DEPRESSION.

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MOST of the papers written on depression during the last five years have been concerned with matters which are dealt with by other contributors in this volume—its genetics, biochemistry, social aspects (including suicide), psychopathology, and treatment by endocrine preparations, electrical convulsions, and prefrontal leucotomy. The remaining papers, here briefly reviewed, are few in number, mainly clinical, and do not record any outstanding advances.

Several writers re-examined the features of depression occurring in later life. Doty (1942) studied a small group in whom the first attack of affective illness had occurred after the age of 40; contrary to the usual assumption he did not find that in these patients the affective picture was complicated by symptoms that could be accounted for by the patient's age. Inasmuch, however, as the bizarre preoccupations and somatic delusions familiar in severe melancholia were not present in his group, it may be supposed that his choice of cases depended on criteria which prevented the inclusion of instances of Cotard's syndrome, *Spätkatatonie*, and other manifestations of the age factor, whether associated with somatic pathological changes or not. In his group Doty found that the precipitating factors for depression were usually to be found in troubles in daily life, e.g., economic stress or bereavement, but that another important cause was reduced physical fitness, or the threat of this, due to some physical illness incident to advancing years.

Quite a different conclusion is reached by Malamud, Sands and Malamud (1941). Like Palmer and Sherman (1938), they consider that the involutional psychoses are a distinct reaction-type occurring in persons of a particular pre-psychotic personality, and representing a failure in adjustment to the problems specific to later life. Describing the pre-psychotic personality, they agree with Titley (1936) in emphasizing a rigidity and tendency towards restriction of interests. Some of the groups exhibited such combinations as (*a*) the hard-driving, aggressive, over-conscientious and stubborn, (*b*) the seclusive, autistic, under-active and prudish, (*c*) the sensitive, timid and hypochondriacal; seemingly a wide variety of personalities was in evidence. The same questions arise in the paper by Brew and Davidoff (1940). Malamud, Sands and Malamud found that precipitating factors sometimes appeared as catastrophic occurrences, threatening the patient's security or his continued possession of objects to which he was strongly attached. In evaluating the findings of these writers, it must be borne in mind that patients were not included as having involutional melancholia if a previous similar attack had occurred, though in a number of them there had been previous mental illness or personality disturbance (mainly

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regarded as neurotic reaction to a difficult situation). It is questionable whether it is safe to use, as these authors suggest, pre-psychotic personality to distinguish involutional psychoses from the recurrent variety of severe manic-depressive illness; informants are likely to have stressed the more recent personality traits which have become conspicuous during the last few years before the actual illness.

Obarrio (1939) has described three cases of recurring melancholic stupor, which would presumably not have been included by Doty in his group. Obarrio stresses the neurological interpretation of the stupor, on the lines of his earlier comparison with the extrapyramidal features of Parkinsonism. One of his patients had no less than ten stuporose episodes, and in all three patients the stupor invariably accompanied the depression, though periods of excitement or well-being might intervene between them. Obarrio does not consider the metabolic phenomena, which might have as important a role here as in some of Gjessing's cases, and he rejects a psychopathological interpretation in which the onset of stupor could be attributed to anxiety. His conclusion that there is adrenal insufficiency with extrapyramidal symptoms, attributed to lability of the locus niger, does not carry conviction. It is, however, undeniable that Parkinsonism of organic origin may be accompanied by severe melancholic symptoms, which cannot be regarded solely as a reaction to increasing awareness of reduced efficiency and bad health. An instance of this, secondary to carbon monoxide poisoning, is reported by Raskin and Mullaney (1940). Their patient died, and in the brain a typical pallidal lesion was found, with numerous small changes in the cortex. Hoffer (1940) provides a psycho-analytical study of depression in a patient with post-encephalitic disorder; he considers the depression essentially hysterical, and a reaction of the ego against organic deterioration. Another instance of the way in which organic disease of the brain can give rise to affective illness is given by Rothschild (1940); the patient had G.P.I.

Gustav Störring (1939), in his monograph on perplexity, insists that this symptom is most frequently to be found in the affective disorders which begin with severe anxiety, and he holds that this association occurs because delusional ideas of a self-accusing or persecutory kind, arising out of the anxiety, fade and leave the patients muddled and doubtful of the reality of what had so recently been a terrifying conviction. In other instances he accounts for the bewilderment by the suddenness of the transition between a depressive phase and manic excitement. Störring attributes the bewilderment in other cases to the patient's awareness of reduced capacity for clear thinking, which makes her doubtful about the continuity of her personality. He rightly emphasizes that the pronounced paranoid disorders of a depressive nature (so often mistakenly regarded as schizophrenic) are more often accompanied by perplexity than are acute paranoid schizophrenic conditions; here again, in the depressives, the fluctuations in affect determine fluctuations in the prominence of ideas of reference, and the patient is bewildered by the contrast between what he now believes and what he lately believed. Störring also mentions the perplexity common in the oneiroid syndrome so fully described by Mayer-Gross (1924).

