

Bell (Geo. H.)

LETTER

TO

SIR HENRY HALFORD, BART. M. D.

PRESIDENT OF THE BOARD OF HEALTH,

&c. &c. &c.

ON THE

TENDENCY OF THE PROPOSED REGULATIONS
FOR CHOLERA.

WITH

OBSERVATIONS AS TO THE NATURE OF THE DISEASE,
AND THE COURSE TO BE FOLLOWED IMMEDIATELY
ON ITS APPEARANCE IN A FAMILY.

BY

GEORGE HAMILTON BELL,

FELLOW OF THE ROYAL COLLEGE OF SURGEONS, EDINBURGH,
LATE RESIDENCY SURGEON AT TANJORE.

W. & A. G. & Co.
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D. S.

WILLIAM BLACKWOOD, EDINBURGH.

MDCCCXXXI.

SIR,

I HAVE perused, with much anxiety, the Regulations lately promulgated by the Board of Health on the subject of Cholera; and I am sure you will do me the justice to believe, that nothing but a deep and overwhelming sense of duty could have induced me to question the expediency of any of those regulations. No medical man in the kingdom can entertain a more unfeigned respect than I feel for the distinguished body over which you preside, and for the high authority by which their regulations are sanctioned. But being impressed very strongly with the conviction, that, in the event of this malady reaching us, the rules prescribed by the Board could not be acted upon; and that any attempt to enforce them would be attended with disastrous consequences, both to the sick and to the healthy, I have taken this method of entreating you to reconsider the subject. It is not yet too late to modify these regulations, or to frame others less likely to be resisted or evaded, and better calculated to save the lives of those who may be attacked with the disease; and in that view it is for the Board to decide, whether any of the suggestions which I have now most respectfully to offer, are deserving of adoption.

In the outset, allow me to observe, that your regulations assume it to be absolutely ascertained that Cholera is contagious; and, on that assumption, some of the rules may be salutary. But, to say the least of it, we have as yet no conclusive evidence that the disease is contagious: And while uncertainty on that point prevails, nothing, as it humbly appears to me, can be more dangerous, than, under the authority of your high name, to excite a degree of panic, the inevitable effect of which must be, immediately on the breaking out of a disease, to deprive the sufferers of those attentions from their families, friends, and servants, which are indispensable to their recovery.

Were these regulations harmless, or did there exist any reasonable expectation, that, if enforced, they would stay the progress of the disease, or confine it to the house or family in which it may first appear; such a sacrifice, for the common benefit, might be expected. But I will venture to say, that, even on that hypothesis, it would be found almost impracticable to enforce the regulations against even one or two families; while, if the disease is to manifest itself here with the wide-spreading desolation which has marked its progress elsewhere, your regulations would not only be nugatory, but any attempt to carry them into execution, would be attended with consequences even more fatal than the spreading of the disease itself; and would multiply tenfold the mortality among those attacked.

I do not mean to resume at any length the much agitated question of contagion. I have already stated my views on that subject in a work which the Medical Board has done me the honour to recommend.* But one or two established facts connected with this question will go far, I think, to support the opinions which I entertain as to the best method of alleviating the horrors of this disease, in the event of its arrival in this country.

First, then, I ask, what has our European experience of Cholera taught us? The general body of Indian practitioners had long been accustomed to regard the disease as non-contagious. But as it advanced into Europe, the eminent physicians in the several countries which it has successively ravaged, disregarded the Indian experience; and, perhaps wisely, resolved to protect themselves against its approaches by rigorous quarantine regulations, or by sanitary cordons, enforced with all the power of despotic governments. Look, however, at the

* Treatise on Cholera Asphyxia, 1831.

result:—In the face of all such regulations the disease has advanced westward with undeviating and irresistible strides; and, so far from the experience of Europe refuting the Indian conclusions on the question of contagion, it would appear, that, as each country becomes acquainted with the disease, the conviction becomes general, that to whatever cause its dissemination is to be ascribed, it is not propagated by contagion, and cannot be confined within any prescribed limits.

