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MILITARY PSYCHIATRY DURING THE WAR WITH SPECIAL
REFERENCE TO THE EGYPTIAN EXPEDITIONARY FORCE.

THESIS

submitted for the M.D. Edinburgh.

by

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MILITARY PSYCHIATRY DURING THE WAR WITH SPECIAL
REFERENCE TO THE EGYPTIAN EXPEDITIONARY FORCE.

Up to the Great War, the subject of Mental Diseases in the Army had received very little attention; but our knowledge of these conditions has been considerably enlarged by experience gained in the War, and, new light has been thrown on the etiology and pathogenesis of Mental Affections and War Neuroses generally.

Before the War, there had been a recognized increase in the incidence of Mental Diseases, not only in the British Army, but also in the Armies of most European Countries. In the Armies of France and Germany, the incidence of Mental Diseases increased so much during the twenty years prior to the War, that the military authorities were much concerned and alarmed. In a large measure this apparent increase was, most probably due, to better methods of diagnosis and in the ability of better recognition of borderland cases. Dr. A. Cramer in Deutsche Militärärztliche Zeitschrift April 4th. 1910, states, that, in the period 1903 to 1907 the number of recruit

rejected from the German Army on account of Mental Diseases increased from 1-3 per 1000 to 1-8 per 1000. This increase Dr Cramer attributes to the better recognition of early cases of Dementia Praecox. Dannehl in Deutsche Militärärztliche Zeitschrift December 5th 1909 states, the increase in the number of recruits rejected from the German Army on account of Mental Diseases, to be due to the better recognition of Borderland Cases—neurasthenia, hysteria, moral degeneracy, epilepsy, imbecility, cerebral syphilis, chronic alcoholism, and the like-. The incidence of Mental Diseases in the German Army during the period 1897-1902 was .92 per 1000 of strength per annum. Since that period, there has been a steady increase in this incidence.

In the French Army, the incidence of Mental Diseases had also markedly increased. Thus in a period 1877-1904 the number of cases of Mental Diseases increased from 606 840 in the Army. Cases of idiocy and imbecility increased from 0.04 per 1000 in 1893 to 0.28 per 1000 in 1904.

The incidence of Mental Diseases has been stated to be greater in troops from Tunis, Algeria, Military Prisons than in other territorial troops; whilst General Paralysis was higher in incidence amongst the officers than the men.

In the American Army, which is a voluntary army, in 1912, the incidence of Mental Diseases was 1.68 per 1000

BRITISH ARMY. The following are pre-War statistics

1898 to 1907.

Recruits rejected for Mental Diseases 1.27 per 1000,
Rejected 3 months after enlistment for Mental Diseases
0.85 per 1000 1908.

1908. Recruits rejected for Mental Diseases 1.27 per 1000.
Rejected 3 months after enlistment for Mental diseases 1.16
per 1000. In 1908, 338 men were invalided out of the British
Army for Nervous and Mental Affections- epilepsy, melancholia
and delusional insanity being the commonest types-.

Thus in 1908 there appears to have been an increase in the
incidence of Nervous and Mental Diseases in the Army. This
increase of 1908, in the incidence of Mental Diseases was
at the time noted in other armies, particularly the armies
of Germany and Italy.

There appears then, to have been, prior to the Great
War, a steady increase in the incidence of Mental Diseases
in all armies. This increase, in a large measure, being due
to increased knowledge of the early signs and symptoms of
insanity on the part of medical officers and physicians
generally.

EFFECTS OF WAR ON THE INCIDENCE OF MENTAL DISEASES IN THE
ARMY. As already stated, the study of Mental Diseases in
the Army has, in the past, not been of any great extent.

The statistics of former wars show that Mental cases
invalided from armies were -

France Prussian War. 0.54 per 1000 of German Troops.

Cuban War. 2.7. per 1000 American Troops.

Boer War 2.6 per 1000 British Troops.

Balkan War. 0.33 per 1000 Bulgarian Troops.

0.25 per 1000 Montenegrin Troops.

0.25 per 1000 Serbian Troops.

Russo-Japanese War. 2. per 1000 Russian Troops.

The incidence of Mental Diseases in all armies which
took part in the Great War has eclipsed all former records,
and, has reached a figure far beyond any previous exper-
iences. Major Stanford Read states, in the Proceedings
of the Royal Society of Medicine, July 1919, that during
one year, in charge of the Mental Wards at Netley, 3000 cases
passed through his hands.

As a Mental Specialist in the Egyptian Expeditionary
Force for sometime, I have personal knowledge of 1169
mental cases which I invalided home. From August 1914 till
March 1919 the total number of Mental Cases invalided home
from all fronts was 12163. Of this 12163 some 814 had
previously had mental attacks, 8361 had been exposed to fire,
and 3489 had not been exposed to fire.

Sanger Brown in an article "Nervous and Mental Disorders in the Soldier" Mental Hygiene, April 1920 states "war increases Mental Diseases in an Army", 90% of the American Troops participating in the Great War were sound in every respect on enlistment. During the period, June 1918 to February 1919, 6093 cases of Mental Diseases were admitted to the American Hospital at Saveney in France. The Lunacy Board of Control of His Majesty's Government reports, that on January 1st 1919 the total number of patients under treatment in the Mental Hospitals of England and Wales was 116703. Of this 116703 total there were 49936 males and 66767 females. Thus, the total number of mental cases invalidated home from all Fronts, roughly represented one quarter the total males of unsound mind in England and Wales under treatment on January 1st 1919.

In the same report, the Board of Control makes the statement, that, the annual yearly increase in the number of male patients under treatment in the Mental Hospitals -*

<u>Annual Increase.</u>	<u>Males.</u>	<u>Females.</u>
1909.	1171.	1184.
1910.	842.	882.
1911.	1125.	1418.
1912.	1380.	1047.
1913.	1155.	1567.
1914.	972.	876.
1915.	1111.	1300.
1916.	1880.	1398.
1917.	1838.	1321.

has in the last five years, altered in ratio 5.
to the annual yearly increase in the number
of female patients under treatment in the mental hospitals

<u>Annual Increase.</u>	<u>Males.</u>	<u>Females.</u>
1918.	5456.	2732.
1919.	5801.	3337.

This is a factor which cannot be lost sight of. From the evidence above stated, it is quite apparent, that, War markedly increases the incidence of Mental Diseases in an Army.

TYPES OF MENTAL DISEASES IN WAR. Previous to the Great War, investigations into the types of Mental Diseases point to, Melancholia, Delusional Insanity, and Mania being the commonest Mental Diseases in Soldiers. The Psychiatrists in the Russo-Japanese War, state, Melancholia the outstanding insanity of that War. In the Great War, psychiatrists varied in opinion, as the following chart show.

Egyptian Cases - my own-

Part.	1. Melancholia 354.
	2. Mental Defect. 218.
	3. Delusional Insanity. 127.
	4. Psycho Neuroses. 91.
	5. Confusion and Stupor. 87.
	6. Mania. 80.
	7. Dementia Praecox. 61.
	8. Epilepsy. 38.
	9. G.P.I. 29.
	10. Alcoholic Insanity. 25.
	11. Secondary Dementia. 23.
	12. Febrile Insanity. 9.
	13. Maniacal Depressive Insanity. 8.
	14. Gross Brain Lesion. 7.
	15. Insanity of Impulse. 3.
	16. Alcoholic Pseudo G.P.I. 2.
	17. Somnambulism 2.
	18. Hysteria. 2.
	19. Traumatic Dementia. 1.
	20. Hallucinatory Insanity. 1.
	21. Drugs. 1.

- - - - -
Total. 1169.

Netley Cases - 3000- Major Stanford Read.

