DEPRESSIVE STATES IN THE SOLDIER

THEIR SYMPTOMS, CAUSATION, AND PROGNOSIS

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Among the patients of a military hospital for psychotics the number of cases of depression appeared to be noteworthy. These cases were of many different types, they had been precipitated by a number of causes in various personalities, and their course varied. An attempt was therefore made (i) to differentiate the types; (ii) to analyse the factors in each case and to correlate them if possible; and (iii) to describe the course, and response to treatment, of the various cases.

Differentiation of Types

In 1926 began the considerable controversy in this country on the question of differentiation between psychoses and neuroses, which unfortunately still continues. This had been provoked by Mapother (1926), who stated that the distinction had grown out of practical differences and that he could find no other basis for it. This was hotly contested by many speakers, their protagonist being Ross (1926), who has since defined his views more concisely (1937), stressing the differentiation of anxiety states from depressive psychoses. In point of fact he does not mention depression as a symptom occurring in an anxiety state, but his distinction of the latter from the depressive psychosis is based on the extent of its dependence on environment, as well as on the absence of retardation and presence of insight.

Gillespie (1929) set up a group of neurotic depressions, separated from the psychotic in their greater reactivity—that is, the greater dependence of their affect on conscious factors, internal or external. He also gave a list of criteria suggested for the distinction of neuroses from psychoses (Gillespie, 1930). Yellowlees (1930) also held these views, basing his distinction on the patient's possession of insight.

Rogerson (1940) has based on the above views a classification into psychoses and neuroses, each again subdivided into anxiety and depressive states, the distinction—the integrity of the rationalizing power of the mind—thus resting on a study of the extent of the dependence of the mood-change on external reality and conscious strivings. He holds also that in a psychotic a defence mechanism operates in a far more wholesale way than in a neurotic.

It may here be interesting to note that many of this school base their sharp distinction on *one* criterion—but this criterion is itself a matter of degree. Thus Rogerson diagnosed the psychotic type by the far more wholesale appearance of a defence mechanism, and Yellowlees by the possession of insight, a quality whose assessment (as Curran points out) Lewis (1934b) has shown to be extremely difficult, while Gillespie's most important criterion was of comparatively less *reactivity*. It would, however, seem more helpful to look for a distinction, if any, in the mechanism of the reaction. Thus it might be held that neurotic depression is an exaggeration of a normal reaction—that is, an attribution of failure to insurmountable difficulties—while the psychotic depression is com-

pletely abnormal, being, in its admission of total failure, biologically dangerous.

The basis of such a distinction was thus held by the authorities quoted as resting on psychopathology, and its use was justified in that it indicated also a complete distinction of treatment and prognosis, as will be mentioned later. Completely opposite views have, however, been given in classic phrases by Mapother and Lewis (1937), who, speaking generally, stated that distinction between neurosis and psychosis is at times convenient but without substance. Lewis (1934a) condemns a sharp distinction between depressive states as not found in Nature and of no help to thought and action, and stresses that, like every other illness, depression is the result of environment working on the organism: there will be a great number of possible combinations according to the individual's inherited endowment and training, and the particular constellation of environmental forces. Applied to his cases Gillespie's criteria gave contradictory results. Lewis's view was supported by Curran (1937), who also attacked the criteria of distinction suggested by Gillespie, and in various cases showed an entire absence of correlation. He proposed that the types of depression should be regarded as a graded sequence. He also attacked the sharp distinction in recommended treatment. Symonds (1939) considered the difference in types to be merely one of degree.

Grouping of Cases

Of 274 consecutive cases admitted to the hospital in the first six months 70 were selected as "depressions." This diagnosis was made on the criterion of "anyone who was unhappy and ill with his unhappiness" without any other significant illness to cause this (Lewis, 1938). The cases were first studied from a clinical standpoint; it appeared that they could be separated into several types entirely from overt symptoms, and it must be emphasized that not until they had been so grouped was their psychopathology considered. Since the symptoms varied during the patient's progress, the most acute phase during their stay in hospital was taken to determine the group. The cases may be classified as follows:

1. *Agitated Melancholia*.—The symptoms were acute misery, apprehension at times amounting to terror, delusions and hallucinations of persecution, and self-reproach. There were occasional periods of calm, which usually ended abruptly. Suicidal attempts were common. These patients showed a complete lack of insight or co-operation.

