The Out-patient Treatment of Early Mental Disorder. The Neurological Clinic, and some of its Functions.[1]

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AMONG the many important advances which have taken place within recent years in the science of medicine, none have surpassed in value or in extent those affecting the nervous system. One of the principal points which these have established, no matter from what direction the subject has been approached, is the recognition of the essential unity of the sciences of neurology and psychiatry. In the domain of psychological medicine, the researches of Freud and Jung on psychopathology and their theories of the subconscious and its manifestations have provided a common meeting-ground; the investigations of Campbell on the cell lamination of the cerebral cortex, and later of Shaw Bolton, have aimed at the elaboration of a scheme of cerebral function based on clinico-histo-pathological proof; the studies of Elliot Smith on the comparative anatomy of the brain and the development of the cerebral cortex peculiar to the mammalia have demonstrated some of the factors which have contributed to the attainment of man's distinctive mental aptitudes, and eventually made possible the emergence of the human intellectual abilities culminating in the development of speech, and the attainment of intellectual pre-eminence within the human family; equally important is the recognition of the integrative action of the nervous system by Sherrington, and his views on the importance of the simple muscle-nerve preparation in explaining the processes involved in cerebral association and the significance of excitation, inhibition and the latent period; and still more recently we have the investigations and publications of Schafer on the influence of the endocrine glands on the nervous system, and of Mott on the relationship of the reproductive and endocrine glands to mental disease, and the light which this has shown on the ætiology of dementia præcox.

These researches, and many others too numerous to mention here, have all consistently furnished proof from their separate standpoints of this essential unity. And it is very important this should be realised. The separation of neurology and psychiatry has done much to hinder the development of both: it has resulted in the development of nervous and mental disorders as independent studies, the neurologist rarely having any extensive asylum experience, and, on the other hand, the alienist rarely has a corresponding knowledge of organic neurology. It is now being recognised that a neurological examination is not really complete unless the mental state of the

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patient is also examined, and *vice versâ*, and that a specialist in nervous disorders must possess not only a knowledge of organic neurology and of psychiatry, but also of psychology, both normal and abnormal. It is interesting in this respect to note that two such eminent specialists in these two subjects in New York as S. E. Jelliffe and Wm. A. White have termed the second edition of their text-book on the *Modern Treatment of Nervous and Mental Diseases*, the first edition of which appeared in 1913, *Diseases of the Nervous System: a Text-book of Neurology and Psychiatry*, because to have published it in two books, one on neurology and one on psychiatry, "would perpetuate a distinction which the authors believe to be wholly artificial."

The separation of the study of nervous disorders from the study of mental disorders dates back to old controversies. The connection of mind and body was the corner-stone of Aristotle's construction; he considered that intellect presupposes sense: as he found mind and body invariably connected, he therefore regarded them as essentially inseparable. It is important to note that Aristotle began his study of mind from the side of body. Descartes, however, could conceive mind without body, and body without mind; therefore he concluded they were actually independent and could exist apart. While the Aristotelian theory developed in mediæval times into a somewhat hazy materialism, the theory of Descartes led on to a separation of the diseases of mind and body. These two problems, the relation of mind and body, and the reality of external perception, have continued to vex philosophic thinkers from Descartes' time to our own, nor will they cease from troubling us until dualism is finally laid to rest.

For practical purposes the nervous system may be divided into three levels of activity—the *vegetative*, the *sensori-motor*, and the *psychic*. The first of these, the vegetative nervous system, is in close functional relations with the endocrine glands—in fact, some of these glands are actually part of the nervous system. The type of tool employed at this physico-chemical level is the *hormone*, and the symptomatology of this region constitutes the borderline of neurology and internal medicine.

The second level is the sensori-motor; the type of tool here used is the reflex, and the function is further integration by providing the means for the balanced interrelations of the various motor organs of the body. It has to provide that all the various parts of the machine work harmoniously together, that the functions of the various organs are not only properly timed in relation one to the others, but also are adequately related on the basis of the functional demands made on them. It is to the symptomatology of this group that the term "neurology" is usually applied.

The third, the highest, the psychic level, is the most complex. The tool here employed is the *symbol*, and the symbol becomes a carrier of energy which is translated into conduct. The function of this level is no longer one of simply integration of the various parts of the individual, but has also to do, not only with the relation of the individual as a whole to his environment, but more especially to his social environment.

