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MEDICAL OBSERVATION.

BY

ARTHUR RANSOME, M.A., M.B.CANTAB., M.R.C.S.,

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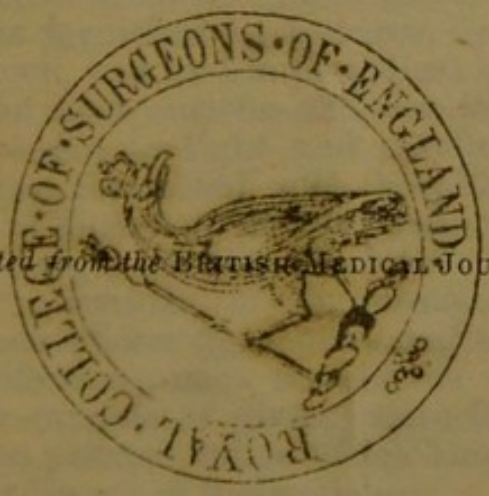

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ON THE NEED OF COMBINED MEDICAL OBSERVATION.

Before an assembly of medical men, it will not be necessary to enlarge upon the importance of wide observation of the phenomena of disease as a basis for the most difficult though most important of the inductive sciences. Not only is this truth fully recognised, but it would appear, at first sight, that every possible effort is made by the profession to extend their researches into every branch of natural science.

It is true, that the members of our body are not wanting in that zeal and activity which at the present day animate every other department of human learning; and the results of their investigations are widely spread, for the public good, through the many channels furnished by lectures, by such associations as our own, and by the periodical press.

All the most curious and rare forms of disease are thus brought to light and carefully studied. Eminent men connected with hospitals contribute the results of their experience in the treatment of intricate or dangerous cases, and give their opinion upon difficult questions of diagnosis or pathology. In truth, our officers fight well; but the rank and file of the profession, men trained to observe, and thoroughly capable of giving material aid, yet find no direction pointed out in which they might also push on the advance of their science.

There still remain to be gathered in many items of observation, each by itself apparently unworthy of record, and too unimportant to advance the reputation of any one, which, when massed together, would form a most valuable store of evidence. It is by the patient accumulation of facts, in themselves insignificant, that meteorology has been able to advance

committee who would undertake to receive them, compile them into a single return for the district, and then forward them to the central offices of the Association in London."

The Committee state, that "the expense of carrying out this scheme would be almost confined to the printing of the forms, and their postage from the various contributors (about six shillings a year for each separate return). Many inhabitants in each town would be willing to subscribe a small sum for the sake of possessing such valuable records as these would be likely to prove."

It seemed certain to the Committee that many valuable results would follow the establishment of such a systematic registration of disease as would record weekly the relative amount and kind of disease prevalent at any one time in all the chief towns of a district. "It would show the influence upon sickness of the varying conditions of climate and season, of prosperity or distress, of the trades and manufactures, or of any other circumstances peculiar to the district. It would afford a means of speedily detecting the advance of an epidemic, and of studying its course; and thus it would be most valuable to the inhabitants of the several towns comprised within the district in which it was made, giving them exact and timely intelligence of the presence of disease, and enabling them promptly to deal with it."

It will be seen that no attempt is here advised to obtain a complete record of all the cases of disease which arise; and it might hence be objected, that the results given will be incomplete or even fallacious. It is found, however, that the constituency from which returns are sent remains for the most part tolerably constant; and thus, at least, the relative proportions between different diseases may be obtained, and compared also with the deaths from those diseases occurring in the practice of the reporters. Thus not only is the progress of disease made manifest, but its fatality can be found; and when this return of deaths is compared with the official register of *all* the deaths occurring in the community, we can both gather from the comparison an approximate estimate of the total amount of disease, and also can judge upon what classes of the community the disease presses most heavily.

Every week, for the last four years, returns of the kind just described have been made to the Manchester and Salford Sanitary Association, by the voluntary labour of thirty-nine gentlemen, medical officers to Poor-law districts, and to other public and charitable institutions in the neighbourhood. During the last three years, only one contribution to this series of returns has been omitted—one out of more than six thousand returns. Occasional delays have occurred; but usually the return is published in the week following that for which the returns are made.

These facts not only prove better than any words the practicability of the undertaking, but they are in themselves a most forcible testimony to the public spirit of the profession. I may mention, also, that Mr. R. C. Brown of Preston has commenced a similar effort in that town.

