THE JOURNAL OF NEUROLOGY AND PSYCHOPATHOLOGY.

VOL. II.

NOVEMBER, 1921.

No. 7.

Original Papers.

THE RELATION OF PSYCHONEUROSES TO MENTAL DEFICIENCY.*

By E. PRIDEAUX, CAMBRIDGE.

DURING the War we heard very little of mental deficiency in this country. Cases of every kind—all failures of adaptation brought on by emotional or commotional shock, actual neuroses, psychoses, and mentally defectives lacking in the innate potentialities for adaptability—were more conveniently bundled into the new pigeon-hole ‘shell shock’, and these have been handed down to us as pensioners under the official term ‘neurasthenia’. Little account seems to have been taken of mental deficiency as such, and high-grade amentia has been rarely recognized. In the stream of war literature that has come forth devoted to the question of the psychoneuroses, this aspect of the subject has been completely neglected. Only such cases as were severe enough to come under the observation of the psychiatrists have been recorded. And yet, as an indication of the general ignorance relating to the diagnosis and recognition of mental deficiency in this country, which resulted in so many defectives being passed into the army, the reports of various medical officers¹ show that the admissions for such cases to military mental hospitals varied from 14 per cent to 30 per cent of total cases, and that, as we should expect, mental deficiency always figured more prominently in the

* Excerpt from lecture delivered at the University of London for the postgraduate course in Mental Deficiency on June 2, 1921.

admission of those who had not been overseas. Whereas, in the American army, on the other hand, "21,000 men were rejected on account of nervous and mental disorders, of which number practically one-third were feeble-minded".²

The views held as to the relation between mental deficiency and the psychoneuroses are never explicitly stated. Some psychopathologists, who are confined to the study of the psychoneuroses and have never had to deal specifically with defectives, certainly seem to forget, and would almost seem to deny, the very existence of innate mental defect, or at any rate are of the opinion that much of what is thus labelled is in reality an acquired condition as the result of some inhibition, an emotional blocking of mental processes. On the other hand, one writer, Professor H. L. Hollingworth,³ has recently put forward the view that the psychoneuroses are intimately related to intellectual deficiencies, in that the ignorance of mental reactions responsible for symptom formation is due to want of sagacity, and not to the assumption, which is now so generally accepted, that such reactions take place outside consciousness. Hollingworth uses the term 'sagacity' in the sense ascribed to it by James,⁴ as the "perception of essence", "the ability to comprehend properly the part in its relation to the whole, and to discriminate out of a whole the appropriate, relevant, or significant detail". The special mechanism of the psychoneuroses, according to this author, is due to this failure in sagacity, with a consequent "disposition to react to a present total situation by singling out some detail of it, and reacting to this detail by some total reaction previously associated with a whole in which the detail figured as an item". This process he calls 'redintegration', a term which was originally used by Sir William Hamilton in his *Law of Repetition* to indicate the tendency of a complex idea to be reinstated upon the occurrence of one of its constituent parts, a very old psychological law, which has now received in part its confirmation in physiology by the work of Pavlov on conditioned reflexes.

Anyone who is in practice dealing with both classes of cases—psychoneurotics and mentally defectives—recognizes at once that neither of these extreme views actually meets the case. The first view does not take into consideration the actual pathological facts—the numerical deficiency and imperfect development of the cerebral neurones—which have been demonstrated and established beyond all doubt in cases of mental deficiency; it only emphasizes the possible effects of a psychoneurosis. The second view, though it appears to be correct as far as it goes from the descriptive point of view, does not take account either of the fact that accompanying the intellectual deficiency there is some temperamental instability which would seem to be the more likely factor at the basis of the

psychoneurosis, or of the fact that a psychoneurosis may and often does occur in those who have exceptional intellectual abilities. Moreover, the development of sagacity, as James himself recognized, is dependent on affective factors, on practical and æsthetic interests—"the dog singles out of any situation its smells, and the horse its sounds, because they may reveal facts of practical moment, and are instinctively exciting to these several creatures".

It would seem, however, that some of the relations between the psychoneuroses and mental deficiency are obvious enough to be definitely stated.

1. The psychoneuroses, in common with some of the psychoses, dementia præcox and manic-depressive insanity, may be superimposed upon an existing amentia, especially amentia of a high-grade type. Of the psychoneuroses this more often occurs with conversion hysteria, which, I think, occurs much more frequently amongst high grade aments than is usually recognized. And it has always seemed to me that the old "Yes-no test" (say 'Yes' when you feel the pin, and 'No' when you don't) is of more value as a criterion of feeble-mindedness than of hysteria. The anxiety states and obsessional cases are uncommon amongst defectives, and the psychosis paranoia must be almost an impossibility amongst them.