Ernst Störring (1938), in a monograph on depersonalization in affective disorders, insists that depersonalized manic-depressives rarely present charac-

teristic delusions of guilt; their restlessness and tension are expressed mainly in bodily terms. He takes a similar view to Gustav Störring, believing that the depersonalization occurs chiefly during transition, either from normal to depressive phase or from depressive to manic, or vice versa. All these views are questionable; from a study of his reported cases it seems that Störring has not sufficiently examined the close link between depersonalization on the one hand, and hypochondriasis, including somatic delusions and nihilistic beliefs, on the other.

Hohmann (1940) has reviewed the forms of depressive illness in which hypochondriasis constitutes the main presenting symptom. He adds little to the earlier study by Felix Brown (1936). He emphasizes that the depression is frequently masked, and therefore missed by the physician in his diligent search for physical disease or his ready acceptance of neurotic motivation. Hohmann goes so far as to conclude that "the overwhelming number of neurotic states are in reality mild or severe depressions which will run a course and terminate in recovery." Ziegler (1939) makes much the same point about masked depression; he analysed the records of 111 ambulant patients of all ages, who had first come to the surgeon or physician for the relief of seemingly bodily ailments, and who were subsequently observed by the psychiatrist and treated for depression as their chief symptom.

The view just stated in dogmatic form by Hohmann concerning the frequency of depression in so-called neurotic illness appears, or is controverted, in several papers tackling the vexed question of neurosis versus psychosis. Rogerson (1940) agrees broadly with Lange, Ross, Gillespie, Yellowlees and others who would classify all affective states in which anxiety or depression are predominant into the two groups, "neuroses" and "psychoses." Rogerson, however, recognizes that the affective states which he would call neurotic are frequently diagnosed as anxiety states, and that the question as to whether anxiety states should be differentiated from depressions has little substance, and must be reformulated if his standpoint be accepted.

An opposite view is taken by R. F. Tredgold (1941), who has examined carefully a number of soldiers diagnosed as "depression" in a military mental hospital. Tredgold found a number of individual patients who passed from an undoubtedly psychotic condition to one that would ordinarily be called neurotic, whereas other patients did the reverse; he regards this as supporting the view that the difference between the psychotic and the neurotic depressives is merely one of degree. Tredgold found that a quarter of all patients admitted to the military mental hospital were diagnosed as depression, but that they could not be sharply classified into clinical groups, any differences being of degree rather than kind. The course of the illness in his patients was satisfactory, except in those who were severely agitated; 84 per cent. of all the depressive cases recovered. Similar views are put forward by Curran and Mallinson (1941). They found that during the latter part of 1940, depressive states accounted for 13 per cent. of all admissions to a naval neuro-psychiatric unit. In an analysis of 99 consecutive cases they found no support for the view that there is any clear-cut division into endogenous and reactive, or into neurotic and psychotic groups. They would, however, distinguish between affective disorders, and hysterical reactions in which depression or anxiety may be

conspicuous. Since hysterical and affective symptoms may co-exist, Curran and Mallinson would advocate assessing their relative intensity, in order that treatment appropriate to an affective disorder should not be applied to a patient in whom the hysterical symptoms are the most important or disabling, and conversely. Among their cases were men of a fine type and excellent morale, though deficient in adaptability, who as a result of prolonged stress developed depressive reactions which differed from those familiar in civilian life in that they responded more rapidly and satisfactorily to treatment. Thus 29 per cent. of their patients were able to return to naval duty, and only 6 per cent. needed further hospital care. Tredgold could not, among his soldiers, relate the form of the depression to particular experiences, and therefore believes that he is at variance with some statements of Curran and Mallinson, but since the latter authors were making only a provisional rough classification into which this consideration entered, it does not seem that there is any genuine divergence between their view and that of Tredgold.

A Dutch writer, Harrter (1939), proposes an extremely elaborate classification of depressive states; it is almost a *reductio ad absurdum* of the principle that they must be subdivided. There are seven main subdivisions of depression, and a still more minute analysis of these. Thus depressive syndromes associated with schizophrenic symptoms are listed as melancholia, minor depression, compulsive depression, hysterical depression and combined hysterical and obsessional depression, all of them occurring as symptoms of fundamental schizophrenia. Harrter's finespun classification shows how pointless diagnostic casuistry can be.