1. Dementia Praecox. 20% of cases.
2. Confusion & Stupor 17.5% of cases.
3. Delusional Insanity. 16.6% of cases.
4. Melancholia. 14.7% of cases.
5. Mental Defect. 13.0% of cases.
6. Mania. 6.0% of cases.
7. Alcoholic Insanity. 1.6% of cases.
8. Epilepsy. 1.2% of cases.

the hand.
Cases from Derby War Hospital- Major Eager.

1. Melancholia.....448.
2. Delusional Insanity..371.
3. Mental Defect.....338.
4. Confusion.....251.
5. Mania.....200.
6. Dementia Praecox.....200.
7. Neurasthenia &
Psychasthenia.....145.
8. G.P.I.....112.
9. Shell Shock.....68.
10. Stupor.....54.
11. Secondary Dementia....48.
12. Mental Instability....48.
13. Alcoholic Insanity....30.
14. Post Febrile Insanity.26.

15.	Not apparently insane.	25.
16.	Epilepsy.	41.
17.	Moral insanity.	6.
18.	Impulsive Insanity.	5.
19.	Hysteria.	5.
20.	Cerebral Syphilis.	3.
21.	Traumatic Dementia.	1.
22.	Tumour of Brain.	1.
23.	Tabes Dorsalis.	1.
24.	Somnambulism.	1.
25.	Not yet diagnosed.	1.

TOTAL.	2249.
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Boulogne Cases.	Capt. W.D. Chambers.
1. Mental Defect.	153.
2. Confusion.	136.
3. Psycho-Neuroses.	134.
4. Dementia Praecox.	101.
5. Melancholia.	98.
6. Delusional Insanity.	94.
7. Mania.	82.
8. Nervous Debility.	29.
9. Epilepsy.	27.
10. Mental Instability.	26.

II Not apparently Insane.	22.
I2. G.P.I.	21.
I3. Alcoholic Insanity.	12.
I4. Psychasthenia.	7.
I5. Stuper.	5.
I6. Moral Imbecility.	4.
I7. Various.	15.

TOTAL..	966.
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Cases from Dykebar War Hospital- Major R.D.Hotchkis.

1. Maniacal Depressive Insanity 188 or 21% Melancholia 133. Mania 31 Stuper.7.Mixed.17.	
2. Alcoholic Insanity.	152 or 18%
3. Mental Defect.	151 or 18%
4. Confusion.	134.or 16%
5. Dementia Praecox.	118 or 14%
6. Delusional Insanity.	44 or 5%
7. G.P.I.	22 or 2%
8. Organic Disease of Brain.	5 or
9. Epilepsy	7.
10 Secondary Dementia.	7.

TOTAL.	828.
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From the charts of the Egyptian, Netley, Lord Derby War Hospital and Boulogne cases, it will be obvious that, the various observers are in agreement as to the commonest types of insanity occurring in the troops during the Great War; the order in frequency of these types however is not constant.

1. My own observations in Egypt coincide with those of Major Eager at the Lord Derby War Hospital in placing Melancholia at the head of the list. This observation is in agreement with past records of Mental Diseases in War.

Sanger Brown states, that, the commonest type in the mental cases of the American Troops taking part in the Great War, to be Mental Depression, complicated with confusion, marked agitation, and pronounced inaccessibility. The late Sir Thomas Clouston in his book "Mental Diseases" says "Melancholia is the most common, as well as, the most curable Mental Disease"

2. My second group is that of Mental Defect. Capt. Chambers places this group first in his list of cases at Boulogne, and Major Stanford Read fifth in his cases at Netley, whilst Major Eager places this group third in his cases at the Lord Derby War Hospital. The occurrence then, of Mental Defect as a large group, has been noted by most military

psychiatrists. This has not been recorded in previous wars.

Mental Defect, figuring so largely in the Mental Cases of the Great War, is largely due to the man power required to swell the army in the later years of the War. Every available man was enlisted, and, the standard of physique lowered. The Mental Defects had, in Peace Time, carried on, shewn a minimum of intelligence; some had earned large wages at manual labour. The stress and strain of military service was sufficient to send the mental balance in a downward direction. In all probability, but for the war, these Mental Defects would never have come to the notice of the medical authorities at all.

3. In My third group of cases is Delusional Insanity. Major Read places this as his third group at Netley, and, Major Eager as his second group at the Lord Derby War Hospital. In the Russo-Japanese War, Delusional Insanity was the third group of the recorded Mental Cases.

4. My fourth group of cases is the Psycho-Neuroses, viz. Neurasthenia and Psychasthenia. Strange as it may seem, Psychasthenia was a mental disease quite unheard of by some of the Presidents to Medical Boards in the Egyptian Expeditionary Force; and, many were the bearding papers returned to me in consequence. Only after a revised nomenclature of mental

diseases had been circulated to the Medical Boards, could one diagnose a case ^{as} ~~of~~ Psychasthenia without fear of comment.

The number of cases in this group seems to vary in frequency according to the statistics of Military Psychiatrists. Lieut.Colonel¹ Hamilton Marr, whilst consulting neurologist at Malta, cites 3000 cases seen by him. Major Eager places this group 7th in his cases from the Lord Derby War Hospital, and, Capt Chambers 3rd in his case at Boulogne; whilst some observers omit this group from their case lists. In previous wars this group of Mental Diseases does not appear to have been observed.

That, the Psycho-Neuroses have been observed in such numbers during the Great War, is due to our increased knowledge in the field of psychology, and to our better understanding of functional disorders of the nervous system, together with, less necessity on the part of Medical Officers to be on the outlook for malingering. The constitution of the Army in the Great War was vastly different to the constitution of any army before, the methods of fighting also, unique, in the experience of human knowledge, and of human nerves.

5 In my fifth group of cases I have classed Confusion and Stupor. I have taken these two Mental conditions together

as my experience in Egypt was, that Confusion merged imperceptibly into Stupor; the difference in the two mental states being only that of degree. Major Stanford Read apparently had similar views at Netley, as he speaks of "Confusional States varying from slight obfuscation to Stupor".

The late Sir Thomas Clouston in his book "Unsoundness of Mind" considers that the two conditions are allied, he says "I look on confusional conditions and stupor as being essentially of the same character and due to the same causes." Some observers in the war do not agree with this view however, thus Capt Chambers places some of the cases of confusion and stupor, seen by him at Boulogne, in the Psycho-Neuroses group whilst by far the larger number of cases of confusion he calls Confusional Insanity. Major Hotchkis, at De Keyser War Hospital, places Stupor as a sub-group in Maniacal-Depressive Insanity.

Many alienists prior to the war believed that Confusion and Stupor were secondary to Melancholia, Mania, Dementia Praecox etc. In the army mental cases were seen quickly, and it was impossible for anything but the most transient of Mania or Melancholia to have occurred in my cases of Confusion and Stupor. I most firmly believe, that Confusion or Stupor

can be a distinct and discreet mental disease, and is.

Clouston held that Confusion and Stupor were stages of Mania, Melancholia etc, or that, they constitute a distinct class of mental unsoundness. That Confusion and Stupor are due to the same causes I shall point out in discussing etiology.

6 In my sixth group of cases I have placed Mania. This Mental Disease is noted as amongst the seven commonest varieties by most Military psychiatrists. The position of Mania is fairly consistent in the charts of the various observers on mental diseases ^{the} during war.

7 In previous wars Mania has been noted as a common type of Mental Disease in Soldiers. In my seventh group of cases I have placed Dementia Praecox. From the charts it will be seen, that a variety of opinions as to the frequency of Dementia Praecox has been arrived at; but, perhaps the mental experts in the army are no more varied in opinion regarding the frequency of this disease, than are the alienists of civilian practice.

