of being elected the President at the last meeting of the old session, as usually happens, and thus having the summer months in which to collect my scattered thoughts and hunt up material for this address.

Gentlemen, only one month has been meted out to me in the middle of a busy daily routine, in which to decide upon a subject on which to address you (and this is no easy matter), and afterwards to write the address. I must ask, therefore, for your indulgence if the subject-matter of my address falls short of the high standard set by former and more distinguished occupants of this chair.

Article 18 of the Local Government Order of March 23rd, 1891, sets forth the duties of a Medical Officer of Health. The first two of these are as follows :—

1. "He shall inform himself as far as practicable respecting *all influences* affecting or threatening to affect injuriously the public health of a district."

2. "He shall enquire into and ascertain by such means as are at his disposal the causes, origin, and distribution of *diseases* within the district, and ascertain to what extent the same have depended upon conditions capable of removal or mitigation."

\* Presidential Address, delivered at Manchester, October 27th, 1905.

I would ask you to especially mark the words "*all influences affecting the public health*," and "enquire into causes, etc., of *diseases*," not infectious diseases only. All of us know of these duties, but not all Medical Officers of Health have realized the enormous scope of the duties here set out. It is quite certain that the general public, nay, most town councillors unless they happen to serve, or have served, on Health Committees, always associate the Medical Officer with the sewers, drains, ashpits, and the sanitary condition of houses generally, and are absolutely ignorant of his other multifarious and important duties. The reason is not far to seek. In the early days of the public health service, when most English towns were badly sewered and drained, when water supplies were bad, cesspools and privy middens abounded, and the streets were badly scavenged, when all fevers and most other diseases were ascribed not only by the public, but by doctors, to bad drains, it was natural that these should have been the first points of attack; and, while I do not wish to underestimate the importance of these sanitary conditions on the public health, I am of opinion that the purely sanitary side of a Medical Officer's work, I will not say receives too much attention, but has too great a prestige in the eyes of the public, while what I might call the pure preventive medicine portion of the work is practically unknown to them.

Since the Report of the Departmental Committee on Physical Deterioration, this side of the work has, however, received a fillip, and such questions as the teaching of hygiene in schools, and the under-feeding of children, are now recognized by the public as of great importance. There are other questions at first sight lying outside the domain of public health, but which are without doubt "*influences affecting adversely the public health*," to which in my opinion Medical Officers should draw much greater attention than has formerly been the custom. What then are these questions?

Dr. Niven in his Annual Report for 1903 writes as follows: "It is necessary to realize what primary poverty implies. If a child has not enough to eat he does not grow, becomes stunted, in fact, and an effort is made by nature to save his life in that way. Unfortunately his mind is also often stunted and warped. If a man has not enough to eat he cannot do his work. To save his life, therefore, he must shirk work. If he cannot do this enough for the internal work of his organs, the maintenance of his animal heat, and the work he does, he takes disease and dies. If the woman is insufficiently fed, she produces miserable offspring, which usually get no chance to recover

ground after birth. Beyond the necessity of seeing that children are adequately fed, I am not prepared at present to make any positive suggestion of a social character. *Yet this is part of public health.*"

It certainly is; it is "an influence affecting injuriously the public health." Let us consider roughly the influence of poverty on two diseases only, viz., phthisis, which in the year 1902 killed in England and Wales 40,671 persons, and diarrhoea, which killed 13,800. We know that while phthisis attacks people in every station of life, its incidence is by far the greater amongst the poorer classes, and greatest of all amongst the very poor. And it must be borne in mind when considering a disease of adult life like phthisis, that the very poor are to a great extent a select class, since only those who have been born with the strongest constitutions will overcome the deadly perils which menace them in their earliest years, and will reach the age of puberty. They are, therefore, the people who, living under better conditions, would not be likely to contract phthisis. Also as pointing to the condition in life of those acquiring the disease, we know that a very large proportion of deaths from phthisis occur in the Workhouse hospitals, and of those who die at their homes many have been at one time or another inmates of those institutions. The conditions usually set forward as being strongly predisposing to phthisis, viz., damp, dark, dirty, and overcrowded rooms, and alcoholism, are almost always found in connection with poverty. Poverty, moreover, in addition to being a factor in the causation of phthisis, is distinctly a factor in the dissemination thereof. We all know how difficult it is for a poverty-stricken family to adopt the simple precautionary measures necessary for their own safety; if a whole family live and sleep for instance in one room, and one member of it suffers from phthisis, some other member or members of the family are almost certain to contract the disease sooner or later.