2. (a) *Anxious*; (b) *Hypochondriacal*.—These patients showed depression accompanied by preoccupation of (a) disaster, or (b) bodily ailment, respectively. Though lacking in self-confidence, they possessed some self-control and could respond to reassurance. There was in some cases a knowledge that their worries were probably exaggerated. The more acute cases of both these subgroups were practically indistinguishable from the milder ones in Group 1.

3. *Emotional*.—Symptoms in this group were a deeper depression with marked emotional instability, sometimes repetition and retardation, with feelings of unworthiness and disaster which in

general the patient realized to be irrational but were none the less distressing. These remains of insight were not, however, associated with any power of co-operation.

4.—This group may be regarded as midway between Groups 2 and 5, anxiety being on the decrease but retardation the reverse.

5. *Retarded*.—Retardation was here pronounced, and in some cases amounted to stupor. No agitation or repetition occurred, and there was little emotional instability. The patient often expressed himself as desiring merely to lie curled up in bed and to be left alone. Suicidal attempts had frequently been made before admission. Co-operation varied with the degree of retardation.

6. *Recovering* (?).—The last group consisted of five patients whose symptoms had disappeared to a great extent by the time of admission but who had attempted suicide while acutely depressed; their history was, however, not adequate enough to decide into which of the above groups they should fall.

There are thus a number of cases ranging from the acutely agitated to the acutely retarded, which, though they have here been subdivided, could accurately be described as a sequence. Groups 1, 2, 4, and 5 present a more or less regular sequence; Group 3, though placed

TABLE I

Case No.	FACTORS (Column 1)				SYMPTOMS (Column 2)					(Column 3)			Specific Treatment	Result
	Familial	Person- ality	Long- sanding	Sudden	Onset	Anxiety	Retard- ation	Repe- tition	Emot'. Instab.	Insight	Attribu- tion	Co-op- eration		
GROUP 1 :														
1		Normal	B†	D		+++		+	+	0	In	0	See Table V	M.H.
2		M.D.		E		++		+	+	0	In	0		H.
3		"		E		+++		+	+	0	Ex	0		
4		"		E		++		+	+	0	Ex	0		
5	+	Worrying	F†	D	A	+++		++	+	0	In	0		M.H.
6		Inferior			A	+	+	+	+	0	In	0		Improving
7		Worrying		F†	A	+++	+	+	+	0	In	0		Recovered
8		M.D.		F†	A	++	+	+	+	++	Ex	0		Recovered
GROUP 2(a) :														
9		Worrying	F	D	A	+	+	+	+	++	In	0	S	Recovered
10		M.D.	F	F†P		+	+	++	+	0	In	0		"
11	+	"		F†P		++		+	+	++	Ex	+	S	"
12	+	Worrying		E		+	+	++	+	++	Ex	0		"
13	+	"	B†		A	+	+		+	++	Ex	++		"
14		"	B†			+	+			++	In	++		"
15		Normal	B†		A	++	+			++	Ex	++	S	"
16		Inferior	B†							+	Ex	0		"
GROUP 2(b) :														
17		Dep.				++		++		+	Ex	+	S	Recovered
18	+	Worrying	B†	F		+				0	Ex	+		"
19		Dep.	B†		A	+	+		+	+	Ex	+		"
20		Normal	B†			+		+		+	In	+		"
21		"	F†	B†	A	+	+		+	+	Ex	+	S	"
22		"	B†			+	+		+	+	Ex	+		"
23		Worrying	P		A	+	+	+	+	+	Ex	+		"
24		Hysteric	B†	D		+	+		+	+	Ex	+		"
25		"	B†			+	+		+	+	Ex	+		"
26		Worrying	D†			+	+		+	+	Ex	+		"
GROUP 3 :														
27	+	Worrying	B	E		+	+	++	++	0	In	0	S	Recovered
28		Normal		D		+	+		+	+	In	+		"
29		Inferior		B†P	A	+	++		++	++	In	0	S	"
30		Dep.		F		+	+		+	++	In	+	S	"
31		"		E		+	+		+	++	In	0		"
32	+	M.D.	B†			+	+		+	+	In	+	C	"
33		"		P	A	+	+		+	+	In	+	S	"
34		"		F		+	+		+	+	In	+		"
35		Dep.*		D		+	+	+	+	++	En	++		"
36		Dep.*				+	+	+	+	++	Ex	++		"
GROUP 4 :														
37	+	Inferior	B†	P		+	+			++	In	+		Recovered
38	+	Dep.		E		+	+			++	In	+		"
39		Normal	B†		A	+	++			+	Ex	+		"
40	+	Dep.		D		+	+			+	In	+		"
41		Worrying				+	+			+	In	+		"
42		Inferior			A	+	+			+	Ex	+		C.E.S.
43		M.D.		P	A	+	+			+	Ex	+		Recovered
44		Dep.			A	+	+			+	Ex	+		Recovered
GROUP 5 :														
45		Dep.	B†	F†		++				0	In	0		"
46		Inferior		F†	A	++				0	In	0		"
47		M.D.				++				+	Ex	+		"
48		"		E		+++				0	Ex	0		"
49		"		P		++			++	0	In	0		"
50		Worrying			A	++				0	Ex	+		"
51		"		E		+				0	In	0		"
52		M.D.		F†	A	+				++	In	+		"
53		Worrying		D		++				++	Ex	+		"
54	+	Dep.			A	++				0	In	0		"
55		Dep.*				++			+	+	In	+		"
56		Dep.*	F†	D		++				+	Ex	0		"
57		Dep.*			A	+			++	+	In	+	S	"
58		Dep.		F†		+			++	+	Ex	+		"
59	+	M.D.	F†		A	+			+	+	In	+		"
60		Dep.	P			+			+	+	In	+		C.E.S.
61		M.D.		E		+			+	+	Ex	0	S	Recovered
62		"		E		+			+	+	In	+		"
63		"	D		A	+			+	0	In	+		"
64	+	"	B†	F		+			+	+	Ex	+		H
65		Dep.*		E		+			+	+	Ex	+		"
GROUP 6 :														
66		Normal	F	F†	A		++		+	+	Ex	+		Recovered
67	+	"	B†	D	A				+	+	Ex	++		"
68		Inferior	F		A		+			+	In	++		"
69		M.D.		F†			+		+	+	Ex	++		"
70		Worrying	D	D			+		+	+	In	+		"