Fortunately, the home-bred English physician has hitherto had no opportunity of studying practically the peculiarities of this extraordinary disease, or of pursuing inquiries into the no less extraordinary influence by which it seems to be propagated. But this can be no reason for setting at naught the experience of the large class of medical practitioners who have had opportunities of treating the actual disease; far less can it justify the circulation, by authority, of opinions concerning its contagious nature, so likely to aggravate all its horrors by a deadly and paralyzing panic. The experience of India, of Russia, and more lately of Germany, proves that Cholera travels not with the erratic course of a contagious distemper, but with a march steadily progressive in a particular direction. The absence of quarantine in India did not accelerate its progress; the enforcement of such regulations in Europe has *in no instance* retarded it. Nay more, it is well known that new cases of the disease do not occur in vessels after they have got fairly free of the port where it prevails; and in the thousands of vessels which have performed quarantine on our shores, no well authenticated case of the disease has been reported.

That my apprehensions as to the probable effect of the late regulations are not groundless or imaginary, will be at once apparent, if we attend to the usual course of treatment in this disease. A

Cholera patient requires not only the almost constant attendance of a medical practitioner, but his life, in most cases, depends on the unremitting efforts of non-medical assistants. In India, we see the patient's ordinary acquaintance, free from all alarm, actively engaged in shampooing or rubbing spasmodically affected limbs; while the medical attendant in that country has always the aid of any number of volunteers he may require. But under the influence of your regulations, where are we to look for such coadjutors? It is impossible for an unprofessional person to read the directions lately published in the Gazette, without being impressed with the belief, that, if he touch a patient labouring under Cholera, he does little less than inoculate himself with a mortal poison. The Board themselves, indeed, are already, I much fear, paving the way for inefficiency in hospital establishments; for, by one of the published heads of instruction, the hospital establishments are directed to be *kept low*, that the number of attendants may not tend to spread the disease.

Under the impression of terror likely to be produced by these regulations, it is likewise to be expected that the domestics of the wealthier classes will fly the house as soon as a case of the disease occurs. Then the public are at the same time to be warned of their danger by portentous *boards* affixed to the house; while the wretched members of the family, devoted as it were to destruction, must either trust to the worst description of mercenaries, or, prompted by their affection, must endeavour themselves to render those offices to the sick which their habits disqualify them for performing; and the fatigue attending which, combined with the predisposing effects of fear, must render them greatly more susceptible of the disease. There is indeed one other alternative prescribed:—The family have the option of seeing their dearest relatives carried off to

a pest-house ; a proceeding so foreign to the customs of this country among the better classes of society, that I fear they would regard this with feelings even more harrowing than those with which they would follow them to the grave.

Nor is this all. The obnoxious surveillance under which those affected with the disease are to be placed, would lead inevitably to evasions of the rules, even were they sanctioned by the Legislature. In order to escape the singular system of *non-intercourse* which is enjoined, the occurrence of cases of the disease would be concealed, or not intimated in time to admit of medical aid being afforded with any hope of success. For it must always be remembered, that this is a disease in which a delay of the shortest period of time in applying for professional advice may be fatal ; and yet no one can doubt, that the natural repugnance of the lower classes, particularly in Scotland, to be removed to an hospital, and, with all classes, the rigour of these regulations, will lead to many such fatal delays, or to other expedients, whereby, even supposing the disease to be contagious, the regulations, by their mere severity, would be rendered worse than inoperative.

This is a melancholy, but it is a true picture of the practical working of the late proclamation. And to what advantage is all this? Have such regulations stayed the spreading of the disease in St Petersburg, in Riga, in Berlin, in Vienna, or in Hamburgh? Assuredly they have not. In Europe, with all the apparatus of lazarettos, and cordons, and plague-boards, and the other means recommended by the Board of Health, the disease has spread as widely, while the mortality has been proportionally greater than in India, where no such precautions are thought of, and where the natives fearlessly brave the disease, and assist one another in mitigating its torments. In India, generally speaking, one in eight of the persons attacked dies :

In Europe, with all the advantages of superior medical skill, the deaths, if newspaper reports are to be credited, have been nearly in the proportion of one to two; and my persuasion is, that this extraordinary mortality is to be attributed, in no inconsiderable degree, to rigorous sanitary regulations; which, while they have in no respect arrested the progress of the disease, have increased its evils, both by their direct operation and by the causeless and enervating panic which they have been so powerful a means of promoting.