Read places Dementia Praecox at the head of his list of cases at Netley, Eager sixth in his cases at the Lord Derby War Hospital, Hotchkiss fifth in his cases at Dy Kebar War Hospital and Chambers fourth in his cases at Boulogne.

The weight of evidence then, is against this disease being as frequent as Read experienced.

In civil practice Stoddart has found Dementia Praecox to constitute one eight of the admissions to Asylums, but the reports of Medical Superintendents from the various Mental Hospitals in the country, vary greatly on the frequency of this mental disease. In 80% of my cases of Dementia Praecox the age incidence was 20 to 25 years of age. None of my cases were over 30 years of age. Hamilton Marr, at Malta, found the age incidence for Dementia Praecox to be 21 to 25 years of age.

In civil practice Maurice Craig found the age period for Dementia Praecox to be up to 25 years of age.

In civil practice Stoddart gives the following statistics

10 years of age	3.5 %	40 years of age	5.0%
15 " " "	2.7%	45 " " "	3.3%
20 " " "	21.7 %	50 " " "	1.2%
25 " " "	25.2 %	55 " " "	1.1%
30 " " "	22.8%	60 " " "	0.2%
35 " " "	13.0 %		

Exhaustion, fatigue, wounds, illness, quickly induces a condition of Dementia Praecox in a soldier so pre-disposed. Sir James Purves Stewart, whilst consulting physician in the Mediterranean, said to me " Look upon Dementia Praecox as an exhaustion psychosis".

8 Epilepsy. In my military practice the Larval Forms of epilepsy were more numerous than the Major or Minor.

9 G.P.I. 29 cases or 2.48% of my total mental cases. In peace time, G.P.I. forms 7% of mental diseases in the European Armies.

In the Russo-Japanese War. G.P.I. accounted for 5.6% of the Mental Cases in the Russian Army.

In civil practice G.P.I. is roughly 11% of the total male population. In military practice I found the signs and symptoms were well defined, the incubation period shorter than in civil practice, and the course of the disease more rapid than in civilian cases.

The age incidence of my military cases was 35 years to 45 years, the syncopal seizures the commonest, whilst the exalted & tabetic types were most frequently met with. In 75% of my military cases of G.P.I. a history of previous syphilis was obtained, whilst the Wasserman Test on the cerebro-spinal fluid yielded valuable diagnostic evidence in all 29 cases.

10 Alcoholic Insanity. I found most frequent in garrison troops.

11 Secondary Dementia. was most frequently met with in the older men belonging to the garrison troops. Either a history of excesses or ^{of} a previous nervous illness was obtained in

most cases.

Illnesses

/2 Post Febrile Insanity, usually followed illness such as pneumonia. One death occurred in this group.

/3 maniacal Depressive Insanity. exalted and depressed states were fairly equal. Age incidence 20 to 25 years.

/4 Gross Brain Lesion. In this group I have classed cases of cerebral arterie sclerosis, brain tumour, injuries to brain tissue and all conditions indicating cerebral softening 40 % of cases occurred from 45 to 50 years of age, 20% to 50 to 55 years, 20% 35 to 40 years, and 20 % 30 to 35 years of age respectively.

/5 Insanity of Impulse occurred in three men from the Detention Barracks. Their crime sheets were very full and no amount of punishment had any deterrent effect upon their impulsive homicidal acts. One case would not control his impulse even at the invaliding Board. All three were of low

/6 grade mentally, and between 25 to 30 years of age. Alcoholic Pseudo G.P.I. occurred in two soldiers, one between 25 and

/7 30 years of age, the other 30 to 35 years of age. Somnambulism

Two men acquired this after enlistment. They remembered nothing of their somnambulistic acts and the condition had

/8 no ill effects upon them. Hysteria. No unusual symptoms.

- 19 Traumatic Dementia followed in the instance of a cavalryman who was concussed after being thrown. No apparent injury was sustained, but his memory remained a complete blank. He did not know his name nor his unit, nor where he was; in consequence of which supervision in Mental Wards was considered necessary.
- 20 Hallucinatory Insanity occurred in one man of 25 years of age. The mental condition followed an operation for bony necrosis, and a complication of exhausting illnesses,
- 21 Drugs. One case due to Haschisch.

MENTAL CASES FROM EGYPT ARRANGED ACCORDING TO

Melancholia.	Infantry.	Cavalry.	R.A.	R.A.M.C.	R.A.S.C.
Melancholia.	214.	13.	35.	13.	23.
Mental Defect.	150.	5.	16.	6.	14.
Delusional Insanity.	81.	3.	8.	8.	9.
Psycho- Neuroses.	33.	8.	14.	6.	13.
Confusion & Stuper.	59.	2.	7.	4.	5.
Mania.	37.	9.	8.	6.	8.
Dementia Prae- cox.	38.	4.	3.	3.	1.
Epilepsy.	25.	2.	1.	1.	3.
G.P.I.	13.		3.	3.	5.
Alcoholic Insanity.	16.	1.	1.	1.	1.
Dementia.	18.		2.		
Post Febrile Insanity.	6.	1.			1.
Maniacal De- pressive.	6.	1.			
Gross Brain Lesion.	6.				1.
Insanity of Impulse.	3.				
Alcoholic Psuedo.G.P.I.	1.			1.	
Somnambulism.	1.				
Traumatic De- mentia.		1.			
Hysteria.	1.			1.	
Hallucinating Insanity.		1.			
Drugs.			1.		
TOTALS.	708.	51.	98.	54.	84.

TYPE AND ACCORDING TO REGIMENTAL UNITS.

R.E.	R.A.O.C.	R.A.V.C.	M.G.C.	R.A.F.	R.N.	Totals.
21.	3.	2.	10.	5.	15.	354.
7.	5.	3.	3.	6.	3.	218.
10.	1.	1.		2.	4.	127.
8.	3.		1.	5.		91.
6.			2.	1.	1.	87.
4.	1.	1.	1.	2.	3.	80.
6.	1.	0.	3.		2.	61.
2.	2.				2.	38.
1.		1.		3.	3.	29.
2.			2.	1.		25.
1.		1.		1.		23.
					1.	9.
					1.	8.
						7.
						3.
						2.
					1.	2.
					1.	1.
						2.
						1.
						1.
						1.
68.	16.	9.	22.	23.	36.	1169.

SUICIDAL ATTEMPTS. These attempts were frequently made by patients prior to admission to hospital. Somewhere about 10% of my cases were actively suicidal and had attempted suicide. I can only recall one instance of actual suicide, and that occurred en route for England. In my experience, suicidal attempts after admission to hospital are rare; one of my patients made the attempt by precipitating himself head first down the stone stair of the Citadel Hospital in Cairo.

X Strange, as it may seem, soldiers do not resort to military weapons in attempting suicide. I had one case only of attempted suicide by means of a bayonet, and that before admission to any hospital. I am of opinion, that, a revulsion or disgust to all things military, accounts for so few suicidal attempts being made with weapons. This point is conceded by other Military Psychiatrists. The razor, strangulation and hanging, were the common methods in attempted suicide.

Suicidal attempts ^{most} frequently occurred in Melancholia, Delusional Insanity and Psychasthenia. All cases of Melancholia, I consider potentially if not actively suicidal; in consequence Melancholics in my wards received constant observation. Suicide is the reaction of an individual to a psychic conflict, which has assumed such magnitude, that, the instinct

of Self Preservation is quite over ridden. As a result of the psychic conflict, a dissociation takes place, and, the suicidal act occurs during this dissociation. ^{How?} In other words, if emotion leads, in spite of knowledge and will power, to impulsive action, the threshold of a suicidal act has been reached.