FACTORS.—Dep.=Depression. * =Previously certified. M.D.=Mental defective. B=Bombardment. D=Uncongenial discipline. E=Enlistment. F=Family troubles. P=Physical illness. †=Major.

SYMPTOMS.—A=Acute. Ex=to external causes. In=to internal causes.

RESULT.—C.E.S.=Discharge to sheltered civil employment. H=Discharge home to c/o friends. M.H.=Discharge to a mental hospital.

SPECIFIC TREATMENT.—S=Somnifaine. C=Cardiazol.

between Groups 1 and 5, may be regarded as a little off the direct line, being characterized by emotional instability (with little anxiety).

Once these cases had been grouped on clinical grounds their possession of insight and their response to environment were noted; the exact assessment of each of these factors in any individual was extremely difficult, but an attempt was made to represent their relative strength by symbols as in Table I, Column 3. It was also noted whether the patient placed the blame for his depression on his environment or on himself.

If these were regarded as the criteria by which to distinguish psychosis from neurosis the more acute clinical states either of anxiety or of retardation could be grouped as psychoses, and the milder as neuroses. However, the contention is here put forward that efforts at such distinction are both false and misleading, and that it is correct to regard the cases as a graded sequence

Transition

Transition from one condition to the other seems to have evoked curiously little remark in recent literature. Rogerson, moreover, quotes Ross's figures of the follow-up of 1,043 cases of neurosis discharged from the Cassel Institute (and of which only 5% later developed psychosis) as evidence that a distinction between the two types existed. In any case, there seems no particular reason why a mild type of illness should be more severe on recurrence. A similar follow-up of recovered psychotics would be interesting. Recently, however, Symonds (1941) commented on the frequency of diurnal variations from "neurotic" to "psychotic" type.

A study of the individual cases in our series showed that a number of those convalescing passed from a condition undoubtedly psychotic to one that was neurotic (by the above criteria), and a number of those relapsing did the reverse. Thus Case 6 on admission was agitated, inaccessible, and had repeated delusions of impending disaster, coupled with auditory hallucinations; his delusions faded as he recovered, but he showed some anxiety and repetition, and increasing insight and co-operation. In contrast, patient No. 5—who when admitted was mildly anxious and lacking in self-confidence, who worried over real financial matters and lack of Army promotion, but was moderately co-operative—relapsed into a condition of acute terror, with vivid delusions of persecution by Germans and a complete lack of insight or co-operation. Here the rapid transition of such cases certainly supports the hypothesis that the difference between the psychotic and the neurotic is merely one of degree.