Let it not be supposed, however, that I am rash enough to advocate the abandonment of all precautionary measures. While it is barely possible that quarantine regulations may protect us, every one must wish to see them enforced as they have heretofore been. I greatly fear that they will prove unavailing; but so long as we are free of the disease, no rational person would desire any relaxation in what may be called the *external* means for preventing its arrival. If, however, in spite of all those means, Cholera should make its appearance in this country; and, above all, if it break out, as it probably will do, under circumstances likely to satisfy the most zealous contagionist that it has not been conveyed in that manner; it will well become those to whom the matter has been confided by Government, to pause, before they subject the country to an irksome and impracticable system of plague-regulations, likely to prove a more serious misfortune than the disease itself.

I am much deceived if one week's experience of Cholera do not satisfy the medical men in England, that contagion is not the real evil with which they have to contend. But however that may be, I had been led to expect from the Board of Health some practical and popular directions for our guidance, in case the disease should unhappily make its appearance; and I need not say that I had direct-

ed my own attention to this subject. It was not, however, my intention to have added any thing to what I have already published concerning this disease; and I should have adhered to that intention, had it not occurred to me, that, as the regulations in the Gazette are directed rather to the prevention of the spreading of the disease by means of contagion, than to the best means of relieving the sufferers, there was still room for some practical directions likely to prove serviceable to the community, and in a particular manner to the inhabitants of the city in which I reside. In offering these suggestions, I make no pretensions to any superior medical skill; but having accidentally seen more of the disease, I believe, than almost any of my professional brethren in this city, and considering it to be the bounden duty of every man who has had such opportunities, to do his utmost to alleviate the sufferings of those who may be attacked, I venture, under the influence of that feeling, and avoiding all controversial topics, to submit the following hints for your consideration:—

I. It appears to me very desirable, that we should have such a popular description of the disease as may enable us to recognize it immediately on its accession. Much anxiety and needless alarm would be avoided, were the public sufficiently impressed with the distinction between this formidable distemper, and those derangements of the bowels with which, from the name it has unluckily received, and from some of its less important symptoms, it is too apt to be confounded. Had we now to choose a name for the disorder, it would certainly be more appropriate to call it *Morbus Asphyxia*, or the *pulseless* disease,—the failure of the pulse, and a suspension of the healthful circulation of the blood, being much more characteristic of the disorder than any other symptom with which I am acquainted.

The approaches of this morbid condition, however, are gradual and insidious. The patient feels lassitude at first, perhaps headache and ringing in the ears, accompanied generally by one or two lax stools. But it must be borne in mind, that the bowels are not invariably so affected; and even that the preliminary symptoms which I have mentioned are hardly deserving of notice, except when Cholera prevails in the neighbourhood.

The symptoms which more properly belong to the disease are blue lips and nails; an earthy or blue colour of the whole skin, the surface appearing shrunken; while the countenance is sunk, and the eyes fall deep in their sockets, and are surrounded by a dark ring. The extremities become cold, and the pulse weak; it may even be imperceptible. There is oppression of the chest, and generally a burning sensation at the pit of the stomach. Severe vomiting and purging, of a fluid which is something like rice water; urgent thirst, accompanied probably by violent spasms in the extremities, and excruciating spasmodic pains in the belly, supervene. The patient tosses about his body, and falls into a state of indescribable agony; and although the mind remains comparatively entire, he has very much the appearance of an animated corpse.

A very few hours will reduce the sufferer to this state; which I need hardly say is one of imminent danger, and little likely to be confounded with any of the ordinary maladies to which the inhabitants of this country are accustomed. And no one can see an individual reduced to this extremity, without being satisfied that not one moment is to be lost in sending for medical assistance.

II. Medical advice, however, may not always be at hand; and although safety is scarcely to be hoped for in absence of a professional man, it is nevertheless of great importance to point out to the friends

of the patient, what steps may be safely taken between the accession of the disease and the arrival of the physician. The patient ought to be immediately placed in warm blankets, and surrounded with bottles of hot water, bags of hot sand or salt; and every other means of applying *dry* heat which may be within reach, ought to be resorted to. The whole body ought to be rubbed with hot flannel, and the belly should be covered with mustard poultices, which should also be applied to the calves of the legs.

I have seen so little good to result from the application of the hot water bath, that, even if it should be at hand, I should not put a patient into it. One great objection to the application of hot water is the fatigue which it occasions the patient, besides, that any benefit attending it is generally neutralized by the difficulty of drying the body, or by the evaporation which takes place during that process.