INSANE DELUSIONS. Clouston has defined an insane delusion as "a belief in something that would be incredible to people of the same class, age, education, or race, as the person who expresses it; these beliefs being persisted in, in spite of proof to the contrary and resulting from a diseased or defective brain action".

Now normal beliefs are, to a large extent, the traditions and ideas which have been handed down by parents and teachers. In estimating the normal, in relation to belief and idea, the opinion of the majority holds good.

Insane delusions are inaccessible to argument, because they do not originate in experience; experience therefore is unable to correct them as long as they remain delusions. The insane man, suffering from delusions, prefers to be guided in these delusions by his own feelings and sensations, rather than, by force of reasoning.

Insane Delusions result from disordered or unstable cerebral action, which is secondary to-

- I. Alteration in feeling and sensation from the normal.

2. Strong emotional states.
3. The Clouding of Consciousness.
4. Loss of powers of comparison.
5. Defective memory and attention.
6. Hallucinations.
7. Cerebral toxæmia. *not a psychic process*

In civil practice the delusions of the insane are found to be more or less coloured according to the profession, religion etc of the patient ^{so} suffering; whilst the tint of the delusion varies with the current topics of experience.

In 1915 Sir James Crichton Brown, speaking at the annual meeting of the Asylum Workers Association, in London, stated that he was of opinion that the great aftermath of the war would bring increased responsibilities on Asylum Workers in the shape of new experiences in the manifestations of insanity. Especially was he convinced that Delusions would be highly tinted and coloured by the experiences and episodes of the War.

This has been my experience as a Military psychiatrist. Delusions of persecution, mostly founded against the Sergeant Major or Company Officer, I found extremely common. Delusions of having to fight as the enemy was upon them, made some of my patients extremely homicidal to any one of whom they had no previous knowledge and experience. Delusions regarding the

Sinn Fein movement were frequent amongst Irish Troops who came under my care. A very common delusion, more common after the opening of venereal compounds and the circulation of literature on the prevention of venereal disease amongst the troops, was that of having contracted some form of venereal disease. I can recall a Melancholic who kept on all day saying "got venereal doctor"; who when questioned did not even know what venereal disease was, and had no evidence of ever having suffered from it, nor had he exposed himself to the risks of contracting it. This delusion, in my opinion, arose from suggestion during disordered cerebral action. It is different from syphilophobia, an obsession met with in neurasthenics and psychasthenics, which in my experience only occurs in those who have either had the disease, or, have exposed themselves to the risks of contracting it. X

These few examples suffice to show the kind of delusions met with in Military Psychiatric Practice.

HALLUCINATIONS. Lewis Bruce defines as "false sense impressions which occur without normal external stimuli!"

Clouston in his book "Unsoundness of Mind" has written regarding hallucinations- " One has merely to suppose that the cells which receive, let us say, the impressions from the eye, which to consciousness at the time are very vivid, and

which we call presentation are unduly stimulated from some irritant, and that without external stimuli from the eyes the cells themselves pass into the former activity of presentation instead of the subdued activity of memory or re-presentation, so that consciousness cannot distinguish the difference at the time; and you have what is called a visual hallucination, The vision then is from the brain cells not from things seen by the eyes".

due Hughlings Jackson has stated, that, hallucinations were ~~due~~ to over activity of the lower brain centres resulting from non activity of the higher brain centres. Stoddart considers that hallucination depend upon two factors (a) diminution of sensation (b) disturbance of association.

Hallucinations indicate either, a condition of toxæmia, or, nervous exhaustion of a profound nature. In civil practice hallucinations have been found to occur in 70% of mental cases; and in the following order of frequency, (1) auditory, (2) visual, (3) gustatory, (4) tactual. In military practice I found visual hallucinations to be much more common than my experience in civil practice had lead me to believe. The visual hallucinations in the soldier appeared to be much more vivid and terrifying than one had observed in civilians.

The eyes of the soldier in the fighting line play such an important role, that I believe, in the production of

visual hallucinations his higher visual centres, through exhaustion, lose control and cease to function.

Hallucinations I found commonest in those addicted to alcohol and drugs. The visual hallucinations, in my patient addicted to the use of haschisch, appeared to me to be the most vivid and terrifying of any insane patient I had ever had under my care.

PHOBIAS & OBSESSIONS. These are ideas imposed upon the mind in spite of the will power, the patient being mentally lucid and quite conscious of both their presence and absurdity; but being quite unable to rid himself of them. These morbid mental phenomena are found in people whose mental and nervous equilibration is not on a sound basis- psycho-neurotics- Officers suffered, in my experience, more than the men; whilst the commonest types were.

1. Folie de Doute or Mental Indecision.
2. Abulia or Deficient Will Power.
3. Syphilophobia or Dread of having syphilis.
4. Delire du Toucher or Fear of touching objects.

Now phobias and obsessions occur in many people and as long as they do not influence behaviour and conduct, the person so affected cannot be said to suffer from a Mental Disease. Legrain asserts that obsession bears the same relation to idea as impulse does to action.

Phobias and obsessions give some idea of the fineness of the line between sanity and insanity. Phobias and obsessions are greatly intensified by fatigue, exhaustion and illnesses. For this reason, perhaps their intensity appeared to be greater in military cases than in civil cases.

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ETIOLOGY.

ETIOLOGY.

In civil practice, alienists have found difficulty in assigning a cause to the various types of Mental Diseases. Of this Clouston has written in his book "Unsoundness of Mind" as follows, "Of all known diseases or disturbances of function, unsoundness of mind is the most difficult in which, in many cases, to assign a definite cause. The more however, we investigate the heredity of mental cases, the more we know of their personal history and previous environment, the more exhaustively we analyse the symptoms present, mental and bodily, and the more we utilize recent discoveries in regard to brain structure and function and the facts of psychology, and the more we know about the causes of diseases in general, the greater are our successes becoming in determining an accurate causation".

In military practice, as an alienist, these difficulties were increased manifold. Many of my patients were admitted to hospital with only such information on their labels, as, Mental, not yet diagnosed Mental, Mental Observation, usually given by regimental medical officers, Others again came with a "chit" from commanding or company officers, to the effect that, for some few days their behaviour and conduct had been unusual.

In many instances the patient's own statement as to his previous habits, health, and environment was, the only available guide for purposes of a clinical history.

The onset of Mental symptoms too, in many cases gave no clue as to causation. One naturally expected mental symptoms to coincide in onset, with the stress and strain of a battle engagement. In this, most military psychiatrists were very far wrong. It is an established fact from the observations on Mental Cases from all Fronts, that, mental symptoms do not coincide with a battle engagement. Indeed, many of my patients had not developed symptoms of mental disease for some considerable period of time after an engagement, and not a few till after serving for some time in garrison troops, in consequence of having been put into category B, on account of some physical ailment.

Again, the environment of the soldier being so different to that of the civilian must be taken into some account, in the etiology of military mental cases. High explosives, aerial bombs, machine guns, noxious gases, submarines etc together with the irksomeness of military discipline and an unutterable monotony, have played no unimportant a role in the causation of mental diseases during the war. There can be no doubt that many men, even in whom there was a strong predisposition to mental disease, would never have had a mental breakdown, but for, the strain imposed upon

them in the execution of military duty. Most military psychiatrists agree that a perfectly sound brain can scarcely become unsound from mental causes. In the army, even more than in civil practice, one was convinced that many of the so called causes given for the mental breakdown were secondary. Even more than in civil practice, the military psychiatrists admit mental disease to be the result of a multiplicity of unnatural and unusual circumstances in which the individual has been placed. Dr Farquhar Buzzard, in his presidential address to the Section of Psychiatry, Royal Society of Medicine published in the Lancet December 3rd 1920. lays emphasis on this fact. With the aid of scrappy and somewhat unreliable information of my cases on admission, by accurate observation of their physical condition, by carefully weighed analysis of the signs and symptoms present, both bodily and mental, and by the collaborate help of the pathologist in the examination of the fluids and excreta of the body, I have formed opinions as to the etiological factors, both predisposing and exciting, concerned in the mental patients committed to my care in the Egyptian Expeditionary Force.