Kirchhof has recently analysed 1,955 new cases seen in the Neuro-Psychiatric Poliklinik at the Charité in Berlin during the 12 months between September, 1939, and September, 1940. Nearly a fifth of the cases (347) were diagnosed as showing a depressive state. Of these 203 were classified as endogenous, including a number of involutional cases. 69 were secondary to cerebral arterio-sclerosis, hypertension or cerebral atrophy; 44 were mainly reactive; 21 were of the cyclothymic type. Kirchhof puts great weight on the vasomotor disturbances, which he found in a quarter of the endogenous cases. The factors chiefly responsible for the reactive depressions were domestic difficulties, and stresses which the war had brought in its train, such as night duty, work under painful conditions, e.g. in factories among disagreeable smells or the noise of machinery, homesickness, and industrial inadequacy.

The association of skin disease with depression has been reported by Mari (1939). His patient was a woman of 30, who developed dyschromia in the course of a fairly severe depressive illness. The cutaneous changes persisted after the depression had subsided. In a lengthy discussion he maintains that endocrine factors were responsible. He does not pay enough attention to the possible nutritional factors. Laignel-Lavastine and Paugam (1939) report the association of psoriasis with depression in a man who, at the age of 38, first developed psoriasis. This improved considerably when, two years later, his first attack of depression came on. Similarly, in an attack of depression which he had five years after the first attack, the psoriasis fell into the background, but reappeared on his recovery from the depression one year later.

Slater (1938) investigated the time of year at which affective attacks of the manic-depressive kind can occur, and confirmed the statement of Kollibay-Uter (1921) that the point of greatest frequency is early summer, and that there is a small secondary rise in early autumn. Tomasi (1939) analysed 313 cases, and similarly found a maximum of depressive states occurring in the spring and a minimum in winter. This corresponds to many studies that have been published regarding the incidence of suicide. Leuthold (1940), however, has examined the manic-depressives admitted to the Munich Clinic between 1930 and 1935, and finds that the increase in the onset of depression in October is greater than that which occurs in spring.

Fox (1942) selected 400 persons admitted to the Henry Phipps Clinic; Johns Hopkins Hospital, with manic-depressive or allied affective states, for an analysis of the leading dynamic factors. The patients had a fairly definite attack of pathological over-activity or under-activity more or less independent of immediate external influences. It was found that there were very few patients in whom the manic-depressive constitutional tendency was the sole factor, and there were only 83 who had a history of an attack of excitement. The constitutional or " thymopathic " factor proved to be intimately related to the personality structure and trends of preoccupation in the patients ; it was particularly closely related to the tendency towards projection. A third of the thymopathic cases had one or more relatives with a history of excitement or depression, which was not an appreciably higher proportion than in the rest of the cases. The author emphasizes that these are remarkable findings, inasmuch as a large number of the 400 cases were such as would be put in the neurotic category in many clinics, e.g. there were many patients in whom anxiety was conspicuous. The pyknic habit of body was slightly less frequent in the primarily thymopathic groups than amongst the rest of the patients. Of all the patients, 98 had made suicidal attempts, but only 12 of these belonged to the thymopathic group. A higher proportion of the thymopathic cases had, however, a history of previous affective swings. A slightly higher proportion of thymopathic cases was discharged improved than of the remainder. From these findings the conclusion emerges that the so-called manic-depressive constitutional tendency is only one among a number of dynamic factors producing affective mental illness, and that it is misleading to regard this particular kind of affective response as a self-limiting attack in which only the hereditary or constitutional determinant is decisive. The foregoing study should be related to a follow-up inquiry by Rennie and Fowler (1942) into 208 patients with manic-depressive illness first seen between 1913 and 1916. They found that the hereditary factor, which is common in this group, was usually evident in the direct ascendants, and most frequently showed itself as a depression. Remission for as long as 10 to 20 years occurred in a third of the patients, and in 5 per cent. depression first appeared after the age of 65, though the largest incidence was in the age-group 45 to 55. All but 7 per cent. of patients recovered from the first affective attack, and only 7 per cent. of cases became chronic. On the other hand, less than a quarter of the patients had only one attack during the course of their lives. It is only by a follow-up carried out at such a distance of time as Rennie and Fowler's that one can see

how unsafe it is to assume that the patient will be free from further trouble, even though several years have passed since recovery from the attack. Depression, they find, is more common in affective disorder than customary statistics would indicate. Manic patients sometimes commit suicide, and depressive or paranoid symptoms may be found on close investigation in three-quarters of the manic cases. The paper contains a great many points valuable in prognosis, and should be read in conjunction with comparable figures given by Kraepelin and Lange.