Duration of Contagion. The question of the duration of contagion is one of extreme practical importance to the general practitioner. He is frequently called upon to pronounce judgment upon the point, without any sufficient grounds upon which to base his opinion. He can only call to his aid his own experience, and that, perhaps, of a few medical friends. He has no evidence to which he can refer in case of need. The result is, that upon this subject the most various opinions are given by different medical men; and thus constant annoyance is caused to medical attendants, and loss of confidence in them is experienced by the patients.

We require to know both the possibility and the degrees of probability of contagion from patients recovering from infectious disorders, after certain periods of time have elapsed from their seizure; and it is likely that some difference will have to be noted between the duration of contagious power in the body of the patient, and in the clothes or other fomites.

These are practical points, upon which all who possessed the necessary evidence would gladly give it up to an influential, well-organised commission; and, after a time, the whole question might be settled, to the great satisfaction both of the public and of the profession.

Observations on Disease. These would constitute the most difficult part of the inquiry, and would need

great care on the part of those who propounded questions on the subject, as well as accuracy in those who gave the answers. Moreover, it would only be in a limited number of cases that the method of question and answer could be of any service. Any attempt to supersede the careful noting of individual cases would be most unwise and unscientific. Still, in some instances, the questions would lead to direct observation; and, for the purpose of testing the correctness of certain views, or of ascertaining the frequency with which symptoms concur, this means of inquiry might well be adopted, and might eventually guide us to a more complete knowledge of the causes of certain symptoms, and might suggest new paths of inquiry by observation. Thus, the true gravity of albuminuria as a symptom—its meaning in different diseases; the connexion between erythema nodosum and rheumatic pains, as mentioned by Trousseau; the import of subclavian murmur as a sign of disease—all these are instances of the kind of questions which might be solved by an appeal to the experience of the profession.

Action of Remedies. The work of testing the action of remedies would be one of vast magnitude, if it were to include the proof of every agent introduced to us as a medicine. Even to try fitly a small number of the weapons of our armoury will involve a large expenditure of time and energy; and yet, unless we are content to remain in our present unsatisfactory state, and to lag behind all other sciences, the work must soon be entered upon. We are greatly in need, at the present day, of a new sect of the Empirics, who would, in the true sense of their title, bring their remedies to trial, and subject them to experiment.

Now, first, what amount and kind of evidence ought we to possess respecting the action of any therapeutic agent?

Let any one consider the difficulty that there is in ascertaining the true action of any one remedy upon the body. The complexity of the problem is so great, the disturbing forces so many, and the dangers of misapprehension of facts so constant, that experiments must be multiplied manifold before we can assume that we know how a medicine may be expected to act. Before any sound conclusion can be

arrived at on this point, we must be provided with numerous observations by trained observers, both carefully made, and so widely and variously applied as to do away with the possibility, or at any rate probability, of error on the score of individual bias or idiosyncrasy on the part of either attendant or patient. Confidence in the efficacy of a remedy will only be just and well founded when its effects have been noted in many thousand cases, and when a record has been made of the distinct changes in the symptoms which can be traced to its employment.* How many of the remedies at present in use have received this searching trial? Let any one reckon up the value of the testimony upon which he proceeds to use any therapeutic agent.

It is true that there are some medicines which have been handed down to us with eulogy from one age to another, which have the general consent of the medical world in their favour. Our confidence in them is probably a most just one, and would only be confirmed by any more searching proof than our own individual experience; and yet we find continually that their efficacy is challenged, not only by our opponents—the Arabs of the profession—but the accusation is echoed from our own ranks.†

The fluctuations of opinion upon the merits of different remedies show the absence of the safe anchorage of trustworthy evidence. I need scarcely adduce, as an example, the changes of opinion with respect to blood-letting; contrasting the almost terror with which it is now regarded with its excessive and unjustifiable use in times past.

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* It may be added, that this notation will be much facilitated when certain simple signs can be agreed upon as necessary to be observed in each case, and when changes in the temperature of the body, and in the amount and nature of the several secretions, can be readily ascertained.

† Dr. Paris, in his *Pharmacologia*, observes: "It is impossible to cast our eyes over such multiplied groups (of medicinal substances) without being forcibly struck with the palpable absurdity of some, the disgusting and loathsome nature of others, the total want of activity in many, and the uncertain and precarious reputation of all, without feeling an eager curiosity to inquire, from the combination of what causes can it have happened that substances at one period in the highest esteem, and of generally acknowledged utility have fallen into total neglect and disrepute."