Factors Influencing the Onset

Probable causative factors were next studied, although it must be admitted that several cases showed very inadequate personal and family history. The following were the factors considered:

A. Internal.—(1) Family history of any psychopathic weakness. (2) Previous personality.—The cases were here grouped under three headings: (a) mental defectives; (b) psychopathic types, including those who had (i) suffered always from ideas of inferiority, hysterical reaction, or had been of a worrying disposition, or (ii) had had previous attacks of depression (which may or may not have led them into a mental hospital); (c) those previously apparently entirely normal.

B. External.—(3) Long-standing factors.—(4) Sudden factors.—Factors 3 and 4 were each subdivided into Physical Illness; Family Worry; Bombardment; and Incompatibility with Military Discipline. Where the mere fact of enlistment seemed the only cause, this was noted. These factors were major, such as bereavement, infidelity of wife, etc., or minor—certainly an arbitrary division.

Table I shows the incidence of these factors in each group (Column 1); Tables IIa and IIb summarize them.

TABLE IIa.—Internal Factors (70 Cases)

Previously normal	..	..	..	..	..	..	9
Psychopathic	..	..	..	..	..	..	24
Inferiority	..	..	..	..	..	..	7
Worrying	..	..	..	..	..	..	15
Hysteresis	..	..	..	..	..	..	2
Depression (5 previously certified)	..	..	..	..	..	..	16
Mental defectives	..	..	..	..	..	..	21

A psychopathic family history was traced in 14 patients (of whom 6 were "chronic worriers").

TABLE IIb.—External Factors

	Total	Long-standing		Sudden	
		Major	Minor	Major	Minor
Bombardment	19	16	1	2	—
Family troubles	22	4	4	9	5
Incompatibility to discipline	15	1	2	—	12
Enlistment	13	—	—	—	13
Physical	9	—	2	—	7

NOTE.—In 17 cases more than one external factor was evident: in 2 of these both major.

These conclusions may be drawn from Tables IIa and IIb in connexion with Table I: (1) No particular correlation could be traced between any type of previous personality and any clinical group. (2) Out of 18 cases in the anxious and hypochondriacal group 9 had previously been subjected to severe bombardment at Dunkirk and had later broken down, in response at most to a minor precipitating factor; one other case had suffered recent bombardment. (3) Apart from those cases no particular correlation could be traced between any external factor and any clinical type.

TABLE III.—Analysis of Cases, showing Incidence of Minor and Major Factors

	Major	Minor only	Nil Ascertained	Total Cases
Normal	8	1	—	9
Psychopathic	10	10	4	24
Depression	4	8	4	16
M.D.	8	12	1	21

NOTE.—In some cases several minor factors were together; these are shown under "Minor only."

But here again no correlation could be found (see Table IIb) between these and any clinical type. It is, however, noteworthy that in fact, as might be expected, the proportion of major to minor factors is far greater in the previously normal than in psychopathics and mental defectives, especially in previous depressives. A recent publication by Curran and Mallinson (1941) has shown that no clear-cut clinical distinction could be found between "endogenous" and "reactive" (so-called) cases of depression in the Navy, and that the cases formed a graded sequence, being borderline. They hold, nevertheless, that there are, at the two extremes of the sequence, distinct clinical types—namely: (1) the "endogenous," which might or might not have been precipitated by external stress, mainly characterized by certain typical symptoms such as retardation, ideas of reference and self-reproach, and a "depressive content"; and (2) the "reactive," mainly characterized by the dependence of the illness upon traumatic experiences which gave rise to a "topical content," but not showing the typical "endogenous" symptoms mentioned above with the same frequency or intensity. In the former they find 25 adequate factors and in the latter 48, thus suggesting that the external factors produce a clinical type distinct from the internal.

Such a suggestion is not supported by the figures of this series, in which, it must be noted, the proportion of previously normal individuals is much lower; for clinically similar cases resulted from a completely different set of interacting factors. It seems only possible to conclude

that any state of depression is the result of the interaction of external factors upon a personality; and that, so far, there is not enough evidence to predict the occurrence of any particular syndrome in any particular individual.

Treatment

1. *Rest*.—The patients were kept in bed for at least twenty-four hours, practically all for forty-eight hours, and some for a week. During this time the question of future treatment and of narcosis therapy was considered. The majority of the patients, however, were those whose progress appeared satisfactory; they were got up and given in the first place light jobs, usually in the ward, requiring little concentration, responsibility, or perseverance. Their existence was ruled by a fairly strict routine time-table; it included regular fresh air and adequate meals. Gradually their occupation was made more interesting and more vigorous, and so far as possible in tune with their own hobbies or occupations. This, of course, was not always feasible, and rug and basket making, digging, and weaving proved valuable substitutes, with the help of much-varied physical training and entertainment such as cinemas and organized games.