PREDISPOSING FACTORS.

I. HEREDITY. Records of family histories in my military cases were limited and unreliable; but, I think from the large percentage of Mental Defectives in my chart, one is justified in assuming "Heredity" as a predisposing factor. Again, in many of my psychasthenics and neurasthenics I obtained conclusive evidence of a family history of mental or nervous instability. In civil practice, the question of heredity as a predisposing cause in mental diseases, has created much discussion and controversy. The observations of such eminent authorities on the subject as Sherlock, Tredgold, Shuttleworth and Potts dispel any grounds for doubt. All these observers indicate that, an evil nervous heredity is the most potent, and, that the most frequent predisposing factor in the causation of Mental Disease. As recently as October 1920 Dr. Reynolds, in his presidential address to the Section of Neurology, Royal Society of Medicine states "Heredity is probably the commonest primary cause of nervous diseases. The bulk of insanity is handed down, nearly all epilepsy, migraine, psychasthenia, much neurasthenia, habit spasm, adult chorea, the tendency to early cerebral arterio-sclerosis, Friedreich's ataxia, hereditary cerebellar ataxia, familial spastic paraplegia, perineal atrophy and the various types of myopathic paralysis"

2. Temperament. Not only is temperament a potent predisposing factor in the causation of mental disease; but is also a determinant in the type of mental disease produced. Fryer Ballard in an article Journal of Mental Science October 1918 defines temperament as " the sum total of inherent emotional potentialities and kinetic tendencies peculiar to the individual". In the same article Fryer Ballard states, that normal people in extremely adverse circumstances may develop a psychosis; and further that abnormal temperaments merge into psychoses and psycho-neuroses. He classifies abnormal temperaments as - hysterical. psychasthenic epileptic, paranoiacal, manic- depressive, dementia praecox.

3. Previous Attacks. All authorities agree to previous attacks of insanity being a predisposing cause. This experience is borne out both in civil and military practice.

4. Arterial Degeneration. (a) Alcoholic. (b) Syphilitic

This predisposing cause was much impressed upon me in my military practice. Old soldiers, with marked old standing arterial degeneration, required a very small exciting cause to bring about a mental breakdown.

EXCITING FACTORS.

I. Stress of Military Service. By this military psychiatrists do not mean Stress of Battle It is the general

experience amongst observers in military psychiatry, that a great proportion of mental cases had never been under fire. Quite 30% of my own mental cases, in Egypt, had never experienced a battle.

(a) Unutterable Monotony. I put this as the most important factor in Stress of Military Service in my experience.

When the life lead by the troops in the desert of Egypt is analyzed, it is not difficult to appreciate this factor in the causation of mental disease, ⁱⁿ these so predisposed. Long ^{routine} periods of waiting, with sand all around and no variety in life, infrequent leave, no refining influences of any kind, is to be wondered at that Melancholia heads my list of Mental Disorders.

(b) Inability in Adaptation to Rigid Discipline. This results in such individuals thus constituted being in continuous trouble, their crime sheets are well filled, they are always appearing at the Orderly Room. The experience of the War has clearly demonstrated the fallacy of general conscription. It is not every constitution which can adapt itself to military discipline. On duty no redress to imaginary grievances is available; but at leisure or on leave such individuals experience a reaction. They become analytical and introspective; whilst delusions, psychasthenia and, neuroses, are liable to result from this analysis and introspection.

- (c) Anxiety due to leaving Home, Relations, Dependents.
- (d) Fear of Financial Loss through Enlisting.
- (e) Blight of Ambition in Civilian Life.
- (f) Constant dread of being killed or wounded
- (g) Infrequent Reception of News from Home.

This was a common and constant experience in the Eastern War Areas owing to the submarines in the Mediterranean.

- (h) Exhaustion due to Strenuous Fighting, Marches, Drills etc.

This may cause insanity in those so predisposed. The fact that extreme physical exhaustion, per se, does not cause insanity, is shown in an article by the War Correspondent of the Daily Chronicle, who, on April 3rd. 1918 described the condition of men fighting continuously for six days and six nights as follows:- "They were tired to death almost, and when called upon to make one last effort after six days and six nights of fighting and marching, many of them staggered up like men who had been chloroformed, with dazed eyes and grey and drawn faces, speechless, deaf to words spoken to them, blind to the menace ^{around.} ~~around~~ them, seemingly at their last gasp of strength.

Towards the end of this fighting they had a drunken ^{standing} craving for sleep, and slept/with their heads falling against

the parapet. In body and brain these men of ours were tired to the point of death. They felt like old old men. Yet after a few days' rest they were young and fresh. It was almost impossible to believe they were the same men. They had washed off the dirt of battle and shaved, and the tiredness had gone out of their eyes and their youth had come back to them".

2. EASTERN DISEASES.

a. Malarial Infection. In the East quite 60% of the Mental Cases invalided home had contracted Malaria Fever.

Major Barton White of the Metropolitan Welsh War Hospital at Cardiff, in the Journal of Mental Science, October 1920, places Malarial Infection second as an exciting factor for his mental cases.

My own experience, in Egypt, confirms Malaria being of prime importance in the causation of insanity, more especially in causing states of Confusion and Stupor. In an earlier part of this thesis I have made reference to Confusion and Stupor being allied conditions of mental unsoundness, and, being due to the same causes. Such a large proportion of my cases, infected by malaria, were conditions of Confusion and Stupor; that I concluded the Malarial Poison to be of prime importance, as an exciting factor in the

Mental.

causation of these ~~Malarial~~ States. My observations have been borne out by military psychiatrists working in other malarial stricken war areas. Particularly in the Malaria stricken Struma Valley of Salonica has this observation been confirmed.

Major Eager, at the Lord Derby War Hospital, gives 16% of his cases as being from the Salonica Expeditionary Force and cases of Confusion and Stupor. It is not difficult to appreciate how Malarial Poison can produce states of Mental Confusion and Mental Stupor. The cerebral arteries plugged with the debris of red blood corpuscles, anaemia and deficient oxygenation of brain tissue ensues. The malignant Tertian form of Malaria produced more insanity than the Benign Tertian in my cases from Egypt.

(b) Dysentery. (1) Amoebic. (2) Bacillary.

Not infrequently this disease complicated Malaria, and consequently, the double intoxication must be looked upon as an etiological factor in the causation of insanity, The Bacillary Form appears the more potent in this respect; and in many of my cases was the only etiological factor.

(c) Phlebotomus Fever. Caused insanity in a small percentage of cases. This disease appeared to be indigenous to certain areas in Egypt, particularly in the vicinity of Cairo; and, at times epidemics assumed great dimensions.

In my experience Phlebotomus Fever has the same residual deleterious effect upon the heart as Influenza. This is also recorded by Boyd and Ritchie of Edinburgh, Cowan of Glasgow, Strong of Melbourne, all of whom were consulting physicians in the Egyptian Expeditionary Force

(d) Relapsing Fever. A disease which occurred at times amongst officers and men in charge of the native labour corps camps. Caused insanity in a small number of cases.

(e) Typhoid, Para-Typhoid A & B Cholera.

