THE INFLUENCE OF PERSONNEL SELECTION ON THE NATURE OF PSYCHIATRIC ILLNESS IN THE SERVICES.

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"Will you tell me, Master
Shallow, how to choose a
man? Care I for the limb,
the thews, the stature,
bulk and big assemblance of
a man! Give me the spirit,
Master Shallow".

Falstaff, Henry IV,
Part II, Act III
Scene II.

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INTRODUCTION.

In February, 1942, there was established at El Kantara on the East Bank of the Suez Canal, a large military psychiatric hospital with an establishment for 600 beds. Its purpose was to treat psychiatric casualties occurring in the Middle East and also to act as a collecting station for cases evacuated from PAIFORCE (troops stationed in Persia and Iraq) and India Command. As it admitted personnel from the British Army, Air Force and Navy and all Allied units, as well as Prisoners of War, a unique opportunity presented itself for the study of psychiatric illness in many diverse groups and nationalities. The latter included Greeks, Poles, Yugoslavs, Czechs, Italians, Germans, Syrians, Egyptians, Palestinians, (both Arabs and Jews), Dominion personnel, Cypriots, Mauritians, Cingalese, Basutos, Bechuanas, Swazis, East and West Africans, Sudanese, Libyans, and others. A nationality return was rendered weekly and it was not unusual for it to exceed forty-four.

As a rule all cases, prior to admission, were examined by the Area Psychiatrist, who very often did not recommend admission to hospital. For example, in the eighteen month period between October 1943 and March 1945, only 24.7% of cases seen as psychiatric out-patients were recommended for admission (1). Furthermore, in the same period, while 75% of all out-patients were labelled 'neurosis' and 'psychopathic personality', and only 5.8% 'psychosis', 24% of the former and 84% of the latter were admitted to hospital. These figures illustrate that there was a considerable degree of pre-selection of the type of case referred to hospital. Generally, these were men who were too ill to be retained in their unit (such as psychotics), those with a bad prognosis, cases requiring prolonged treatment, and milder types who, however, exerted a bad influence on the morale of their comrades.

But all cases suffering from neurosis were not referred to the Area Psychiatrist. Many were handled, quite effectively, by the Unit Medical

Officer, Regimental Officer, or Padre, while others were regarded as non-psychiatric and referred to physicians and surgeons. Among the latter group were cases of Effort-Syndrome, Dyspepsia, Fibrositis, Hyperhidrosis and other skin conditions. Douglas-Wilson (2) found that 231 out of 810 patients referred to a military hospital in England for Medical Specialist's opinion were eventually diagnosed as suffering from psycho-neurosis. Alongside these psycho-somatic conditions, it was quite common to find in general hospital, men with hysterical prolongation of physical illness and injury. It can be assumed that these modifying factors were operating in all groups admitted to hospital and therefore do not materially interfere with any comparisons that might be made between them.

It has often been stated that no new types of psychiatric disorder were produced by war, and this conforms with general experience in the late war. There has, however, been a difference in their incidence, the mixed reaction particularly, occurring with greater frequency.

It had been felt for some time that the Royal College of Physicians Nomenclature (1931) had proved unsatisfactory and many psychiatrists were using their own modifications. A War Office Letter 24/GEN/2345 (A.M.D.10) dated 16.10.42. brought a new one into use and its adoption by all Army Psychiatrists was recommended. Section A dealt with Mental Deficiency, which was divided into 4 groups:

(1) Dullness
(2) Feeblemindedness.
(3) Imbecility
(4) Idiocy

"Dullness" was a higher rating than that of 'feeble-minded person' under the Mental Deficiency Acts. If a man was considered to be too dull for the ordinary duties of a soldier and could be employed in a special unit only, such as the unarmed Pioneer Corps, he would be labelled Mental Deficiency - Dullness.