2. *General Psychotherapy*.—This consisted in giving individual encouragement and reassurance, and later included a series of talks, leading the patient to adjust his personality to cope with his difficulties so far as was possible and stressing the fact that he had passed through an illness caused, like any other, by physical factors. There can, however, be little doubt that a number of patients for whom no individual attention was then available recovered as completely, though perhaps more slowly.

3. *Prolonged Narcosis*.—Those patients whose progress appeared unsatisfactory after a few days' observation or who suffered acute anxiety were recommended prolonged narcosis. Thus it was advocated for all members of Group 1 and several of Groups 2, 3, and 5. For some of such cases, however, it was not available by reason of administrative difficulties in the early days of the hospital. Thus a series of clinically similar controls is provided. In all, 19 cases were treated. The technique adopted was that described by Ström-Olsen (1933, 1934), using somnifaine, insulin, and glucose; or that suggested by Palmer (1937), using somnifaine and paraldehyde. Average daily sleep varied from twelve to eighteen hours, and was in most cases over fifteen and a half hours. In cases other than Group 1 it can scarcely be said that narcosis improved the number of recoveries, for the rate was exceedingly high in any event, but those treated with narcosis did appear to recover more quickly. In cases of Group 1, however, the results were extremely interesting, and may be set out thus:

TABLE IV.—Results in Group 1

Case No.	Narcosis	Progress	Subsequently	Further treatment	Progress	Result
1	No	Unchanged	Remained so	Nil	—	M.H.
2	Yes	Improved	Relapsed	Narcosis	Slightly improved	H.
3	"	"	"	Nil	—	M.H.
4	"	Slightly improved	"	Insulin	Improving	Not yet discharged To civil life
5	"	Improved	"	Cardiazol	Recovered	Not yet discharged To civil life
6	"	"	"	Insulin	Improving	Not yet discharged To civil life
7	"	"	"			
8	"	"	Remained well			

There are as yet insufficient data on the question of relapse; but it must be stressed that at least two patients, after apparent recovery, became far worse than on admission, showing an acute agitation, with marked delusions of persecution.

4. *Shock Therapy*.—This was recommended for the cases of relapse and also for the case that was unchanged after narcosis, as well as for one which showed only very slight improvement after some weeks. Owing to relatives' objections, however, it could be given to only 4 cases, 2 of which received cardiazol and 2 insulin. Considering first those in Group 1, one which was given cardiazol was discharged recovered. Two given insulin are steadily improving but are not yet discharged. The three which were given no further treatment, as well as Case 3, which was given further somnifaine, were, as persons of unsound mind, only able to be sent either to their relatives or direct to civil mental hospitals—two are known to be in the latter. The eighth case in Group 1, as was seen, recovered without narcosis. The only other case given cardiazol recovered.

Prognosis

Prognosis must be regarded as very good, apart from the cases of agitated depression (Group 1). For of 62, only 2 were classified as "unfit for civil employment," and 3 others as "fit only for sheltered employment." Of Group 1, however, 4 showed practically no improvement, while 4 did improve. The dependence of recovery on adequate treatment (if necessary, shock) appears probable. Of the above-quoted 9 failures 5 were mental defectives. The follow-up of such cases is not yet adequate, but an effort is being made to keep in touch with them: so far none marked "fit" are known to have relapsed—the longest time after discharge, however, is only five months. It will be noted that no men returned to duty, whereas 57 went back to normal civil employment. This result is due to the instructions of medical boards, which have insisted till recently on the elimination of all those at any time diagnosed as depressive cases, discussion of which is beyond the scope of this paper.

Summary

The incidence (25.5%) of cases diagnosed as depression in admissions to a military mental hospital is noted.

These were classified into groups entirely on clinical grounds: no sharp differentiation could be observed between such groups, which could be regarded rather as a graded sequence of cases.

An analysis is made of various factors—predisposing and precipitating. No correlation between such factors and any one clinical syndrome could be found, with the exception of a syndrome following some time after severe bombardment. The occurrence of any type of depression does, however, appear to be the result of the interaction of external and internal factors.

The treatment is described.

The prognosis is considered good—59 cases out of 70 making a complete clinical recovery.

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