The intellectual status of a psychoneurotic patient, when his condition is fully established, is difficult to estimate, for mental tests in my experience are then of doubtful value; but the standard reached at school does give us a rough guide, though we know that it is not always reliable on account of the tendency to put children up into higher standards on account of their size and age. Unfortunately in this country no records were made as to the intellectual status of the men on enlistment, and we have no criterion by which we can judge whether the war psychoneurotics as a whole differed from the general average in this respect. But, as was first pointed out by Myers and later emphasized by Rivers,⁵ everyone is agreed that conversion hysteria is especially apt to affect the private soldier rather than the officer. As Rivers states, "pure cases of this kind are rare among officers, who, as a rule, only suffer from this form of disorder as complications of states of anxiety, or when there is some definite physical injury to act as a continuous source of suggestion". And the only observation I can find that has been made by observers in this country as to the intellectual status of conversion hysteria patients is that made by Adrian and Yealland to the effect that "the majority of patients are below the average normal intelligence as judged by the Binet-Simon scale, and others who are more highly equipped prove to have an unstable history either personally or in the family".⁶

My experience amongst officers is small, but it has been confined entirely to anxiety and obsessional states. It was not until six months before the end of the War that I realized the importance of recording the standards reached at school in all cases, and at that time the number of conversion cases that came into my hands was much smaller than in the earlier stages of the War. An analysis of my cases of definite war neuroses treated since then, excluding epilepsy—324 cases amongst non-commissioned officers and men (my obsessional cases were amongst officers and were merely aggravated by the War)—shows very clearly the liability for those in the lower standards to suffer especially from conversion hysteria and for those who had reached the higher standards to suffer from anxiety states. [See the accompanying scheme.] For example, amongst my military in-patients, of those who had not reached higher than Standard III 82 per cent suffered from conversion hysteria, whilst of those who had reached Standard VII only 6 per cent suffered from conversion hysteria, and many of these were of the fixation hysteria type. This classification was made according as the symptoms were most marked for that particular class, so that some of the anxiety cases suffered also from slight conversion symptoms, and some of the conversion cases showed additional symptoms of anxiety. My figures also show another point of practical importance, which is that the pensioners who have had treatment of various kinds over a long period and are still going the round of special hospitals and clinics, are as a whole of a lower grade of intelligence than my military patients. Whereas over 50 per cent of my military patients reached Standard VII, only 24 per cent of my present pensioner out-patients did so. This may, in part, be due to the fact that I am now treating patients from rural districts; but the same tendency was apparent amongst my in-patient pensioners, who came from the precincts of London. I conclude from this that the higher grades tend towards a more complete recovery as the result of treatment. Those in the lower grades can never be made capable of adapting themselves to a difficult environment, however much treatment they may have, for they have not and never have had the necessary potentialities for adaptability—their environment must be adapted to them.

2. In the family histories of the feeble-minded in Cambridgeshire, in whom there is evidence of a neuropathic inheritance in 90 per cent, it is common to find that one of the members has had 'shell shock'. In the majority of my psychoneurosis family histories there is no record of grave mental disorder or defect, though, of course, it may be that in some cases it was concealed; amongst those in whom such a history was present the prognosis has in consequence been much more grave.

CLASSIFICATION OF WAR PSYCHONEUROSES

according to School Standard. 324 Cases.

Standard
% in each

Inpatients. Military Hospital. July 1918—Oct. 1919.

Inpatients. Pensioners. June — Sept. 1919

Outpatients. Pensioners. Jan.1st.—Dec.31st. 1920.

Anxiety States

Conversion Hysteria

Constitutional Inferiority

3. Many of the symptoms, both physical and mental, including delinquency, pathological lying, etc., are common to both conditions and require differential diagnosis. Thus, speech defects of all kinds are common in mental deficiency, but the only one which may give rise to difficulty is stammering. Stammering which developed at the age of learning to speak is generally of the mentally defective type, is persistent, and is often associated with left-handedness, but it is more amenable to treatment by speech training. In the psychoneurotic type it develops after a period of normal speaking, it disappears in the presence of inferiors, it is much more common in males than females, it is more marked as the result of emotion and may be exaggerated over certain words, and it requires psychological treatment. But it is important to remember that stammering of this type may be a cause of mental retardation and lead to the suspicion of feeble-mindedness.

Enuresis is another symptom which may give rise to difficulty after organic causes have been excluded; in most cases a diagnosis must be made between mental deficiency, in which case control of micturition has never been established, a psychoneurosis, and a minor form of epilepsy, and this can only be done by the consideration of the history and by the presence or absence of the other signs of these conditions. The same applies to the so-called habit spasms, head-shaking, nail-biting, etc., which are so common in both psychoneurotics and mentally defectives.