Section B listed "Mental Disorders of Psychogenic Origin without clearly defined organic cause or

structural changes". These were:-

MANIC-DEPRESSIVE PSYCHOSIS

Specify
- Mania
- Hypomania
- Depression Mild
- " Severe
- Alternating Type
- Stuperous Type
- Mixed Forms

INVOLUTIONAL MELANCHOLIA

CYCLOTHYMIA

SCHIZOPHRENIA

Specify
(1) SIMPLE
(2) CATATONIC
(3) HEBEPHRENIC
(4) PARANOID

PARANOID STATE

ANXIETY STATE

Specify
(1) DURATION (Recent or Chronic)
(2) SEVERITY (Mild or Severe)
(3) TYPE (a) UNSPECIFIED
(b) WITH GROSS SOMATIC DYSFUNCTION
(c) PREDOMINANTLY PHOBIC

HYSTERIA

Specify
(1) AMNESIC
(2) MOTOR
(3) SENSORY
(4) VISCERAL

OBSESSIONAL STATE

Specify (1) RUMINATION
(2) THOUGHT
(3) IMPULSE

PSYCHOPATHIC PERSONALITY

Specify (1) WITH EMOTIONAL ABNORMALITY
(2) WITH ANTISOCIAL TRENDS
(3) WITH PATHOLOGICAL SEXUALITY

Under this same Section B were included Alzheimer's Disease, Pellagra and Cerebral Embolism, so its imperfections must have been obvious to its sponsors! Its biggest advantage was that it carried the authority of a War Office letter which ensured its uniform adoption.

Most admissions were accompanied by Army Form B. 183, a copy of which is included in Appendix B. This was intended to furnish some of the information which in civilian life is usually obtained from the man's relatives and private doctor. While it was not so full as one would have liked, it was of great help in assessing the case. The medical history sheet A.F. B.178A (see Appendix B) and Conduct Sheet (A.F.122) were also available, as well as other relevant documents such as summary of evidence in disciplinary cases.

The final diagnosis was made only after discussion between the Officer Commanding the Division (a senior psychiatrist), the specialist in charge of the case, and the General Duty Medical Officer who was usually a Trainee in Psychiatry. If the case presented unusual features, or the diagnosis was disputed, the problem was discussed at the weekly clinical meeting, which was attended by about twenty doctors. In addition, many informal tribunals were held in the 'Mess'.

The Psychiatrists: Various schools were represented. These included the Institute of Psycho-Analysis with its purely Freudian approach, the Tavistock Clinic with its eclecticism, the Edinburgh school with its accent on the psycho-biological reaction, the Maudsley Hospital, various County Mental Hospitals in England and Wales and Scotland, and a Commissioner of the Board of Control. They all had previous experience in the United Kingdom with Service psychiatric cases.

The Groups of Patients: These were classified according to Nationality, Service (Army, Navy, Air Force), and in certain cases, Rank. In the divisions of rank, which are usually Officers and OtherRanks, it was decided to split the latter into two - N.C.O's (Non-commissioned Officers) and Other Ranks. This sub-division was made in two instances - the British Army and the Royal Air Force. It had always been felt that in psychiatric cases, the N.C.O.'s reaction to stress was different to the average O.R. admission. This was borne out by a previous investigation (3) when it was found that out of 627 British Army N,C.O's who were admitted to the 41st General Hospital between March 1942 and July 1943, 127 or approximately 20.2% were evacuated from the Middle East, while 58% required no alteration in their medical category, i.e. they were returned to duty in the same category as on admission. These figures are contrasted in Table I with others from a different source (1). These were 898 psychiatric hospital admissions of British Other Ranks, including N.C.O's, also occurring in the Middle East, for the three-month period October-December 1943. In one important respect, the figures are comparable; the Mediterranean was not yet in use for the free evacuation of psychiatric casualties. In the second group more were evacuated and less had their medical category unaltered. As N.C.O's were included in this group, one might assume that the discrepancies would have been even greater were N.C.O's extracted from it. The conclusions could be drawn that N.C.O's admitted to a Base Psychiatric Hospital are less likely to require evacuation to the United Kingdom than the Other Ranks and also that they were more likely to be rendered fit for return to duty in their original medical categories.

In the same group of N.C.O's the incidence of schizophrenia (excluding paranoid states) was 2.2% (4.3% with paranoid states). Hogben and Johnstone (4) in a statistical study of morbidity in the army, give the incidence of schizophrenia in other ranks admitted to hospital in the United Kingdom as 12.3% (also excluding paranoid states). Again one might assume that the discrepancy would be greater if the N.C.O's were extracted from this group.