Dr. Gregory (quoted in Sir W. Hamilton's *Discourse on Revolutions in Medicine*) says: "There is no one disease nor any one remedy that has not been the subject of obstinate controversy."

It may be said that, after one or two such ebbs and flows in the tide of opinion, we should gradually settle down to a rightful appreciation of the value of our materia medica. But, besides the objection, that this would be a most rude and unscientific manner of solving our difficulties, it is very doubtful whether they would ever in this way right themselves. It is the habit of the age to distrust all mere tradition, to doubt all hearsay evidence; and thus, unless the proof remains patent and incontestable, what has been considered settled in one century comes again under discussion in the next.

Our improvidence in wasting the observations of our members is especially noticeable in regard to the trial of new remedies.

A new therapeutic agent is generally introduced to the profession by some man of eminence, who publishes his own approval of it, and perhaps supports it with the record of a few cases in which it has been tried with success. If these cases had been properly selected, and noted with discretion, they would probably afford sufficient *à priori* evidence to justify the further proof of the remedy by the profession at large; but here, as a general rule, the matter ends; no more evidence upon the subject is stored up for future reference, and many valuable observations are lost.

The remedy is probably used by many men who have been disappointed in the action of the ordinary means of treatment, or by those who make a practice of experimenting with new medicines whenever they have an opportunity of doing so with safety; but these observations are seldom recorded. They are thought too scanty or unimportant to allow a special paper or treatise to be composed upon them; and the result is, either that a worthless medicine is used over and over again to the exclusion of more effectual weapons, or, if it be really valuable, it may drop out of sight, or be a very long time before its value is recognised.

The medicine may remain in repute in one district, and go out of use entirely in another, according to the temperament of the medical men of the place. There are some men so sanguine, that they will ascribe every recovery from illness to the remedies last employed; whilst there are others so sceptical

that, whether of death or cure, they say alike," 'Twas Nature did it."

An attempt has already been made by the managers of our JOURNAL to carry out a Therapeutical Inquiry, and the effort demands our warmest support. But the work ought not to be left to them; it should have the sanction, and, if necessary, the active support, of the governing body of the Association. For complete success, also, it needs personal solicitation for observations. Gentlemen should be appointed to call upon the members to ask their help, and to explain the nature of the undertaking.

It is probable, that a large portion of the work now sketched out could not be performed by our own central body; part of it might be better left in the hands of the supreme Medical Council. The determination of this point, however, might well be left to the consideration of a subcommittee. I would propose, therefore:

1. That the central governing body of the Association should appoint a working committee, who should foster the registration of disease, and devise the best means of obtaining the evidence of members upon questions having a practical bearing.

2. That the Council should request the co-operation of all the members of the Association, in giving answers to the questions proposed to them.

3. That the Council should appoint certain members to visit medical men in the several districts, and appeal personally to them for assistance; and to obtain answers upon the several subjects requiring elucidation.

It may be well here to anticipate some of the objections which may be raised to the scheme now proposed.

In the minds of some there is a profound distrust of the value of any statistical inquiry into medical subjects; and although the researches now contemplated would be only partially susceptible of a numerical arrangement, yet this feeling might lead them to object to the plan.

This distrust arises from these sources. 1. Collections of figures have been handled so as to bring forth erroneous, and even contradictory, results; and 2. They have been applied to questions which could only be solved by careful individual observation.

This argument, however, only bears upon the mode in which the instrument of statistics is used. It might be, and indeed has been, applied with equal potency to discourage the use of the miscroscope. It will be found, I believe, upon examination, that the objects now sought by this means are strictly and legitimately within its scope.

Another objection springs from a doubt of the uniformity in the powers of observation in the contributors to such an inquiry. And yet this is an imperfection which clings to every form of human evidence, and it is one which must be borne by all who attempt to collect it, whether they are lawyers, statesmen, or medical men.

Our witnesses, however, are men accustomed to observe, and to test the evidence of their senses; trained to hesitate before they form their opinion. The average ability of members of our profession is at least as high as that of any other body of men, and their judgment might be relied upon with confidence. In any case, many of the objects sought after would not require much discrimination. The recognition and enumeration of the different epidemic disorders would be one of the most important of these objects, and would not need much skill.

The difficulty of obtaining the required information from men already heavily burdened, would, perhaps, be the most serious impediment in the way; but if the questions were proposed by gentlemen in whom the profession have confidence—if they were of a simple description, and had evidently a practical bearing—we should, I feel sure, again have proofs of the public spirit and self-denying energy of our profession, and a collection of true archives of medicine would be the result.

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