The most important of the mental symptoms common to both are those related to the affective life, though a psychoneurosis in early childhood may be the cause of considerable retardation, and is often responsible for intellectual disturbances, such as loss of memory, weakness of concentration, and defects of judgement and apperception. The child may then become incapable of sustained attention, and may be unable to adapt himself to new conditions or acquire new ideas. The history will furnish the diagnosis, and such conditions can generally be shown to be due to preoccupations; moreover, the extreme variability, the ups and downs in the behaviour, give us the clue. Janet says of hystericals, "From the beginning of the disease they cease to develop. Instruction is entirely arrested whatever be the age of the subject".⁷ He quotes the case of a girl, who had been an excellent pupil in her school; she developed hysteria at the age of eleven, from which time she ceased to learn anything. It is this kind of arrest, according to Janet, which is responsible for the production of that infantile state of mind so generally observed in the conduct of all hystericals. Such an extreme case as that quoted by Janet does not appear to be common, and has probably a definite causation in a study of the emotional factors concerned; and his

explanation of infantility is not so much in accord with the facts as that given by Freud, who ascribes it to a lack in the development of the affective life—a 'fixation', as he calls it.

Besides these general intellectual deficiencies, there are also certain cases where there are apparent defects in special mental abilities, which must be distinguished from the real innate special defects in children who are otherwise normal. These apparent special defects occur in children who have other symptoms of psychoneurosis. They appear in the course of the neurosis—for example, defect in writing or inability to write at all (a condition which is similar to the psychogenetic writer's cramp in adults), an apparent inability to read which may extend to a complete hysterical amaurosis, or a defect in any of the particular school subjects, all of which can be traced back as the result of mental exploration to emotional inhibitions the result of past experiences.

But the symptoms relating to the affective life are by far the most important and difficult to differentiate. These constitute what is popularly spoken of as emotional instability, which is a characteristic not only of psychoneurotics and defectives, but also of a large class on the borderline, definitely abnormal, not capable of being classified as feeble-minded in the technical sense, and yet with many irregularities which cannot be called psychoneuroses or psychoses. These borderline cases come under the group termed by Adolf Meyer "psychic constitutional inferiority". They are cases of temperamental deficiency, and some would like to include them and certify them under the Mental Deficiency Act. But, although it is often necessary in the case of children to certify them under the Epileptic and Defective Children (Education) Act for the purpose of educating them in a special school, in the case of adults—unless at the same time they show sufficient intellectual defect—however desirable it may be theoretically so to include them, in practice such a course is quite impossible, unless the defect is of such a kind as to come under the definition of moral imbecility.

Emotional instability, a term which as popularly used really means impulsiveness, consists in a want of balance between opposed impulses—innate instinctive impulses on the one hand, and impulses derived from the acquired and controlling sentiments on the other; and all human conduct in adult life must be for the most part regarded as a resultant of these two kinds of impulses—it must be considered as a solution of mental conflict. In all unstable conduct and in the psychoneuroses we have to distinguish between: (1) Those cases in which the primitive impulses are too strong, either as the result of inborn tendencies or as the result of overstimulation in childhood before inhibition is possible; (2) Those cases in which the controlling

sentiments are too weak, either from want of formation and development or from disintegration as the result of disease; and (3) Those cases, which are probably the most numerous, in which both these factors are in combination. For purposes of contrast it might be correct to say that the psychoneuroses come more under the first class and the defectives more under the second class, but it seems possible, and it is distinctly more profitable for the purpose of showing the relation between them, to classify such cases from the point of view of the evolution of the moral character. In such a classification no hard-and-fast line can be drawn between the different classes; they merge one into the other, and it is often difficult to say in the absence of analysis whether the weakness of the moral character was a feature before the illness, or only a consequence of it; for, as in all mental disorders, the first tendencies to cease functioning are those most recently acquired.

I therefore classify my cases as follows:—

1. *Moral imbeciles*—those who have no moral sentiment at all and no potentiality for its development.

2. *Feeble-minded*—those whose sentiments and intelligence cannot develop very far owing to their innate defects, which prevent them from profiting by experience. They form two groups according as their primitive impulses are strong or weak—the impulsive and phlegmatic types of feeble-mindedness.

3. *Constitutional inferiors*—those whose moral sentiments are too weakly organized to deal with adversity. They are egoistic, yet have sufficient intelligence to recognize that they get more advantages from the world by yielding to its demands, but they cannot undertake any responsibility. Their impulses are not necessarily exaggerated. They are just as likely to commit a crime as to develop hysteria when they are up against it, but they differ from moral imbeciles in that they are always very repentant, and punishment has some deterrent effect.