The low incidence of schizophrenia might be queried on grounds of age. This disease tends to occur with greater frequency in the younger age groups, but in Hogben's figures, even in the over 45 group, the relative incidence was 2.59% out of a total of 728 cases spread over all the age groups. In the N.C.O. analysis

72.4% were under 35, while in the O.R's, the relative strength-age distribution in the M.E.F. between 1943-44 was 79.5% under 34, indicating that there was not a great difference in the age composition of the N.C.O. group of patients and the general army population in the Middle East. The difference therefore between 2.2% and 12.3% is significant.

Apart from these data, one would expect that a man who has shown the efficiency and keenness to earn a stripe and retain it, and who was regarded by his officers as fit to undertake responsibility, would differ from the private soldier in his response to stress.

DISEASE INCIDENCE IN THE DIFFERENT GROUPS

Differences between the British private soldier and N.C.O. having already been demonstrated, a comparative study of the diverse groups in the hospital was the next problem to be tackled (5). The disposal of casualties was affected by too many inconstant factors to permit reliable comparisons. The most important factor in disposal, was the opportunity for evacuation. For example, it was easy to dispose of a Palestinian, Egyptian or Syrian, but more difficult to discharge a Pole or a Czech. The Royal Navy took a particular interest in their own personnel and it was easier to evacuate a sailor than a soldier. East Africans could be evacuated by the Nile and then overland, but West Africans had to be retained in hospital for many months, often exceeding a year. These instances show how in some groups morbidity as indicated by duration of stay in hospital could be very unreliable. In fact in the N.C.O. group it was shown that in those cases which were returned to duty the average number of days in hospital was almost constant, whether the man was diagnosed as anxiety state or schizophrenia (see Table II). Expediency rather than clinical findings determined a man's disposal.

The diagnosis of the case however was something for which the psychiatrists alone were responsible, and this was influenced entirely by the clinical findings. It was decided therefore to compare the incidence of the various psychiatric conditions in the different groups (see Table III). In this table the number of paranoid states, including paranoid schizophrenia, has been shown separately. The reason for this action will be explained later when psychopathology is discussed.

The incidence of psychopathic personality reaches as high as 16% in the Army Officer group and is rarely lower than 10% in the other large groups. The sub-types of this interesting condition were listed under Nomenclature, but many other criteria began to creep in. It was felt that the Army classification did not meet all the clinical requirements and consequently the psychopath with emotional abnormality readily attracted qualifying terms such as schizoid or paranoid type. In fact, the label was often used for all non-psychotic cases which were not adequately embraced by the prescribed nomen-

clature. The cases falling into this group were far too diffuse to warrant group comparison.

Epileptics were ineligible for admission to the hospital, but a few did filter through. These are also listed in Table III, but are not a representative sample.

Mental Deficiency, while of interest in the different British groups, lost much of its standardisation in the foreign groups. It was very difficult to assess the intelligence of the African patients. Raven's Progressive Matrices was used, but as the majority of them had never been to school they had great difficulty in understanding what was required of them, although the test was developed to measure the Spearman "G" factor. (6). The diagnosis of mental deficiency was based largely on the man's inability, because of poor intelligence, to cope with the duties allotted to him. The question the psychiatrist had to answer was not whether the man was a mental defective, but a mentally defective Basuto Pioneer, Algerian Muleteer, or East African Guard. Each case had to be considered on its own merits and it was felt that Mental Deficiency as a diagnosis did not lend itself to comparative study.

When the Psychopathic personality, Epilepsy and Mental Deficiency columns are abstracted from Table III, there remain the four large groups - Anxiety State, Hysteria, Manic-Depressive Psychosis, and Schizophrenia. These accounted for 81% of the cases in Table III. These four main groups have been displayed separately in Table IV. On glancing down the table wide differences in disease incidence are apparent. For example, the incidence of hysteria in African troops is much higher than in British troops, while their incidence of anxiety state is much lower. There is also an interesting relationship between the various diseases of each group. In most of the larger groups (and incidentally accounting for about 90% of the total cases) when the percentage of anxiety cases is greater than that of hysteria, then that of manic-depressive psychosis is greater than that of schizophrenia and vice versa.