The hormone and the reflex are confined in their capacities for reaction within relatively narrow limits of possibilities. The symbol, on the other hand, is capable of infinite change and adjustment, and so has grown out of the necessity created by ever-increasing demands. The growth from the lowest to the highest, from the youngest to the oldest, from the simplest to the most complex, has been, as everywhere in nature, without gaps. We must now regard the mind as the end-result in an orderly series of progressions in which the body has used successively more complex tools to deal with the problems of integration and adjustment.

With these short introductory remarks on the oneness of neurology and psychiatry, and on the different levels of nervous activity, we pass to the more particular subject of this paper, namely, the treatment of disorders of the higher levels of cerebral functioning at the out-patient clinic. The disturbances which present themselves for special consideration here are essentially those included in the terms "functional nervous disease" and "incipient mental disease." These two types merge into one another so gradually and so completely that it is not possible to draw a line sharply where the one ends and the other begins. They constitute clinically the connecting link between neurology and psychiatry, and are only now beginning to receive the attention they deserve. The war has brought them specially into prominence on account of the great increase in number of types and variety which it has produced, and the necessity for immediate and appropriate treatment. The treatment organised during the war by the War Office consisted of in-patient treatment only, and proved most successful, but after the war, when the whole question of treatment came up before the Ministry of Pensions for consideration, it was decided to establish out-patient clinics as well as special hospitals. These clinics have now been functioning for about two and a half years, and much useful information about the types of cases presenting themselves for treatment and the results of treatment have been obtained. The urgent present-day need for the establishment of such clinics in connection with our general hospitals for civilian cases renders the results which have been obtained from Ministry of Pensions clinics of much value, and the fact that the types of cases resulting from the war present a simpler problem

than those of the corresponding civilian cases in no way detracts from the value of the results.

The Neurological Clinic, which was established in Edinburgh in the beginning of 1920 by the Ministry of Pensions, has been responsible for the supervision and treatment of approximately 2,000 cases. In order that a pensioner may become entitled to such treatment it is necessary that certain procedure be adopted. This consists in his examination previous to appearing at the clinic by a medical board or a medical referee, who certify that he is suffering from a disability requiring such treatment, and that such disability is the result, or has been aggravated by, his service during the war. In the great majority of cases a diagnosis is made of "neurasthenia," and he is then transferred to the clinic for full investigation of his case and for whatever treatment is required. It will, of course, be obvious that practically every type of nervous and mental disorder may come before such a clinic, and that the first requirement is an accurate diagnosis. It was found that these cases may be roughly grouped under the following headings:

First. Cases in which the "neurasthenic" symptom is merely part of some general disease, such as phthisis, diabetes, cardiac dilatation, pernicious anæmia, or some such type of condition. Such cases are immediately transferred to the wards of a general hospital for treatment. They incidentally illustrate the fact that the first requirement for treating "neurasthenia" is a knowledge of general medicine. In view of the importance of accurately diagnosing all cases, as far as is possible, at the first interview, the association of such a clinic with a general hospital is important, as the patient may be examined without delay or difficulty at any of the other specialist departments should that be considered necessary or desirable.

Second. The second group of cases include those of the endocrinopathies, of which exophthalmic goitre and thyroid disturbances were the most important. This was not a large group.

Third. The third group is that of the organic nervous diseases. It includes all the well-known diseases—tabes, disseminated sclerosis, paralysis agitans, peripheral neuritis of different kinds, muscular atrophies, subacute combined sclerosis of the cord, and syphilitic lesions. Gunshot wounds of the head were fairly numerous. When it is realised how closely many of these diseases simulate "functional" states, it will at once be obvious how essential an intimate knowledge of organic neurology is in the examination of such cases. It must not be forgotten that in many of the cases in which the larger number of the symptoms were of a purely "functional" nature an organic element was also present.

Fourth. The epileptic group. These were divided into the

traumatic and the idiopathic types. The former was associated with gunshot and other wounds to the head. The proportion of such cases when compared with the number of cases of wounds to the head was small. The fits were frequently of the Jacksonian type, and the element of alcohol had to be usually carefully considered. The other cases—and only true epilepsy is included in this group—were in most cases when fully examined found to have a pre-war history of fits. They presented great difficulties; they were mostly able to get work, but none were able to keep it. They soon became known among employers as epileptics and their chances of employment became *nil*. The number of fits did not make much difference—the mere knowledge that they took fits was enough. A large proportion were capable of good work under suitable conditions, and were indeed most anxious to obtain it. There does not seem to be much doubt that an extension of the epileptic colony system is an urgent necessity.