4. *Conversion hysterics*—those whose intelligence may be quite up to the average, but is more often below it, though sufficient to enable them to foresee consequences. They are markedly egoistic, and on the affective side are, like the feeble-minded, undeveloped. Their mental processes take place mainly on the perceptual level, and their symptoms can be removed at once by an appeal to their crude emotions. They refrain from their egoistic acts only through fear of punishment or social ostracism, and not from any altruistic motives. That which stands for the moral sentiment is the fear impulse. They refrain from crime, but when up against it they develop hysteria. They appear to be on the same level as some of the native races, for I would say that this was a common type

amongst those I know best—the Fijians, of whom Deane writes, “As a consequence of his moral deficiency there is no word for conscience in the Fijian’s vocabulary”.⁸

5. *Anxiety states*—those who have developed higher sentiments, recognize their moral obligations and responsibilities, and have altruistic tendencies, but who have not been able to organize them into dominating sentiments owing to the strength of opposing impulses. They are always in a state of doubt, and any prolonged conflict gives rise in them to an anxiety state.

6. *Healthy persons*—those who have some sentiment strongly organized which acts as the sovereign of the hierarchy.

7. *Adolescents*—those who have the potentialities for normal development, but whose moral sentiment is only in process of organization.

8. *Moral dements*—those in whom the moral sentiment has developed normally, but has become weakened as the result of physical factors, injuries or disease. These cases include commotional shock and head injuries, which often seem to produce an alteration in the entire personality. It is remarkable how few of such cases develop a genuine psychosis, for they are comparatively uncommon in asylums; but in those predisposed they cause some slight form of genuine dementia, so that a case of constitutional inferiority, for example, who has a history of minor deficiencies in childhood, becomes clinically like a case of well-marked mental defect, and it is almost impossible to say how much is due to amentia and how much to dementia. The most common effect of these injuries is the disintegration of the moral sentiment, which is the first function to be disturbed. If it becomes completely disintegrated the patient becomes a moral dement and behaves like a moral imbecile, or if it is only weakened he becomes liable to occasional delinquencies or conversion hysteria. Similar effects of a temporary character are produced by organic disturbances, such as autointoxication, disturbance of the hormonal or endocrine balance, and the effects of alcohol and drugs. Instability is common during convalescence after typhoid, influenza, etc., and often during menstruation and pregnancy. Healy quotes Gudden as maintaining that practically all cases of shoplifters were women, who were at the time of their offence in or near their period of menstruation.⁹

There are two other conditions, which cannot be placed in this classification, but which bear an important relation to mental deficiency in that they have to be differentiated from moral imbecility, namely, obsessional neurosis and epilepsy. Some of the impulses present in obsessional neurosis, true irresistible impulses, have to be differentiated from those impulses which are simply not resisted

—a very important question in relation to criminal responsibility. In his analysis of defective criminals, Goring showed that mental defect is associated the most intimately with stack-firing and with unnatural sexual offences,¹⁰ and these are also common impulsions in obsessional neurosis. The diagnosis of obsessional neurosis is generally an easy matter, as the particular impulsion is generally associated with other symptoms, minor manias of interrogation, perfection, number pacts, or compulsive ties such as touching lamp-posts or stepping on the cracks of the pavement, and so on. Moreover, such patients are fully aware of their impulses and come of their own accord to be treated for them, whilst they are quite willing to put themselves under restraint to ensure themselves against acting upon them.

The question of epilepsy is much more difficult, and is still a subject for dispute.¹¹ Pierce Clark's view, that in the so-called idiopathic epilepsies there is a group which is psychogenetic in origin, has shaken our foundations as to diagnosis, for the tests which used to be accepted as evidence of an organic epilepsy are said no longer to hold good, "for the psychoneurotic may not only have aura in their psychic episodes like genuine epilepsy, but they may fall and injure themselves, and in exceptional instances even pass water, bite the tongue, or lose consciousness". But it is the epileptic character with complete ethical depravity, pathological lying, etc., particularly before the onset of fits, or when they are replaced by equivalent symptoms such as violent outbursts of temper, that causes the difficulty in differentiating epilepsy, whether it be of organic or psychogenetic origin, from mental deficiency. So-called psychic epilepsy is still more difficult. In this there is an attack without convulsions, in which the patient does not lose consciousness entirely—he is vaguely aware of everything that is going on, but feels unable to do anything or stop himself from doing anything. He behaves like a man under hypnosis or a man who is not quite fully awake. These attacks may be quite transitory or may continue for days. During them the subject reacts like an automaton to all his impulses, and for the time being he may become a moral imbecile. These attacks of ambulatory automatism occur commonly as fugues in the feeble-minded, and they have to be differentiated from similar states occurring as a genuine post-epileptic phenomenon, or as an epileptic equivalent, or as one of the symptoms of hysteria, or they may be simply manifestations of what might be called an ambulatory instinct, as exhibited, for example, in tramps, and they have then to be differentiated from the conscious running away which is a common delinquency amongst defectives in special schools and institutions.

