

SECTION IX.

CONCLUSIONS.

THE evidence in the preceding pages leads to the following conclusions:—

First.—That the temporary measures for the removal of the localizing causes of cholera, ordered by the regulations of the General Board of Health, have, *cæteris paribus*, been successful precisely in the ratio of the ability and perseverance with which they have been applied, it having been proved that in some cases they have ensured immunity from attacks, that in others the intensity of the epidemic has been materially diminished, while there is no instance of their having been unattended with success, except where they were inefficiently applied, or where there were local *permanent* causes of disease which they could not remove.

Second.—It has been proved that where, from the nature of the localizing causes, they did not admit of removal by temporary means, the population might be carried through the epidemic period with almost perfect immunity by withdrawing them from the affected districts to places of refuge, and bringing them under strict medical inspection.

Third.—That the great majority of cholera attacks have been preceded by premonitory symptoms of longer or shorter duration, which, with very few exceptions, might in all probability have been speedily checked by *early* medical aid; that, in its fully developed form, the mortality from cholera is not materially lessened by any known mode of treatment, while the whole experience goes to prove that henceforth the measures of medical relief should be directed mainly against the earlier stages of the disease.

Fourth.—That, without entering into any discussion as to whether or not the diarrhoea which prevails during a cholera epidemic be pathologically of the same identical nature as cholera itself, there can henceforth be no doubt that, for all practical purposes, it is absolutely necessary to consider every case of diarrhoea, especially in localities affected by cholera, as part of the epidemic, exposing the patient to danger if neglected, and consequently requiring immediate treatment.

Fifth.—That it has been proved by melancholy experience, that during severe epidemic seizures persons labouring under premonitory symptoms will not, of their own accord, apply sufficiently early for medical aid, and that therefore the great proportion of cholera cases are not seen at all till they are in the stage of collapse. To this circumstance is to be attributed the high mortality of the epidemic.

Sixth.—That consequently the main dependence for arresting the ravages of the disease, and saving human life, must in future be placed neither in any specific mode of treatment nor in trusting to the application for relief of the patient or his friends, but chiefly on an active

and systematic house-to-house visitation by medical officers specially appointed for the purpose throughout all localities where the disease prevails, and the treatment on the spot of all persons found labouring under cholera or its premonitory symptoms.

Seventh.—That there is ample evidence to show that the system of household visitation, adopted during the late epidemic, has been the means of saving a vast number of lives, both by preventing the development of cholera and by bringing many developed cases of the disease under successful treatment which otherwise would not have been seen until the stage of collapse, while it also led to the discovery and removal of many local causes of disease which would have escaped notice.

Eighth.—That it is always advisable to treat cholera cases at home, instead of removing them to hospital, unless such removal be indispensably necessary.

Ninth.—That the most severe outbreaks of cholera have been those connected with very obvious local defects, requiring the execution of permanent works for their removal.

Tenth.—That, with a few apparently exceptional cases easily accounted for, cholera has invariably localized itself in the bad sanitary districts of towns, while the portions in a better sanitary condition have as invariably escaped, either entirely or with the occurrence of the milder diarrhoeal forms of the epidemic.

Eleventh.—That the track of cholera and that of fever are identical.

Twelfth.—That experience has proved the possibility of extirpating fever by permanent sanitary improvements and police regulations; and that we are warranted by the preceding conclusion in asserting that it is possible, by the same measures, to prevent the localization of cholera.

Thirteenth.—That although a great amount of present benefit has been derived from the preventive measures of the General Board of Health, the most unremitting efforts should for the future be directed to the extirpation of the well-known and obvious localizing causes, not only of cholera but of other epidemics; and that henceforth this object should be perseveringly aimed at as of paramount importance to the health, moral well-being, and pecuniary interests of the country at large.

Lastly.—That the experience of the late epidemic has proved that this most important public object will be best effected under the watchful superintendence of a vigilant, well-informed, and disinterested authority.

It will be observed that I have confined my observations to the measures of prevention embodied in the regulations of the General Board of Health, and that I have omitted all discussions as to the pathology and treatment of the disease as not forming a part of my public duties; but before concluding this Report, I may be permitted to lay before the Board certain deductions as to the management of epidemics in general, which, although not directly within the scope of my present subject, have nevertheless been very forcibly impressed on my own mind by the experience of the last eighteen months. I feel a conviction that those measures which have been successful in the management of cholera are the very measures which, *mutatis mutandis*, will be found most effica-

cious in coping with typhus, smallpox, scarlet fever, and other forms of epidemic disease which infest large cities. A moment's consideration of the history of these will show that they rarely attract much attention until a considerable mortality has taken place. The germs of disease which always exist in an overcrowded population, breathing a vitiated atmosphere and drinking unwholesome water, are permitted to vegetate and produce their natural fruit of wide-spread pestilence and death before it is in general conceived to be necessary to take any steps for checking the evil. The most complete ignorance in general prevails as to the real condition of the affected localities, and the causes from which the calamity has sprung. No intelligent medical oversight is kept up among the people. The occurrence of epidemics appears to be considered a matter of periodical necessity; and whatever form they assume, the existing law places their management amongst the industrious classes, as well as amongst paupers, in the hands of the parish authorities. A niggardly medical relief is provided, entailing enormous labour on the officers, and resulting in many fatal casualties from over fatigue and exposure in the affected districts; parties are vaccinated for whom application is made; hospital accommodation is generally afforded; additional parochial relief for the sick administered where necessary; and the dead are buried. In the great majority of instances, these measures, which contain no efficient element of prevention, may be said to constitute the machinery at present in use for the management of epidemics. It cannot be too often repeated that epidemics ought not to occur; and that, were our cities properly built, drained, cleansed, supplied with water, and otherwise regulated, they would probably be abolished. Until these objects can be attained, we must content ourselves with doing all that is within our reach. My own feeling is, that the district medical officer should devote his whole time entirely to his special work; and that in addition to his usual duties he ought to keep a constant supervision over all those parts of his district which experience has proved to be peculiarly liable to epidemic or other forms of disease; that his attention should be directed to ascertaining the causes of this peculiar liability, and the steps required for their removal; that the very first appearance of an epidemic should lead to the instant adoption of measures of prevention, with the view of checking it in its first germs. If cleansing be required, it should be done; if the lime-washing of houses in entire neighbourhoods be necessary, it should at once be undertaken; if unwholesome water be the cause, a better supply should be provided as soon as practicable; if the houses be badly ventilated, every possible amelioration should be adopted; and above all, if neighbourhoods be overcrowded, or the disease have appeared in particular houses, the excess of population should be dispersed without delay, or removed to temporary places of refuge, which ought to form part of the standing establishment of all unhealthy cities and towns so long as they continue so. The medical officer should also be vested with certain legal powers for carrying out his recommendations.

These, in fact, have been the very measures adopted during the late cholera; and it appears to me to be absolutely necessary that some more effectual legislative provision should be made for applying them to future emergencies. The enormous local rates which have been levied to

meet the expenses of unchecked epidemic disease ought to be a sufficient argument with persons who cannot be influenced by higher considerations, for calling in question the wisdom of the present system of management, and to show that the subject of *prevention* merits a much greater degree of consideration than it has received, and is far more intimately connected with the vital interests of society than has been hitherto imagined.

I have the honour to be,
My Lords and Gentlemen,
Your obedient servant,
JOHN SUTHERLAND.

London, April 24, 1850.