(f) Confluent haemorrhagic Variola. Accounted for one case of insanity, which I was asked to see, at the Isolation Hospital in Alexandria. Of all Eastern Diseases, Malaria is undoubtedly the most potent in the causation of Insanity in my experience,

3. CLIMATE. In a small number of cases, may have caused insanity. Prior to the War, medical men practising in India had observed that European resident in that country were more prone to insanity than the natives. I do not consider, Climate, per se, sufficient to cause insanity.

4. Syphilis accounted for every case of G.P.I. in my list of mental cases - 29 or 2.48% of total mental cases-

5. Alcohol. Lepine in his work "Troubles Mentaux de la Guerre" which he published in 1917 states, alcohol to be the cause of one third of the mental cases which came under his care. He saw some 6000 cases of mental disease in the War.

Renee Charon in "Psychopathologie de Guerre" June 1915 states, that alcoholism in the French Army was the principal and immediate cause of ^{psychic} ~~physic~~ illness. He, further, attributes 32% of his mental cases to alcohol. In the Russo-Japanese War alcohol appears to have been a potent factor in the causation of insanity; accounting, it is said for one third ^{of the} total mental cases. Capt. Napier Pearn in the Journal of Mental Science April 1919 states, that alcohol accounted for 10% of the mental cases seen by him; whilst Major Hotchkis states alcohol to have caused 18% of the mental cases seen by him at Paisley.

Major Stanford Read, in the Proceedings of the Royal Society of Medicine, July 1919 finds 1.6% of the mental cases seen by him at Netley, due to alcohol. In my own cases 29 or 2.13 % were directly attributable to excessive use of alcohol.

(6) Mental Stress.

(a) Infidelity of Wife in a few of my cases.

(b) Worry over the Disgrace of Contracting Venereal Disease.

This apparently, was the exciting cause, in not a few of my cases; and produced Suicidal Melancholia.

(c) Continual Fear of being thought Afraid. In young officers and non commissioned officers. Common in fighting line cases.

(7) WOUNDS. I did not have many cases of mental disease which I could attribute to wounds.

My experience is, that severe wounds can cause the mental

states of Confusion, Stupor, Dementia Praecox. Wounds to the head, in my experience rarely caused insanity, except in cases where there was definite injury to Brain and Nerve Tissue. Wounds involving large surfaces, with great loss of tissue, and often requiring operative treatment; in my experience, produce psychoses similar to those produced in conditions of exhaustion and toxemia.

(8). INTENSE EMOTIONAL CONFLICT. This is a causation of Mental and Nervous breakdown of by no means the least importance. This etiological factor in the psychoses and neuroses of war is one which has been predominant in firing line cases. During battle, there is a curious change in the habits and thought of the soldier. The fact that he is faced by an emergency, upon the proper solution of which may well depend the safety, not only of himself, but also of his country, alters altogether his outlook. The tendency to see in destructive happenings elements of gain is but a reflection of the spirit of rationalization. Emotional shock and conflict may cause reactions of an abnormal kind. A nervous system under the stress of battle, already weakened by fatigue, loss of sleep, hunger, may, in the presence of intense emotional shock, react, so that, the primitive instinct of Self Preservation is aroused into activity, dynamical, automatic, and uncontrollable. This response to Emotional Stimuli protects the individual from re-experiencing the experience, in the same way that fatigue prevents the

individual from destroying his complete organisation by fatal overdose.

The Primitive Instinct of Self Preservation, together with the Intense Emotional Shock, has brought about a protective factor for the individual, in the guise of a disease picture. This disease picture is a neurosis, psycho-neurosis or psychosis, depending upon, whether the nervous or mental qualities of the complex nervous system have been mostly involved in the reaction of protection.

In the Emotional Conflict occurring during battle the idea of the Self is predominant. MacCurdy in an article "War Neuroses" Psychiatric Bulletin, July 1917 says " In active warfare man's aggressive instincts are sublimated, and the development of a neurosis is due to failure of this sublimation, whereby he becomes more individualistic, and feelings of personal harm become more paramount" The production then of Psycho-Neuroses is a defence mechanism, which results in the successful removal from the environment.

This interpretation of Emotional Conflict resulting in the production of a Defence Mechanism, Explains the so called "Shell Shock" which is in reality a psycho-neurosis having a multiplicity in its obvious manifestation.

The Emotional Conflict may hold the whole mind and result in dominating conduct and behaviour. The Defence Mechanism of Emotional Conflict in the establishment of a disease picture, is no new idea. The late Sir Thomas Clouston wrote on the subject in 1911 in his book "Unsoundness of Mind" "The experiences of alienists during the War have been more and more convincing in establishing its universal acceptance. War has proved the fact, that, Emotional Conflict may become so intense that (1) any soldier under given circumstances of war environment can develop a psycho-neurosis (2) the potential neurotic of civilian life, not only more readily develops a psycho-neurosis than the normal soldier, but, that such an individual is less capable of reacting to proper treatment, and is less easily cured.

Endocrine

9. ALTERATION IN QUANTITY AND QUALITY OF ENDOCRINE SECRETIONS

The study of the internal secretions has for some years attracted much attention, and both, physiology and pathology has enhanced our knowledge greatly, regarding their functions. Particularly has advance been made in our knowledge of the functions of the secretion of the Thyroid Gland. Every physician is now fully cognisant of the symptoms associated with hyper secretion and hypo secretion of the Thyroid; and, the mental symptoms of excitability and, depression with the

slowing of thought, attributable to hyper and hypo thyroidism respectively.

Similarly "Addison's Disease" has given us some knowledge of the symptoms resulting from hypo secretion of the Adrenal Gland; whilst, the normal disappearance of the Thymus Gland after puberty, gives us knowledge, that, the Thymic Secretion has some influence upon bodily growth and bodily development.

Within recent years much research has been carried out on the Endocrine Glands in an endeavour to establish a relationship between their abnormal functionings and the etiology of Mental Diseases.

Sir Frederick Mott, in a research on the Testes and Ovaries has demonstrated a relationship between, hypo-secretion and existing Dementia Praecox. These investigations are fully published in the Proceedings of the Royal Society of Medicine June 1920.

My own clinical observations, both in civil and military practice, have convinced me of a definite relationship between testicular hypo-secretion and existing psychasthenia. Again Sir Robert Armstrong-Jones in the Journal of Mental Science July 1917 states, that Emotional Stimuli have certain definite activities on bodily secretions including the endocrine secretions. The subject is as yet in its

infancy; but is worthy of further investigation and elucidation.

TREATMENT.

Up to the time of occurrence of the War, and also for some time after the outbreak of hostilities, the treatment of the insane soldier was woeful in the extreme. The insane soldier was looked upon as a nuisance, a malingerer; and the military authorities had no further use for him. The military authorities were slow in adopting the humane and scientific methods of treatment for mental patients.

Accommodation. At the outbreak of hostilities, the only accommodation for mental cases occurring in the British Army in Egypt, was at the Citadel Military Hospital in Cairo. Such accommodation consisted of a small ward containing ten beds, and, was an annex to the Hospital Detention Wards. The Medical Officers in charge of this so-called Mental Ward were not experienced psychiatrists. In addition, the army regulations did not permit of a Ward Sister being in charge of the Mental Wards. Such then, was the condition of affairs in Egypt up to 1916. As hostilities proceeded, the number of Mental Cases assumed such proportions, that, the Military Authorities awakened to the fact, that, Medical

Officers experienced in psychiatry might profitably tend to the mental patients; and also, that extra accommodation for such patients was a crying need. Extra accommodation was consequently obtained for mental patients by (1) increasing the bed accommodation for mental patients at the Citadel Hospital in Cairo, (2) Provision for a few military mental patients at the State Asylum, Abbasia in Cairo. (3) The constitution of Mental Wards at 19th General Hospital in Alexandria.