In the British Officers, N.C.O. and African groups this relationship is so marked that it is statistically significant and cannot be attributed to chance. This finding was further strengthened by a subsequent investigation at the 78th General Hospital. This hospital, which was situated at Fayid, on the west bank of the Great Bitter Lake, was similar in

composition to the 41st General Hospital. It, too, was a psychiatric unit of 600 beds and many of the personnel - psychiatrists, Nursing Sisters and Orderlies had served with the 41st. By September 1943, the 78th had begun to take over most of the work of the 41st, especially the British and Empire psychiatric casualties. Table V, like Table III, was drawn up to include all the groups and the numbers involved were large enough to warrant comparison. There is one important difference between Table III and table V. In the latter all admissions were split into two groups - direct admissions and transfers from other hospitals, either general or psychiatric. It was assumed that the transferred case would prove the more serious or less recoverable and that this might have some bearing on the disease incidence. This proved to be the case, for most groups showed a higher incidence of schizophrenia among the transfers as well as a higher proportion of hysteria, indicating that there was some relationship between these two conditions, as far as their Service prognosis was concerned.

In Table VI, as with the material from the 41st, the Psychopathic Personality, Mental Deficiency and Miscellaneous groups have been extracted and we are again left with the four major ones - Anxiety State, Hysteria, Manic-Depressive Psychosis and Schizophrenia. Apart from the notable exception of the British Other Rank group, most of the others show a similar relationship to that observed in Table IV. The British Other Ranks owe their exception mainly to the relatively high incidence of schizophrenia. While this was to be expected in the transfers, it was also found in the direct admissions. This would indicate an increase in the incidence of schizophrenia compared to that shown in Table III. As the armies were of approximately the same age distribution, this factor could not account for the difference. It was probably connected with the change in conditions prevailing in the Middle East. Some of these cases had been through the hands of the psychiatrist before, often with indeterminate symptoms, were given an approximate label such as Anxiety State, Chronic, Mild, Unspecified, and returned to duty in a reduced category. While the war in North Africa was in progress they were still subject to the stimulus of battle, a factor which Churchill stressed as being of prime importance in keeping troops up to the mark. When the war in the Middle East ended and the scene shifted to Italy, these men rapidly deteriorated and began to show schizophrenic features.

In my search for further data for comparison, I was helped by Major Alice Cox, psychiatrist to the South African Medical Corps. She kindly requested the Union Defence Force authorities to give me copies of her carefully prepared records of their psychiatric casualties. These are listed in similar fashion to Tables III and IV in Tables IX and X.

These figures are not strictly comparable, for they included out-patients as well as hospital admissions. They do show an interesting gradation in disease incidence, especially in Anxiety States, and when the 'psychiatric index' is discussed the difference in the three groups will become more apparent.

Captain Phillipopolus of the Royal Hellenic Army, who worked with us for a time at the 41st General Hospital, was also very helpful in offering me his data for psychiatric casualties in the Greek Navy, Army and Air Force for the period October 1943 - September 1944 (see Table XI). As these also included out patients, they are not strictly comparable to the figures in Tables III and IV.

The relationship between Anxiety State and Manic-Depressive Psychosis, has long been recognised. In fact, the distinction in the diagnosis was not always clear, some cases being called Depression with Anxiety features and others Anxiety with Depressive Features. Occasionally, the differentiation was so difficult that the diagnosis was deferred till the response to convulsant therapy could be ascertained, it being thought that cases of endogenous depression would react better than the anxiety ones (7).

Curran and Mallinson (8 & 9) have drawn attention to the difficulties of making a sharp division between these two diseases and the former could find no criteria for doing so, and came to the conclusion that the differences were quantitative.

The relationship between hysteria and schizophrenia does not find the same general support, but there are certain points of contact. Hysteria is regarded as a dissociative phenomenon and in certain respects, so is schizophrenia. Henderson and Gillespie (10) state:

"The personality in hysteria is an unusual one, apart from the tendency to dissociation. The hysterical patient is often emotional, shy and reserved, even a little 'peculiar'. There has been described an 'hysterical personality'. This consists of a life-long theatricality of behaviour and a desire to impress and gain sympathy, a contrast between actual shallowness of the feelings and the intensity of the expression of them, a contrary contrast of external shyness and intense erotic interest, a lack of persistence of emotion and of effort and much compensatory day-dreaming".