Fifth. The mental defective group. The number of mental defectives who appeared for treatment was considerable. As a group they do not appear to have suffered much from the effects of the War. Their inability to adapt themselves saved them. They were early sent home, or developed a state of mental confusion which necessitated their immediate removal to a mental ward. When transferred to this country they soon recovered. But the question of their employment then arose in an acute form. Many of them were found to be quite fit for good work, if under supervision. Suitable institutional treatment is what is required. The moment of their discharge from military hospitals presented a unique moment for their recognition and segregation, but such was unfortunately not possible, and the opportunity was lost. According to Goddard, feeble-mindedness is hereditary in a large percentage of cases, and is transmitted in accordance with the Mendelian formula. The problem which they present is of great importance to the community. The recognition and determination of the different grades of mental defect requires special study and training, and it would appear that such would come under the supervision of out-patient clinics.

Sixth. The criminal degenerate. Our attention was specially drawn to this group by the repeated requests we received from lawyers for information of cases who had come into the hands of the police. Many were well-known characters, repeated punishments having had no effect whatsoever. No attention appeared to have been paid to their mentality. They illustrated the great help which such a clinic could give in such cases when working in co-operation with the Law Courts. It is astonishing how little there is in the literature of criminology which is directly helpful to those who have to deal

practically with offenders. Of general theory there is no lack, but when we come to the study of individuals there is almost no guidance. In view of the failure of the past and of the present to handle effectively anti-social conduct, and in the light of the enormous expense of criminality, standing in striking contrast to recent progress in many other fields of human endeavour, there seems the utmost justification for further work in the underlying causes of delinquency. The remarkable results which have been attained by Dr. Healy at the Juvenile Psychopathic Institute organised in Chicago in March, 1909, and later attached to the Chicago Law Courts, illustrates well the importance of this matter.

Before passing from this group, attention might perhaps be directed to a recent publication by Dr. Briggs, of Boston, entitled *The Manner of Man that Kills*, in which the importance of this subject is demonstrated. A most careful study of the life-history of three prominent American murderers is given, one of whom, Czolgosz, was responsible for the murder of President McKinley. As a result it is shown that the first was a defective, the second a case of dementia præcox, and the third was a victim of hysteria with delusions and hallucinations. Dr. Briggs emphasises the point that while Society is willing to condemn and punish the defective or lunatic after he has committed a crime, it does not do anything to save him from leading a life that results in disaster, often in homicide; and not only so, but is liable to bring down with him in his tragedy innocent persons. Further work on this subject will be found in the volume on the *Criminal Imbecile: an Analysis of Three Remarkable Murder Cases*, by H. H. Goddard, published in 1915.

Seventh. Cases found to be certifiable on the first examination. These include various delusional states, acute hallucinatory conditions, chronic alcoholic types and dementia præcox. Nothing has astonished me more than the failure of the general practitioner to recognise and realise such states. And this failure is not limited to the general practitioner. Cases found to be certifiable were not certified by us, but recommended to the parish authorities through the local pension committee for this purpose. Nevertheless we repeatedly found that cases potentially suicidal or homicidal, and reported to be so, were not certified. The tendency always was to wait until the tragedy happened, and then to rush the case into an asylum on an emergency certificate. This is obviously one of the principal explanations of the epidemic of tragedies which are being so repeatedly reported in the newspapers from day to day. Unless these cases are considered certifiable as insane, they are practically unable to receive any treatment. Had there been a series of out-patient clinics attached to large general hospitals in different parts of the country to which

such cases could have been referred for examination and treatment, and where they would immediately have come under trained mental supervision, they would have been realised at once as potentially dangerous either to themselves or others, and transferred to the mental hospital before the tragedy, and not after. Clearly such clinics would render valuable service to the general practitioner. Few cases present more difficult problems to the general practitioner than the incipient mental case. He has not the time, even if he has the training, to give them the care and attention they require. It would be of immense help to him if there were some out-patient clinic available to which he could refer all such cases, in exactly the same way as surgical and other cases are referred to the corresponding surgical or appropriate clinic. An important function of an out-patient clinic of this nature is to recognise and remove to the mental hospital certifiable cases which have so far escaped recognition, and hence the necessity for men trained in mental work (and this can only be learned in an asylum) on the staff of such clinics, and a new line of advance for those who have decided to specialise in mental work is presented.