There is one more relation of greater difficulty which involves the much discussed question of the etiology of the psychoneuroses. Mental deficiency we know to be due to definite organic conditions, innate and, as far as our present knowledge goes, incurable, but the psychoneuroses we speak of, loosely perhaps, as being functional disorders, acquired and curable. Theoretically curable, perhaps I should say. For are they all curable? It would not seem so if we take our pensions budget as a guide. We use the term 'cure' in much too glib a fashion. I am still treating cases who have long ago been 'cured'. Last week I had a relapse case of mutism of 11 months' duration, and he had been 'cured' 18 months previously. All I did was to persuade him that he could talk, which he did quite readily, but he is not cured any more than a tuberculosis patient is cured by relieving him of his cough; and as he is a man of 40 and of a low psychological type, I regard his cure as being extremely doubtful. The views held by different authors as to the curability of the psychoneuroses depend on the class of patients they are dealing with. Youth, plasticity of mind, and intelligence are requisite if one is going to be successful and produce a cure in the proper sense of the term by psychological treatment. Cure can only be spoken of when there has been, so to speak, a reorganization of mental structure, when complete re-orientation has been made possible.

Are we then justified in speaking of all cases of psychoneuroses as functional disorders? Unquestionably the symptoms are of psychogenetic origin. The real difficulty is as to what constitutes the disposition to these accidents. What is the state of mind which allows them to occur? It would appear that both physical and psychical factors play a variable but complementary part, some cases corresponding more to the one and some more to the other, and those in whom the physical factors predominate approach more closely to the feeble-minded. Investigations which I have been carrying out, under a grant from the Medical Research Council, have indicated that there are definite physical differences between cases of conversion hysteria and anxiety states—for instance, the psychogalvanic reflex in the large majority of conversion hysteria cases approaches more nearly that obtained in the imbecile classes. There seems to be little doubt that our temperaments are largely dependent on physical conditions, more particularly of the viscera and endocrine glands, as everyday experience shows our moods to be.

At the same time the rapidity with which a symptom may appear or disappear, the close relation between emotion and the symptom as cause and effect, and the importance of the influence of past experiences in conditioning later behaviour, make it most profitable in the present state of our knowledge to view the psychoneuroses

from the psychological point of view, for it is clear that the immediate origin of the symptom at any rate is a psychogenetic one, and there is no doubt that it is often determined by past experience, whilst we have definite knowledge of the influence of emotion on the functions of the viscera, and endocrine glands.

REFERENCES.

- ¹ HENDERSON, D. K., "War Psychoses", *Jour. of Ment. Sci.*, 1918, lxiv, 165.
EAGER, R., "Admissions to the Mental Section of Lord Derby War Hospital", *Ibid.*, 1918, lxiv, 272. CHAMBERS, W. D., "Mental Wards with the British Expeditionary Force"; *Ibid.*, 1919, lxx, 152.
- ² READ, C. S., *Military Psychiatry in Peace and War*, H. K. Lewis & Co., 1920, 104.
- ³ HOLLINGWORTH, H. L., *The Psychology of Functional Neuroses*, D. Appleton & Co., 1920, 59.
- ⁴ JAMES, W., *Principles of Psychology*, Henry Holt & Co., 1890, ii, 343.
- ⁵ RIVERS, W. H. R., "War Neurosis and Military Training", *Mental Hygiene*, 1918, ii, 515.
- ⁶ ADRIAN, E. D., and YEALLAND, L. R., "The Treatment of some common War Neuroses", *Lancet*, 1917, June 9, 868.
- ⁷ JANET, P., *Mental State of Hystericals*, trans. G. Putnam, 1901, 199.
- ⁸ DEANE, W., *Fijian Society*, Macmillan & Co., 1921, 142.
- ⁹ HEALY, *The Individual Delinquent*, 1915, 772.
- ¹⁰ GORING, C., *The English Convict*, abridged edition, 1919, 179.
- ¹¹ ALDREN TURNER, W., "Epilepsy. Critical Review", *Jour. of Neurol. and Psychopathol.*, 1920, i, 156.