It may or may not be within the scope of our duties to enquire whether poverty is due to alcoholism, casual employment, misfortune, laziness, or any other cause, but it certainly is our duty to point out strenuously the effects of poverty on the public health, and thus urge on the efforts of social reformers to ameliorate the conditions, whatever they may be, which cause it.

The influence of poverty on diarrhoea is not at first apparent, at any rate to the layman, but it has a distinct influence, and one which I do not consider is impressed sufficiently upon the public. In hot and dry summers, when the infants in our towns are dying in hundreds weekly, the facts are reported in the

newspapers and the public attention is aroused. The first thought which flies to the mind of every critic is that there must be something radically wrong from a sanitary point of view. The Medical Officer is not exactly blamed, but he is looked upon as more or less responsible for the mortality, and the inference is drawn in people's minds, if not expressed, that he has in some way or other not done everything he might have done. This arises from the fact that the Medical Officer has devoted his attention almost entirely to certain factors in its causation, as for example the necessity for a clean milk supply, and has not impressed with sufficient strenuousness on the lay mind other equally important contributing factors. At any rate, nine out of every ten persons look upon epidemic diarrhoea as a question *entirely* of milk, and do not or will not consider other factors, e.g., the moral causes at work, the previous health of the children who die, improper feeding, etc., the latter of which depends so greatly on poverty.

I do not wish for one moment to be understood to assert that I minimize in any way the importance of a clean milk supply, but I do think that milk is usually given a far too exalted position as a causative factor in summer diarrhoea. There can be no doubt that a very marked improvement in the conditions under which most of the milk in this country is produced has been manifest in the last few years; at any rate *town* milk with few exceptions, and with a little improvement in certain directions, may be said to be produced under very satisfactory conditions; but has the improvement been followed by a corresponding reduction in the deaths from summer diarrhoea in particular, and the infant mortality rate generally? Again, among which class of the community does the artificial feeding of infants prevail to the greatest extent, and which class consumes the largest amount of milk? I think we must answer, among the rich; but among whom is the greatest mortality from summer diarrhoea? We all know that it is among the poor. In other words, we would surely expect to find that if milk *per se* deserved its exalted place as a causative factor in summer diarrhoea, a more pronounced fatality among those who use it most, viz., the children belonging to that portion of the community comfortably off would be manifested.

Another point is this: as a rule it is the country milk which is produced under the worst conditions as regards cleanliness. Those children in the country not breast-fed are fed on this milk, and yet the infant mortality and deaths from diarrhoea in the rural districts are considerably less than in towns. I know well there are many

other additional reasons for these facts, and you may not think much of the points, but anyhow they will serve to remind us that we must not run milk to death. And, because scattered over the country are farms from which milk is produced under conditions which it is hardly possible to find words strong enough to condemn, and the milk from which is filthy enough to kill anybody, we must not imagine that we need look for no other cause ; we must insist often and insist strongly upon the many other complex forces at work. The fact is, gentlemen, that the class among whom the incidence of diarrhœa is greatest does not use fresh milk to any extent. My own experience teaches me that almost as many children die from lack of milk as from impure milk, and this is where poverty comes in as a factor.

The children of the poor are fed upon condensed milks of all varieties (with especial preference for the condensed separated milk because it is cheapest), and the cheapest of worthless prepared foods, and I would like to see a crusade which would result in the prohibition of the manufacture of the majority of these foods. What happens among the poor ? The mother, half starved herself, cannot produce milk for her infant ; the money left for food after deducting the cost of rent, and the cost of drink, is not sufficient to buy fresh milk for the child ; instead are bought the foods I have mentioned, with the result that in a very large number of cases the child dies, and the death is ascribed to marasmus, convulsions, and to summer diarrhœa. Poverty and the resulting malnutrition is the direct cause of a large number of these deaths.