Laudanum is usually to be found in every house, and certainly ought to be so during the prevalence of this disease; but the friends of the patient must be cautious of administering it in large doses without the sanction of a medical man. A tea-spoonful of laudanum, added to six table-spoonfuls of brandy, may be prepared, however; and one table-spoonful of this mixture may be administered in half a wine glassful of hot water every quarter of an hour,—five drops of essence of peppermint and ten drops of sulphuric ether being added to each dose of the brandy and laudanum. In case the stomach reject the liquid, pills containing three grains of camphor and half a grain of opium may be given; and if the irritability of the stomach be so great that it rejects all that is swallowed, a warm glyster of arrow-root, with a tea-spoonful of laudanum in it, should be injected into the bowels.

As a measure of precaution, all these remedies ought to be at hand; but in towns, of course, me-

dical attendance will probably be obtained in time to admit of their being applied under sanction of a professional man.

Early bleeding is of so much importance in this disease, that, if possible, it should be resorted to even before the arrival of the regular medical attendant of the family. The rule is to bleed until the blood, which is black and thick when a vein is first opened, assumes a red and more natural colour, and until the oppression of the patient is relieved. In the course of my practice I have always found that the danger is, that too small rather than too large a quantity of blood is removed.

The greater part of the course of treatment just prescribed, may be adopted in almost every case, and, if promptly followed, the most salutary effects may be expected. But, as I have already said, the sooner that a medical man is called, so much the better is the patient's chance of surmounting the disease. As to the minute details of medical treatment, it would be foreign to my present purpose to enlarge upon them.

III. Could we make even a plausible conjecture as to the remote cause of Cholera, we might have some hope of being able to resist the advances of the disease by precautionary measures. But, in the present state of our information and experience, an absolute preventive against an attack of this extraordinary malady, is a desideratum which we can hardly expect to see supplied. At the same time, while we are thus unable to arrest its progress, we are warranted in giving the character of predisposing causes, to certain circumstances which are within our reach. In India, it has been almost invariably found, that regular habits, nourishing diet, and cleanliness, gave those exposed to the disease the best chance of escape; while exposure to fatigue or to cold, particularly during sleep, poor diet,

and, above all, intoxication and dissipated habits, have been found powerfully to predispose to Cholera. There is also reason to believe, that persons living in low ill-aired situations, and sleeping on the ground floors, or in damp floors near the ground, are more liable to the disease than those who are less unfortunate in their habitations.

In this country, attention to clothing and to within door comforts, will be of even more consequence than within the tropics. Every endeavour therefore ought to be made, by the upper classes of society, to prepare the poor for resisting the disease, by providing them with warm clothing, and, if possible, with warm and well-aired houses. It is said, that in Vienna, where proportionally more of the upper classes have suffered than in the other towns in which Cholera has appeared, it is the custom for this class to inhabit the lower storeys, and to leave the upper part of the house to the humbler classes of society. If this fact be established, it would justify us in transferring our beds, where that can be conveniently done, from the lower to the upper flats.

Nourishing diet is unquestionably very useful as a preventive, while crude fruit and undressed vegetables, and in general all food having a tendency to produce disorder in the stomach and bowels, ought to be avoided.

Debauchery of all kinds may be regarded as almost the certain means of provoking an attack of the disease, while it prevails in a town or district. Powerful purgatives are also dangerous at such a time; and, in general, I should recommend it to that pretty numerous class in the community who are in the practice of dosing themselves with favourite medicines, to abstain as much as possible from this indulgence during the prevalence of Cholera. For although at such a time attention to the state of the bowels is of much importance, yet as certain of

the ordinary medicines are more likely to be prejudicial than others, or to predispose to attacks of the disease, it is particularly desirable, while the danger exists, that the slighter, as well as the more important derangements of the system, should be treated by medical men.

The disease in India was usually confined to a particular part of a city, or camp, or district, while those residing beyond the tainted limits were safe, for the time, from attack. If the same phenomenon should be exhibited when the disease makes its appearance in this country, safety may occasionally be found in deserting the quarter of the town or district in which the disease particularly manifests itself. But before resorting to this expedient, the habits of the disease would require to be well ascertained; for any thing like a precipitate removal, unless it be to a quarter indisputably beyond the limits to which the disease is confined, might prove more prejudicial than it would be to remain and face the danger—using such precautions against the predisposing causes as have been suggested.

IV. The duties of Magistrates and of the Heads of the Police, on the appearance of the disease, may, I think, be disposed of in a very few words. The higher classes of society may safely be left to themselves, as they can easily have within their own houses most of the means required for the cure of the disease; and any attempt to enforce against them a system of regulations intended to prevent contagion, would speedily be found impracticable. On that subject I have already said enough, and I have little doubt, that if we are unfortunately visited by the disease, all such regulations must and will be abandoned as vexatious and useless.