An interesting review of affective disorders among university students is provided by Himler and Raphael (1942). In two-thirds of the men and three-quarters of the women students the first attack occurring during their studies was a depressive one. In 60 per cent. of the students prompt psychiatric treatment enabled them to complete the academic term. The writers emphasize the danger that arises through the physician assuming that affective disorder of this kind is of psychoneurotic nature merely because some of the symptoms complained of, e.g. anxiety, or fatigability, suggest this on superficial inquiry.

Brill (1939) reports with psycho-analytical comments a patient in whom in his opinion actual suicide was effected by psychological means. He considers that the same forces that lead to ordinary suicide can impel some people to die without the need of resorting to any physical means of bringing this about. After quoting some of the extensive data in anthropological literature, he gives the history of his patient, who had put off going into a sanatorium when advised to do so. The melancholic symptoms were concealed, and eventually she died, largely because of her own failure to take sensible measures. He concludes that her object-love " had gradually changed into narcissistic identification," which in turn gave full play to already existing ambivalence towards her husband, with resulting liberation of her repressed sadism towards him. These hostile feelings finally annihilated (through what was tantamount to suicide) that object through which she had suffered humiliation and poverty.

Psychologists have reported findings, in depression, elicited by such methods as the Rorschach projection test, the use of a questionnaire and study of handwriting. J. S. Lewinsohn (1940), leaning heavily on Heinen's (1928) earlier work on handwriting in manic-depressive insanity and on Klages' (1936) well-known exposition, points out that in all psychotic handwriting the rhythm is completely disturbed in respect of height, breadth and depth ; the disturbance may, rather paradoxically, appear as rigid regularity. Tempo is also affected. In apathetic depression she finds slight irregularity, little difference between long and short letters, upper signs set low, more bond than release between letters, extreme slowness, but regular distribution. In agitated depression there is much more irregularity, fluctuation in the relationship between bond and release, acceleration of movements without emphasis, and distribution is irregular. Her analysis is too technical to be suitable for summary presentation. Varvel (1941) has examined by the Rorschach ink-blot method 34 depressed patients (7 of them classified as manic-depressive, 13 as reactive and neurotic, 14 as agitated or schizophrenic types of depression), and has compared them with 144 normal students. His results are somewhat inconclusive, and

turn a good deal on the so-called constriction of personality. His evidence shows that it is impossible to distinguish constriction which is part of the pre-morbid personality, from constriction manifesting itself in the course of the depressive illness. Constriction can, of course, be found in socially adjusted "normal" individuals, in which case Varvel regards it as a fundamental characterological deviation.

Hathaway and McKinley (1940) have described a scale to measure various clinically important phases of personality. 3,000 normal and abnormal individuals have now been tested and their answers to the 504 items in the schedule classified. The normal group was derived from visitors and relatives of patients in the University Hospital. In a study of hypochondriasis it was shown that the scale yielded a score from which the degree of hypochondriasis could be inferred. Fifty carefully chosen depressed patients were compared, in another study, with 339 normal adults between ages of 26 and 43, 265 college students, 40 normal persons who appeared to have a high depression score on a preliminary application of the procedure, and 50 patients who had similarly scored high on the scale but did not show clinically observed depression. The preliminary scale referred to contained 70 items which were left after the scale had been purged of all items that seemed unreliable. For clinical use raw scores from the schedule were transferred into standard scores in which the means of each of the whole normal groups of males and females between the ages of 16 and 45 were given the value of 50; other raw scores were transformed so that the standard deviation would be 10. A significant separation of clinically depressed patients from normal could be demonstrated for a large percentage of cases, and patients who had moderate degrees of depression without any specific abnormality could also be differentiated. The scores were significantly higher for females than for males, and they become higher with increasing age. It is doubtful whether the method is of much value, since it consists, at bottom, of asking the patient whether he has any of the familiar symptoms of depression. It would presumably fail to detect such a patient at a time when he was free from depression or resolved to conceal it, and it is open to the criticism that a questionnaire method, used on depressed patients, is less satisfactory than a clinical interview in indicating the severity of their depression.

Rennie and Howard (1942) believe that the clinical syndrome of "tension-depression" can be related to hypoglycaemia, the latter being symptomatic of the emotional disorder. They emphasize that changes in blood sugar may not in themselves lead to any discomfort, and that there is great variation between individuals in this respect; the treatment of patients exhibiting such a condition of depression with hypoglycaemia must therefore be psychiatric rather than chemical.