I. Citadel Hospital, Cairo. At this hospital, the extra accommodation for mental cases consisted in, the acquisition of a Barrack Block, from the Garrison. This Block had previously been utilised for the detention of alien prisoners of war, and had all the appertainances required for such a use in consequence. Not an ideal place for classifying, segregating, and treating persons of unsound mind. In fact classification of cases was quite out of the question, all one could attempt to do was to house the insane in this building. The acquisition of this Barrack Block as a Mental Ward increased the bed allotment for mental patients by 60. At times, however, the number of mental patients housed in this Block was nearly 100.

The Mental Ward at the Citadel Hospital constituted a section of the Medical Division of the Hospital; whilst the Medical Officer in charge came directly under control of the Medical Divisional Officer, and, had limited scope for exhibiting administrative capabilities, or, of pursuing scientific methods of treatment.

My staff at the Citadel Hospital consisted of one non commissioned officer, and, orderlies varying in number from 12 to 20. The question of orderlies was always a difficult one. Not infrequently my orderlies were taken from me for duty in other wards of the hospital. Again, after the second battle of Gaza, all R.A.M.C. men who were physically fit were compelled to join a fighting unit; and, were replaced by physically unfit infantry men, who were quite unsuited for the duties of mental nurses. In course of time, however, I persuaded the A.D.M.S. to sanction the Sisters from a neighbouring department of the hospital taking some interest in my Mental Ward. Eventually, those sisters took a very keen and active interest in my work, and, although not definitely posted to my ward for duty, still time came, when my official round was always done in the company of a fully trained hospital nurse; she received my instructions and was invaluable in supervising the orderlies in their

duties. This was however, a new departure from army regulations. Of the benefits that accrue from the nursing of the insane by fully trained hospital nurses, others, as well as myself, have emphasised and written upon prior to the War.

(2) State Asylum, Cairo. The house of the Assistant Director being unoccupied, accomodation for 25 mental patients was available. An Officer of the R.A.M.C. assisted the Director in the supervision of the military mental cases; whilst one non commissioned officer and sixteen orderlies were allowed for nursing duties. The surroundings of this habitation could not be said to be ideal for the treatment of mental patients. The fact of being in an Institution along with various races and types of humanity was an indignity to our brave soldiers.

I9. General Hospital. Alexandria. This hospital built by Austrians prior to the War was modern and up to date, and provided accomodation for 100 mental cases, whilst, (apart from a regular mental hospital) the site, situation, and accomodation for those cases was as ideal as could be expected. The medical officer in charge also had sufficient scope both for administration and in pursuing modern methods of treatment. My staff at I9 General Hospital consisted of 2 Day

Nursing Sisters, 1 Night Nursing Sister, 1 Non Commissioned Officer, 12 Day Orderlies and 6 Night Orderlies; whilst any extra help, if required, was always obtainable.

These various hospitals afforded habitation for the Mental Cases in Egypt, and, with the exception of the last named, much more could have been desired.

Alienists in other theatres of war experienced the same difficulties. Capt Chambers writes of a similar state of affairs at Boulogne; whilst many journals and periodicals have borne out similar testimony.

Why did the Mentally Diseased not meet with the same desire for satisfactory treatment as the Venereal Diseased?

In Egypt a large number of medical officers, with experience in psychiatry, were available for duty as mental specialists, and, a most excellent Mental Hospital, independent and apart from the General Hospitals, could have been constituted, if only, the authority for the constitution of such an Institution had been forthcoming.

Routine on Admission to Hospital. In military practice, I followed, as far as possible, on the lines which I had found advantageous in civil practice.

On admission, every patient was given a bath, unless contra-indicated, a purge consisting of calomel gr.iii with a saline; whilst rest in bed together with light

nourishing diet for 3 or 4 days was my practice. I also carry out a systematic examination of the physical state; but the examination of the Mental condition I leave until 3 or 4 days have elapsed.

REST. Rest for body and mind is most important in the early treatment of mental patients. An exhausted brain requires rest, just as much as an exhausted body. No good can ever accrue from overstimulating, by travel, hurry, bustle and excitement, an already overtaxed brain. Therefore rest in bed with quiet and isolation if need be, is a golden rule for the early treatment of insanity.

DIET. Food should be nourishing, well cooked, and neatly served. In the insane, the appetite is often capricious, and, the digestion often deranged. In acute cases of insanity, milk or fluid custard is the best diet. A fluid custard made by adding one or two eggs and a little sugar to one pint of milk which is just heated to under boiling point, constitutes dietetically a meal. The eggs should be beatentup before being added to the milk. Several ^{such} custards administered daily makes an efficient and easily digested diet. This type of diet is also easily administered by nasal or oesophageal tubes if necessary

Mutton broth, beef tea, bovril, jelly etc makes a good

supplement to the custard.

Food at times, may require to be given often and in small quantities. Night feeding is frequently necessary. In dieting a patient, the physician is guided by the state of the digestive function, and, by the body weight. The body weight, in improvement of the mental condition, should show a gradual increase.

X Weir Mitchellism. This method of treatment is of undoubted value in the psycho-neuroses, in cases acutely ill and exhausted, in cases easily excited by outside impressions, in cases complicated with pyrexia, in cases with concurrent bodily illness. I employ this method, with gratifying results in my cases of neurasthenia, psychasthenia and hysteria.

Attention to Bowels. This is most important in the treatment of the insane. The daily administration of a mild laxative is frequently necessary. An occasional dose of calomel gr.iii followed by a saline is most beneficial; whilst small doses of calomel gr. $\frac{1}{2}$ twice daily or β naphthol gr.iii daily are valuable as intestinal antiseptics and disinfectants.

Hydrotherapy. The prolonged bath of 97° Fahrenheit induces sleep and arrests attacks of excitement.

2. Cold Douche and Spray. I use frequently in the excited attacks of hysteria and epilepsy, and in some cases of stupor,

but, guardedly. In Egypt, the daily spray in patients not too debilitated I found most beneficial.

SEDATIVES. These are now legion in number; but I use mostly-

1. Paraldehyde $\mathfrak{z}\tau$ to $\mathfrak{z}\text{iii}$ in $\mathfrak{z}\text{i}$ draught.
2. Amylene Hydrate $\mathfrak{z}\tau$ in $\mathfrak{z}\text{i}$ draught. This drug is less disagreeable of taste than paraldehyde.
3. Bromides. the combined salts of Potassium, Sodium, and Ammonium in epilepsy.
4. Chloral. combined with bromide of potash in the excited stages of epilepsy particularly.

In Status Epilepticus, in large doses, as a rectal injection.- ^{Pot} ~~P.M.~~ Brom gr. XL. Chloral Hydras gr. XX Aqua ad $\mathfrak{z}\text{i}$

5. Chloralamide. I have found of great value in alcoholic excitement and insomnia.
6. Vesonal. I now use almost entirely instead of Sulphonal or Trional.
7. Opium. I know of no better sedative, in agitated cases, than Liquor Opii Sedativa. I frequently use it in such cases combined with Bromide of Potash.
8. Bromidia. I use in cases of chronic excitement.
9. Mistura Sedans. This sedative was brought to my notice, in Egypt, by Strong of Melbourne. I have since used it frequently, in mild mental cases where insomnia is a distressing symptom. In doses of $\mathfrak{z}\mathfrak{ss}$ to the ounce of water, at bedtime, Mist-Sedans is a useful hypnotic.

Treatment of Concurrent Physical Diseases. In Egypt, this was extremely important; as not infrequently the concurrent disease was the exciting etiological factor in the mental breakdown.