Eighth. The eighth group is the largest, and includes all those cases which are usually included under the terms " functional nervous" and " incipient mental " disorders. These two conditions merge into one another so gradually that no sharp dividing line can be found at which a separation might be drawn. Many cases considered to be neurasthenic are in reality mild mental derangements—a fact which does not appear to be yet fully realised. It is difficult to exaggerate the sense of illumination which is experienced in the study of " neurasthenia " after a period of residence in a mental hospital (the only way in which mental states may be adequately studied), while residence in a neurological hospital with neurasthenic and functional nervous cases gives an insight into nervous conditions which can be learned in no other way.

I have not time in the present short address to discuss at any length the different types of cases which came under the present group. But several points stand out and are worthy of attention. The type of case to which the term " conversion hysteria " has been given presented no difficulty in treatment, provided the case was sent to us first. Unfortunately many before coming to us had undergone long courses of treatment in or out of hospital, where the disability had been regarded as of an organic nature with resultant fixation of symptoms. It made it clear to us how much good could result from the establishment of neurological out-patient clinics in connection with general hospitals, to which surgical and orthopædic clinics could immediately transfer all cases of paralysis

and other loss of functions for which no definite causative organic lesion can be discovered. At present there is practically no treatment for such civilian cases unless they are so unfortunate as to be treated as if of organic origin.

The greater proportion of the remaining cases which came under observation were emotional disturbances characterised by anxiety. At the very onset it was discovered that many patients showed clinical pictures which would not fit into existing diagnostic pigeon-holes. The manic-depressive group was to be recognised, but the rigidity of this term, which is descriptive, has confused the problem of classifying many benign psychoses. Although elation and depression are the commonest mood anomalies in this group, they have no more theoretic importance than anxiety, distressed perplexity, or apathy. The term "anxiety-apathy" insanity is just as distinct a group and as appropriate a term as Kraepelin's manic-depressive states. The symptom-complex centering round apathy is just as distinct as that which is centred round mania with its predominant characteristic of elation.

Regarded from the point of view of adaptation and regression, an attempt was made to discover what was the unfavourable attitude of reality up against which the patient found himself placed. A large proportion of the cases were best understood as merely cases of psychological regression. Regression is a term used, especially by Jung, to describe a mode of reaction to the environment implying backward movement in time. It is the psychological opposite to that forward movement of life which is essential to the proper growth of individuality. There is a constant movement forward or backward of the psychic stream in accordance with the aspect that reality wears. If reality is favourable the stream flows forward; if reality is unfavourable, the stream flows backwards. Immediately the stream begins to flow backwards intra-psychic tension occurs, due to the accumulation of dammed-back psychic energy. It is this accumulation which later on makes possible a new effort to overcome the obstacles in reality. This, of course, is normal. If, however, this accumulation is unable to overcome the obstruction in reality, it finds escape along other channels, and a neurosis results. The return to civilian life after a period of stress serving in the Army or Navy during the war was associated with conditions tending to render adaptation difficult, and consequently regressive symptoms appeared in a very large number of cases. This was undoubtedly aggravated by the need of rest following the mental tension and fatigue of the war. It was usually possible to discover the difficulties which each case presented without much of an analysis, and it was surprising how little often was the assistance necessary to enable him to regain his normal

mental equilibrium. It was found that many such cases who had been sent to hospital were discharged worse than when admitted. This is to be expected, as the effect of admission to a hospital is in no way a help to solve the problem of an unfavourable environment—an environment to which he must return on leaving hospital, the difficulties being magnified by his absence, and in no way solved before his discharge. Such cases are essentially cases for out-patient treatment; they illustrate the fact that in a very large number of neurasthenic cases the problem lies in the present.

To give an example of such a case, a pensioner was referred to the Clinic for "nervousness and stammer." The stammer was his most serious disability; on the least excitement he not only developed such a marked stammer as to make anything he said practically unintelligible, but usually could scarcely even produce a sound except of a painful nature, while his expression was most distressing to watch. It was found that his profession was that of an auctioneer. He had been treated in hospital without benefit. He had been repeatedly told that he would not be fit to return to such work again, and that he should try and discover some other kind of work in the country—a thing he was most unwilling to do. It was also discovered that his previous employer was willing to re-engage him as soon as he was fit. It was thought that the whole symptom was of a regressive character, and his employer was informed that if he were given a start again as he was, it was extremely likely that he would settle down to the work quickly, and that this in itself was the best treatment he could receive for his condition. Fortunately his employer was willing to have him on these conditions. He returned a few days after commencing work, and it was practically impossible to detect that any such disability could have originally been present. He stated he had been taken back at a good wage with the certainty of permanent work and promotion, and that his stammer had vanished during the following night. It was observed that it returned at his next medical board, but passed away again as soon as the board was over. This was the only time it had returned since he commenced his work.