Strongin and Hinsie (1939) had described in 1938 their observations on the secretory rate of the parotid gland, showing that it was lower in "manic-depressive depression" than it ever became in normal persons. In 1939 they published data designed to show whether there is here a difference between depression of the mainly endogenous recurrent kind and other varieties of depression. In 23 out of 25 patients with the former diagnosis the parotid

secretory rate was below an average of 0·01 c.c. per 5 minutes during a test of half an hour's duration. In 24 out of 25 with " non manic-depressive depression " the parotid secretory rate was still level. They also found that the parotid secretory rate was inhibited in early stages of the manic-depressive disorder, before clinical diagnosis was possible. The inhibition prevails during the daily mood fluctuations of the patient, but the rate returns to normal when the patient recovers from his depression ; the rise when he improves may be very sudden. Inasmuch as parotid secretion is controlled by the autonomic nervous system, it would be desirable to know the findings in a large group of patients with anxiety states or " tension depression " before assuming that sharp differentiation can always be made by means of the test.

The body temperature in various forms of mental illness varies more widely than is sometimes recognized. H. I. Schou (1940) has studied ten patients with affective disorder, and found that the temperature of the skin of the temples was low during the depressive phase, whereas that of the hands and feet was high. In four patients who recovered after fits had been induced by cardiazol, the foot temperature sank to normal immediately after recovery ; the temperature of the temples rose, but not to the same extent as the foot temperature fell. Schou advocates that any abnormality of the skin temperature in a depressed patient who is recovering should be taken as a sign that the illness is not yet really over.

Looney *et al.* (1939) made exact inquiries into the possibility that the phytotoxic index was abnormal in depressives. The results were negative, and this ingenious method of investigation, on which a paper had already been published in Scandinavia, appears unlikely to be pursued further.

Discussion of most of the papers dealing with the treatment of depression will be found under the sections on convulsion therapy, endocrines, vitamins, psychotherapy and prefrontal leucotomy. A few scattered papers in which other, rather feeble methods are reported may be mentioned here.

H. Sopp (1939) treated 32 depressives of various sorts with " decholin " and vitamin B. The decholin (a 20 per cent. watery solution of sodium dehydrocholate) was introduced by De Crinis a decade ago for the treatment of melancholia. Ten c.c. of the decholin are injected intravenously for four days, vitamin B1 being also given alternately intravenously and subcutaneously. After the first four days the same dose was given every second day up to 10 injections, and if the patients improved, thereafter once or twice a week. Of 32 patients, 8 recovered completely, 16 improved to some degree, 8 were unchanged ; of the 8 who recovered completely, 3 were mainly reactive, 2 were involutional, 2 climacteric, 1 mainly endogenous. Sopp states that the possibility of recovery being independent of treatment could be excluded. Following Roggenbau (1936), he considers that the liver is at fault in these cases, but his evidence is very slender.

There are a few papers dealing with the treatment of depression by haematoporphyrin, according to the method first advocated rather more than ten years ago by Hühnerfeld (1932). O. Bruel (1939), writing from Denmark, describes how he obtained recovery in 50 per cent. of a small group of private out-patients with depression ; in several others improvement was brought about. He

holds that it is an almost specific remedy in patients who exhibit pyknic constitution with cyclothymic traits. Bruel has not observed any untoward or even disagreeable effects in any of his cases. This is somewhat surprising, as the injection sometimes leads to considerable discomfort. H. Schaeffer (1939) intimates that the method has had some vogue in France also. Schaeffer recognizes that the reports already published are contradictory; the value of the method is in doubt.

A few German articles on pervitin treatment of depression have been published; its action is similar to that of benzedrine. Dub and Lurie (1939) gave benzedrine twice a day to a number of severely depressed patients, increasing the dose if there was no improvement after one week. Control methods were employed to judge the efficacy of the benzedrine. The diagnoses in the 48 women treated were too varied, however, for safe conclusions to be possible regarding the value of the method, though the authors draw favourable conclusions. Finkelman and Haffron (1939) treated 15 severely depressed patients with large daily doses of benzedrine for a period varying from 3 to 13 weeks. Few of the patients improved, and in those who did the result could not be attributed to the benzedrine, except in one instance. In several patients the benzedrine made them more restless and irritable, or even suicidal. These conclusions do not invalidate the usefulness of the drug for some forms of mild depression. Chittick and Myerson (1941) have also reported results of benzedrine treatment of depression.

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