Again, what is the use of supplying clean milk to people when the milk is placed in dirty vessels ? What is the use of telling people to sterilize milk, when in many instances there are no utensils to do it ? What is the use of supplying sterilized milk, if the people for whom it was primarily intended cannot afford to buy it ? The public are apt to fix upon us, and we to assume, the whole responsibility for the excessive mortality from summer diarrhœa ; but we must point out that however perfect the sanitation of a place may be, however clean the milk supply, until certain other causative factors are removed there will always be this excessive mortality, and that one of these factors is poverty ; and, as I said before, leave the solution of this problem of poverty to the social reformers.

Now let us look at the effect of the abuse of alcohol on the public health. Many Medical Officers of Health do not even mention alcoholism in their annual reports. Everyone knows that the deaths ascribed to alcohol in the death returns do not give even a remote

idea of the correct number of deaths which are directly caused by the abuse of strong drink; and even if it were possible to name accurately the number of these deaths, it would convey nothing of the amount of injury done indirectly to the public health from this cause. How many cases of pneumonia in alcoholics die, who would probably have recovered if their constitutions had not been undermined by drink? How great an effect alcohol has as a predisposing cause of phthisis! What a fertile source it is of poverty and all that that involves! You, gentlemen, know as well as I what a great influence it has on infant mortality. Children born of alcoholic parents are, to begin with, probably born with less stamina than others, and fall ready victims to ailments which other children would throw off; and in what a large number of instances are the deaths of children ascribed to convulsions, bronchitis, atrophy, diarrhoea, and accidents from burning, really due to carelessness on the part of parents, owing to the fact that the parents were on a particular occasion drunk, or were habitually drunk. How many premature births are due to alcoholism! What is the effect of alcoholism as a cause of insanity? Surely the abuse of alcohol is an influence affecting the public health, and as such the evil effects wrought by it ought to be discussed by every Medical Officer of Health in his annual report, and the attention of the public drawn to them in any other way that may be thought desirable.

Since writing the foregoing, I was very interested to read in the *Liverpool Daily Post* a long leading article on a placard drawn up by Dr. Priestly of Lambeth, and displayed on the walls of that Borough. It deals with and commends the very point which I have endeavoured to make. Perhaps you will allow me to quote from the article referred to. It says: "A Medical Officer of Health sees much of the evils of drink, and, for more reasons than need be stated, he realizes complications of the question which make remedial and corrective measures difficult of institution and employment. Dr. Priestly conceived the idea of appealing direct on the walls to the consciences and intentions of the common people of Lambeth. *Much to the honour* of the Borough Council, the idea was immediately adopted. *There never was a better innovation* than this endeavour to convince and persuade into moderation or abstinence thousands of persons who have grown up and lived entirely unaware, except when any of them got locked up, of the contingent evils of "cakes and ale." Again, the heading of the great mural placard distinctly associates alcoholism with physical deterioration, *two ideas* which few MUNICIPALITIES

have ever brought officially together, and the bringing together of which will be a new light to many a Lambeth mind. The placard sets out with a quotation from a report to Parliament to the effect that the abuse of alcoholic stimulants is a most potent and deadly agent of physical deterioration, and leads to degenerative changes in most, if not all, the organs of the body, ending in mental and physical disease, and finally in death. Then the burgesses of Lambeth are warned that the alcoholic persons are specially liable to tuberculosis and inflammatory disorders, and suffer more, and get better with more difficulty than others." The writer of the article then quotes from the placard at length, and concludes as follows: "We should like to see this Lambeth placard have Pan-Anglican circulation. It will probably do more good than the most ingenious plan of ritualistic compromise, or even the most solemn protest against the excessive use of the divorce court." The last remark refers to a paragraph in the placard which asserts that "alcoholism is the most terrible enemy to family happiness, etc."

I think, gentlemen, that this article thoroughly bears out my contention that we as a body have not taken the active part we might have done in bringing into notice the evil effects of alcoholism on the public health; it commends Dr. Priestly's action, and also the Council for following Dr. Priestly's advice, and at the same time describes it as *an innovation* in public health.