Cases which failed to adapt themselves even when reality was eminently favourable, either completely or partially, were first treated as out-patients. A mental exploration of a mild nature was undertaken, and it was usually not difficult to discover that a repression or dissociation was the responsible cause. This was then worked out. As a general rule it was found that if the man had good and quiet home surroundings, and his case was not complicated by domestic difficulties, he did well on out-patient treatment. If, however, the home conditions were bad or unsatisfactory, he did best in hospital.

The other condition which was considered often to be most suitably dealt with in hospital was when the distance at which the man lived from the Clinic was such as to make constant attendance difficult. It was repeatedly found that in-patients after discharge from hospital required a further period of out-patient treatment before they could be considered fit to be finally discharged.

It was found that an elaborate analysis was only required in a comparatively small number of cases.

The group consisting of the psychoses was not large. Such cases were mostly sent to one of the Ministry hospitals for borderline mental cases. The value of these hospitals is great, as they fulfil a definite need.

The reason for the present plea for the permanent establishment of out-patient neurological or psychiatric clinics for the treatment of functional nervous disorders and incipient mental troubles is based, not only on the urgent need of such cases for treatment, but also on the fact that temporary clinics of this nature established by the Ministry of Pensions for the treatment of such cases resulting from service during the war have proved beyond any possibility of dispute that such early supervision and treatment is successful. The time for the permanent establishment of such clinics is overdue. The idea itself dates back for many years. In 1849 the fourth report of the Visiting Committee of Hanwell Asylum drew attention to this problem. Sir Frederick Mott, in 1903, emphasised the importance of treatment for early and acute cases not yet certifiable. Prof. Elliot Smith, whose attention was directed to this subject from a study of " shell-shock " cases in a war hospital, has emphasised the problem still more strongly. The establishment of the Maudsley Hospital is a gratifying step in progress. But the time has now come for a full recognition of the real importance of the subject, and the necessity for action on an extensive scale.

The following brief summary states some of the principal arguments dealing with such out-patient clinics.

Summary.

1. In all other branches of medicine facilities for dealing with disease in its initial stages are recognised as indispensable. In the case of borderline mental cases this has yet to come.

2. The study of mental disorder requires a long apprenticeship, and the treatment of incipient cases is often a long and complicated process, for which the average general practitioner has seldom either the time or the special training necessary.

3. It will permit of the recognition of dangerous and certifiable mental states at an earlier date than often occurs at present, and

thus result in their removal to a mental hospital before, instead of after the tragedy.

4. It will allow the general practitioner to obtain an expert opinion on all doubtful cases, and supply the early mental case with appropriate treatment at the beginning of the illness, thus tending to cut short the duration of the attack, and often prevent the necessity for certification and removal to a mental hospital; or, if this be ultimately necessary, shorten the duration of his time in hospital.

5. It will help to relieve the overcrowding of asylums, and thus leave more time for the individual treatment of those who remain.

6. It will assist, when necessary, in the after-care of the discharged patient.

7. It will allow of the examination and segregation of mental defectives in institutions.

8. It will allow of the examination of epileptics with a view to removal to epileptic colonies.

9. It will form a useful adjunct to the treatment of offenders in the Law Courts.

10. It will serve as a teaching centre.

11. It will serve as a centre for investigation and research.

12. It will allow surgical and other out-patient clinics to refer cases for examination whenever it is thought that nervous or mental factors are also present in the case.

13. The clinic must work in close co-operation with the mental hospital, the mental defective institute, the epileptic colony, and the general hospital. The staff must be specialised in organic neurology, psychology, normal and abnormal, and psychiatry. Uncertified wards for the treatment of early cases requiring in-patient treatment, and for acute cases of short duration, should be attached to the clinic. A social service organisation to assist in the investigation of cases and their after-care should be also attached.

An out-patient clinic, organised on these lines, will bring the mental hospital into touch with the general public through the medium of the general hospital. It will help to expedite the removal of the vague fear of illegal detention, which has not yet passed away, and it will also help to remove the "stigma" which is still supposed by many to be attached to the legal certification of the person of unsound mind.

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