I have seen innumerable cases, in my military experience, where the mental condition showed marked improvement coincident with improvement in the concurrent disease. Particularly in cases of insanity complicated by malaria fever has this been my experience, in such cases, an intensive treatment of the Malarial Infection was followed by a marked improvement in the Mental condition.

PSYCHO-THERAPY. Much has recently been written, on the subject of psycho-therapeutics. The experiences of psychiatrists vary considerably in the number of successes gained in the treatment of mental diseases by this method.

Given suitable cases, psycho-therapeutic methods of treatment have much to be said in their favour. On the other hand, it is not every mental patient who is amenable to this treatment, and, a great deal of harm can follow its use in unsuitable cases. In the psycho-neuroses, in some cases of dementia praecox, and delusional insanity, psycho-therapy is of undoubted value. In these cases the "Psyche" is the mental element which is chiefly deranged; in consequence, the treatment must consist in enabling the sufferers to overcome distressing thoughts, by mastery of will power, and to thus dislodge the obsessive thoughts which are so persistent, and so tena-

scious. The aim in psycho-therapeutics then, is to induce the patient to believe that he can recover, and this aim is gained by (1) Suggestion. (2) Psycho-analysis.

I. Suggestion consists in the forcing into the mind of the patient the firm conviction of ultimate recovery. Suggestion is either accepted Blindly or has to be Persuasive. Suggestion is the power of the physician's mind over the mind of the patient. In Blind Suggestion, the patient at once falls under the physician's influence. In Persuasion, the confidence of the patient in the physician is gained, only after several conversations; and by the logical demonstration to the patient, on the part of the physician, of the unfounded need for anxiety or worry over non-existent ills. In Persuasion a Catharsis and Re Education of mind is produced. Catharsis Memories which have been intolerable evil influences upon mind, during silence and inactivity, are rendered tolerable if not pleasant.

Re. Education Some aspect is found of a painful experience which allows the patient to dwell upon it, without the terrifying nature of the experience being present to his mind. Suggestion, in suitable cases is, in my experience, a valuable therapeutic agent, especially if combined with Weir Michellism
(2) Psycho-Analysis at times meets with success. Psycho-Analysis is the bringing of sub-conscious mental presentations



under the full control of consciousness. The sufferings of the patient are but the expressions of an effect produced by ideas or wishes concealed in his subconsciousness. If these be brought to light, the patient sees them pass from him one by one he recovers.

The method of treatment involves much expenditure of time and labour, and a large staff of medical officers is required in the carrying of it out satisfactorily.

Again, it is not every patient who is suitable for the method of treatment and likewise, not every medical man who is fitted to be a psycho-analyst.

RECREATION & OCCUPATION. As self centredness on morbid feelings and ideas is characteristic of most types of mental disease, it is necessary to combat such. After a period of rest, the patient can be given some light recreation and occupation. Such recreations as cricket, tennis, walking, care being taken not to overtax the physical strength. Amusements in the form of concerts, whist and card games, are good during convalescence; whilst the social aspects of life should be provided for. The society of the opposite sex is desirable during convalescence and has a refining influence. Knitting, gardening, I have found a beneficial occupation; whilst work in the ward is the common method of providing occupation. The great dictum is to apportion out the day so as to avoid overtaxing physical strength, and obviate monotony and ennui.

CONVALESCENCE. The separation of convalescent patients is desirable. In army practice, this was not possible in most of the mental wards.

Parole, is, in suitable cases, good; and ^Istrongly believe in it. In the army, commanding officers, handicapped as they were by regulations, were usually opposed to the granting of parole. In a few isolated instances, I was able to obtain this privilege for officer patients, and without any harmful results.

INVALIDING TO THE UNITED KINGDOM. In, my opinion, the great majority of cases diagnosed as "mental" were of no further use in the firing line. The climate of Egypt, together with military environment, not conducive to a speedy recovery. Consequently, as soon as possible, I invalided my mental patients for embarkation to the United Kingdom. At times long periods elapsed before a hospital ship was available for transport. Again, many hospital ships had no accomodation for mental cases. Still further, the military embarkation authorities were loath to allot accomodation to mental patients, and, on more than one occasion, I have had to insist on the allotment of accomodation to mental cases, by the embarkation authorities, in consequence of my wards becoming overcrowded.

The invaliding papers for mental patients are:-

Officers: Army form B.183.

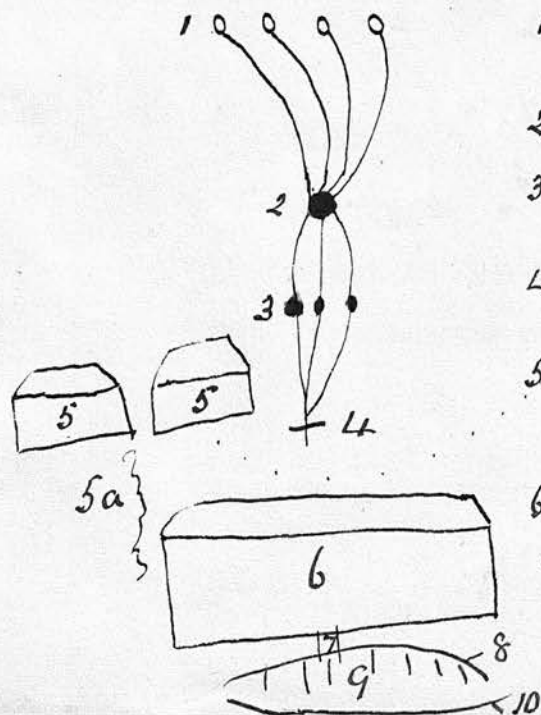
Other Ranks Army form B 183 and Army form B.179.

On embarkation, every invalid has a label attached to his person indicating the nature of the disease for which he has been invalided. Up to 1919 the mental patients suffered the ignominy of having this label clearly marked with the word "mental". I can still remember the indignation of several officers and men who suffered this ignominy.

Early in 1919, the word "mental" was abolished from the labels attached to the persons of the mental invalids; and only the mental disease for which they were invalided indicated. This was in uniformity with other invalids on embarkation.

The invaliding boards rarely had the help of the medical officer in charge of the mental wards in adjudicating the mental cases, and very frequently had no knowledge of the terms used in psychiatry.

Evacuation from Firing Line to United Kingdom.



- 1 Regimental Medical Officers.
- 2 Field Ambulance to Brigade.
- 3 Field Ambulances to Division.
- 4 Casualty Clearing Station.
- 5 Stationary Hospitals at Railhead.
- 5a. Hospital Train.
- 6 General Hospital at Base.
- 7 Motor Transport.
- 8 Coast Line.
- 9 Hospital Ship.
- 10 United Kingdom.

CONCLUSIONS.

1. Prior to the Great War there was a gradual increase in the incidence of Mental Diseases in all armies.
2. War increases the incidence of Mental Diseases in an Army.
3. War has not produced any new psychoses nor psycho-neuroses but the obvious manifestations of these have been coloured and tinted by military experiences.
4. Military Environment aggravates Congenital Mental Defects.
5. The prominence of the Psycho-Neuroses since the War.
6. Etiological Factors in Mental Diseases being a multiplicity of unnatural and unusual circumstances and phenomena.
7. The great fallacy of general conscription.
8. The great need for medical officers, with experience in psychiatry, to be members of all military medical boards, including recruiting boards.
9. The appalling need for revolution in the army in methods of treatment for the mental patients.
10. The encouraging of further investigations into the psychology, pathology, bio-chemistry and psycho-therapeutics of the psychoses and psycho-neuroses.

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