It is therefore to the poorer classes that the attention of the Magistracy ought to be directed. For their accommodation, as well as for the benefit

of such of the inhabitants generally as may be willing to go into hospitals, certain houses ought to be fixed upon, which may be converted into sick-houses on the appearance of the disease. These houses should be conveniently situated for the service of the most densely peopled portions of the town; and there ought to be several of them, so that if one or two are found to be within the *fomes* of the disease, they may, for the safety of the attendants on the sick, be deserted.

A sufficient reward ought to be held out to induce persons of good character to come voluntarily forward as hospital attendants; and each hospital should have as many medical attendants attached to it as possible, so that they may relieve each other from the severe duty to which they must necessarily be exposed. I have already adverted to the recommendation of the Board of Health, that the hospital attendants ought to be *few*. This recommendation bears internal evidence, that the individual by whom it was suggested to the Board, *never witnessed the actual disease*. For my part, I should say, with humble confidence, that if the hospital attendants are *few*, it would be much better for the sick that there were no hospitals at all, and that each patient were left to such chance assistance as his friends might be able to procure for him; for, most undoubtedly, in the whole circle of diseases to which the human constitution is liable, there is no one in which the aid of numerous assistants is more absolutely indispensable than in Cholera. My suggestion therefore would be, that the Magistrates of each town in which the disease appears, should have a list of all such persons as are willing to enrol themselves for this duty; and that, when occasion requires, they should be sent in sufficient numbers to each hospital.

These hospitals ought, of course, to be well supplied with medicine, and with the apparatus for a

spirit vapour bath, described in my treatise on Cholera. Indeed, it would be a proper regulation to have this apparatus placed in certain marked stations in each town, for the use of the sick generally, whether in hospitals or in private houses. The hospitals ought also to be provided with an ample supply of warm bedding, with the means of keeping up a high temperature by stoves or otherwise; and with a cooking establishment for the benefit of the convalescents.

Lastly, It is the duty of all persons of influence, on the breaking out of Cholera, to exert themselves in allaying panic and alarm. The disease undoubtedly is very appalling; but it will be much more so, if it be not encountered with manly energy and with becoming fortitude. It may afford some consolation to alarmists, that it is a disease which seems speedily to exhaust its violence at any one place. And this is a circumstance, I may add, which is not easily reconcilable with the notion that the disease is of the contagious nature so much apprehended by the Board of Health; since, were that the case, instead of leaving a town, and passing onwards after raging for a limited number of days, it might be expected to propagate itself like the plague, small-pox, and other maladies, which are admitted on all hands to be contagious. This peculiarity in Cholera has been observed by all who have witnessed it either in Asia or in Europe, and is particularly relied on as proving the disease not to be contagious, in the Bengal Medical Report; in which Report also it is stated to be the *unanimous* opinion of the whole medical men in that Presidency, that the disease is not communicable by contagion.

It only remains for me to make a suggestion as to the best means of conveying the sick from their houses to the hospitals. For this purpose, a sedan chair, inclined as those are which are used in hos-

pitals, or a litter, may be employed. The great difficulty in removing a Cholera patient, is to avoid exposing him to any fatigue; for, in this disease, the powers of life are reduced to so low an ebb, that whatever is done about the patient, must be managed in such a manner as not to require him to make any over-exertion.

I have now brought to a close the practical suggestions to which I have adverted in the outset. In what I have said, I have been actuated by a sincere desire to avert or to mitigate the evils of the pestilence which seems to be approaching us. To some it may appear, that I have animadverted too pointedly on the regulations circulated by the Board of Health. But feeling as I do upon that subject, I have not hesitated to express my opinion. The Board, as well as every medical man in this country, can have but one object in this emergency; and if my endeavours should lead to some modification of the more obnoxious or questionable portions of those regulations, I shall have the consolation of thinking that I have discharged a duty which I hold to be paramount; and no one, I am sure, will look upon my endeavours with more indulgence than the eminent and distinguished individual to whom I have now the honour of addressing myself.

I have the honour to be,

SIR,

Your most obedient humble servant,

GEORGE H. BELL.

EDINBURGH, 13, CASTLE STREET,
October 28. 1831.