I spoke just now of moral causes affecting the public health. Every Medical Officer of Health knows what a vast amount of carelessness, indifference, apathy, and ignorance he has daily to fight against in his efforts for the public weal. There is indeed here a mountain to be removed before the full fruits of victory in the battle being continually waged against dirt and disease are gathered. Who are fighting this battle? Principally the Medical Officer of Health and his staff. I think the clergy here have a great opportunity of doing real good, an opportunity of which a very large number do not avail themselves. What an opportunity they have of preaching the gospel of fresh air, temperance, cleanliness (which is next to godliness), and what examples of stringent health laws they could furnish from the Jews themselves.

Some diseases are described as preventable diseases, and this is taken to mean that they are preventable exclusively by the action of Sanitary Authorities. It appears to me that Medical Officers of Health are so anxious to do all that lies in their power with a view to their prevention, that they do not insist sufficiently that

in many diseases the moral and social factors are equally as important, or perhaps *more* important in their causation than sanitation; in other words, their prevention is as much the concern of moral and social reformers as of the Sanitary Authority, and any measures for diminishing the loss of life which do not take cognizance of this aspect of the question can only be partially successful. Three quasi-social questions are occupying the minds of the public very much at the present time: viz., the underfeeding of school children; the exclusion from the public elementary schools of children under five years of age; and the teaching of hygiene in public elementary schools; and there is no doubt that these questions owe their inception entirely, and their prominence among current questions, almost entirely to the attention given to them by the medical profession generally, and particularly by Medical Officers of Health, an indication that much more attention than formerly is being given to "those influences injuriously affecting public health" which lie, or have hitherto been supposed to lie, a little outside the purview of the duties of a Medical Officer of Health.

These questions all have relation to schools and the school children, and it is from this quarter, in my humble opinion, that the greatest improvement in public health will in the future be traceable. The attempts to lift the dark pall of ignorance which enshrouds the poorer classes with respect to the feeding of children, the value of cleanliness and fresh air, etc., cannot up to the present be said to have met with a large amount of success. The infantile death-rate of the country has been practically stationary for years, although the birth-rate has declined, and the infantile death-rate is the one that is principally affected by ignorance, apathy, and indifference of parents, and would be the first to show any improvement which might take place in respect thereto. To commence with the parents is to grasp the wrong end of the stick; it is much more difficult to root out of people's minds old superstitions and fixed ideas, than to inculcate into young children habits of decency and cleanliness and a knowledge of the elementary laws of health. I do not see how the teaching of hygiene in schools can fail to do good, especially if conducted on sensible lines, and not killed by the teacher going too much into unnecessary detail. It is especially to be desired that girls should be taught what food stuffs are the best and most economical to buy, and how to cook them when bought. Labour leaders often inveigh, and justly so, against the poor wages paid to some classes of working men, but it may safely be asserted as a truism that those who earn the least wages



spend their money to the least advantage. With how much greater facility would the poor people ward off disease, and what inestimable benefits would accrue to the public health by reason of the better nutrition of the people, if the money earned, however little, were laid out more advantageously as regards the buying of the right foods and clothing. This is another fact which might be insisted on oftener. To those daily brought into contact with it, it may seem that everyone is acquainted with the state of things that exists. I do not think they are, for if they are, how comes it that no serious attempt has until quite recently been made to grapple with the question? It certainly is an influence affecting the public health injuriously, and for that reason should be commented on until some reform ensues.

Before we may expect any good results from the teaching above referred to, it appears to me that more active steps might be taken to overcome the apathy and indifference of a great many parents as to the fate of their children. We Medical Officers know that not a few infant lives are lost because parents will not carry out the instructions with regard to feeding given them by the doctor or the lady inspector. Although *we* know that these lives are lost through neglect, it is very difficult to prove the fact so clearly to the satisfaction of law-clerks and magistrates that punishment would follow. In other words, it is difficult to prove criminal neglect. Still, I think the fact could be proved sufficiently for the Coroner to severely censure the parents. Quite recently the female inspector on my staff discovered a child about whose welfare the mother seemed indifferent, and who was being insufficiently and improperly fed. A doctor was supposed to be in attendance, but the mother was evidently not following his instructions. The child was kept under observation, and since no improvement took place in the mother's conduct, when the child died, although the doctor had certified the death as being due to marasmus, I notified the Coroner of the circumstances, and suggested that it was a case for enquiry, and at the least, censure of the woman. An inquest certainly was held, but the result was disappointing. The lady sanitary inspector was not even called upon to give evidence, and a verdict was returned of "Death from Natural Causes." My view is that if all similar cases were systematically reported to Coroners (and these cases are by no means rare), and inquests were held, even if very few parents were punished for their neglect, the fear of the inquest and possible punishment would act as a strong deterrent against the apathy displayed by callous parents as to the fate of their children, and would add weight to the warnings and instruction given

by female inspectors to ignorant parents with respect to the feeding of infants, and kindred subjects.

Another purely medical question just as important as the quasi-social reforms alluded to, but one from which more immediate benefit to the public health will follow, is the medical inspection of schools. This is a question which for personal reasons cannot be pressed like the others. Municipalities are very unwilling to incur what appears to them extra expense in paying for such medical inspection. They cannot, or will not, see that without going into any elaborate scheme of medical inspection, the salary of the Medical Officer would be saved ten times over in the prevention of many cases of infectious disease, which would otherwise have to be treated in the Corporation hospitals. Suppose that each case treated in the Infectious Hospital costs the ratepayers £10, and this is a very low estimate, and suppose that the salary of the Medical Officer be placed at £100, 10 cases prevented would save his salary, without taking into consideration the loss of life and perhaps subsequent lifelong illness; and I do not think that any Medical Officer of Health will have any difficulty in pointing out in any one year considerably more than 10 cases which would in all probability have been prevented, under any well organized system of medical inspection of schools.

Perhaps if the loss of life were represented to the Authorities in money value, the question would receive more immediate attention by them; in some such way, for instance, as was made use of in a paper recently issued by the Infants' Health Society, which was as follows:—

“We may assume that a strong working man should have a working life of about forty years. We may assess the average wage at £1 per week. We must assume that the wage more or less represents the value of work done, else his employer could not pay it. Hence his producing value to the State is about £2,000. That sum, therefore, is lost to the State for every child which dies from any cause commonly known as preventable disease.”

The article goes on to say: “Since the basis of the estimate is the male worker, it may be objected that the number of female infants should be deducted, but the potential value of the female is at least as great as the actual value of the male, and hence this cannot diminish the loss.”

You will observe that even this does not take into account the loss of wages caused by ailments, the result of the first preventable disease in those who survive it, the expenses of medical attention,

perhaps the support in hospital of those unable themselves to afford medical attention.

When facts are represented in money in this way, they often have more effect and receive more attention than the justice of the case by itself would obtain. Indeed, the question of the desirability of allowing children under five years of age to attend school, seems to have been settled in most places from the point of view of lessened expense, rather than from any conviction as regards the fact that the aggregation of young children of such tender years in schools is detrimental, not only to the public health, but also to the health of the individual child.

Gentlemen, I have had in view three objects in this address: (1) to bring before your notice the fact that some questions not generally considered as being within the domain of public health have in reality a most important relation thereto, and ought, therefore to be commented on by all our Medical Officers of Health; (2) that some questions generally considered as belonging entirely to public health, have contributing factors moral and social, equally as important as sanitary ones, and that this fact should be brought strenuously before the public; (3) to notice with admiration the successful efforts of Medical Officers of Health in drawing public attention to the beneficial results to the public health likely to result from the institution of various reforms in the curriculum and administration of public elementary schools.

I am aware that my remarks have been somewhat scrappy, but I take comfort in the knowledge that those who have had the honour of being President of this Society, will know the difficulties of choosing a subject for, and writing, a Presidential Address.

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**BUTTER FRAUDS.**—The annual report of the Board of Agriculture and Fisheries, just issued, states that the large profits made by the sale of margarine as butter continue to attract the unscrupulous trader. An organized fraud was perpetrated in the manufacturing districts of Yorkshire and Lancashire, where certain persons who posed as Irish egg and butter merchants carried on the traffic in certain places until they were found out, when they absconded, either before a summons could be served, or before it became returnable.

No fewer than twenty-five or thirty shops were opened in this way at one time or another during last year, but by the combined efforts of the authorities in Manchester, Sheffield, and other districts, the plot was revealed. The organizers proved to be two brothers, who had obtained the services of some thirty men to act as managers, who were all "sworn to secrecy," and promised compensation if the worst happened. The brothers, it appears, have so far escaped, but three of their subordinates have been sent to gaol for twelve months' hard labour each.