It is not too fanciful to read into the above description much that is basically found in early schizophrenic illness. The 'contrast between actual shallowness of the feelings and the intensity of the expression of them', is not far removed from the emotional blunting and disharmony between mood and thought so commonly associated with schizophrenia. In the more primitive groups, such as the Africans, a gross hysterical reaction very often simulated a katatonic schizophrenic state. The diagnosis of hysteria was made only after treatment by electrical convulsant therapy (E.C.T.). In practically all cases, the response was dramatic - the patient appearing perfectly normal after one to three convulsions. The personality thus uncovered could not be described as a schizoid one - They were often cheerful and friendly with a keen interest in group activities and because of this, one hesitated to label the case schizophrenic. A very controversial point was being raised, for to regard them as hysterical was equivalent to diagnosis by prognosis - a situation which has very little support in clinical medicine.

This point was hotly debated, but the prognostic criteria usually triumphed and the majority were labelled hysteria. It did illustrate, however, how closely the two conditions could resemble each other, but the acceptance of this relationship was not easy. It conflicted with the polarities of Jung (11) and McDougall (12) too, for the latter while stressing the relationship between anxiety and depression, regarded hysteria as the expression of the extrovert. Could it be that his attention was held by the "life-long theatricality of behaviour" of the hysterical personality while the shallow affective element escaped him?

Further support for the relationship between Anxiety and Depression is found in Freudian psychopathology (13). He states that anxiety results from

the conflict between the Ego and three factors - Reality , Super Ego, and Id. Depression too is the expression of the conflict between the Ego and the Super-Ego. This point is of interest in that it would indicate that the overlap between Anxiety and Depression would be greatest where conflict with the Super-Ego is involved. This will be discussed later.

In view of the difficulty in diagnosis that existed between Anxiety States and Manic-Depressive Psychosis and between Hysteria and Schizophrenia, and the possibility of their possessing common factors in their psychopathology, it was decided to compare the groups, by contrasting the sum of one pair with the sum of the other. This was done by expressing one sum as a fraction of the other - $\frac{A + D}{H + S}$ These are given in Tables VII and VIII, where it can be seen that the size of the fraction varies greatly between the different groups. The fraction could be termed a psychiatric index, for if it were more than unity, it would indicate that in that particular group, the number of cases of Anxiety and Depression was greater than the combined total of Hysteria and Schizophrenia.

Why should it vary so in the different groups? It is very tempting when faced with a list of different nationalities, to assume that racial factors are responsible. But there is a wider difference between British Officers and R.A.F. Other Ranks, than between the latter and African natives.

THE EFFECTS OF RACE, AGE, RANK AND INTELLIGENCE ON THE PSYCHIATRIC INDEX.

The African natives were in effect racially rather complex. They consisted of East and West Africans, Basutos, Bechuanas and Swazis. It is true that most of them were of Bantu stock, yet their language and customs were very different. It was in their cultural level that they presented a solid front - they were mostly primitive. Dembovitz (14) who spent several years with West African troops, stated that hysteria was the hall-mark of psychiatry in Africans and that all other psychiatric conditions must be seen as medallions set upon the basic pattern of hysteria - even in psychotic states. Carothers (15) in a very comprehensive survey of psychiatry in Africans, indicates that the reaction is not specific for any particular tribe, but is a general one occurring in primitive peoples. He points out the relative absence of true endogenous depression and of the type of anxiety state encountered in Europeans. He also mentions the absence of guilt feelings in his cases of Involutional Melancholia and the complete absence of obsessional neurosis. Figures for hysteria are not quoted, but as his work was based largely on Kenya Africans notified as insane and admitted to the Mathari Mental Hospital, it is not surprising. Nichols (16) whose work dealt largely with the material described in this thesis, also drew attention to the very low incidence of Anxiety State in Africans, and was very sceptical as to whether they existed at all. He would probably subscribe to Carothers' view that they did not exist in the form encountered in Europeans.

When groups are divided according to rank, one would expect them to be of different grades of intelligence, as indeed they were. In our quest for the cause of the variation in disease incidence, the effect of intelligence cannot be overlooked. Halstead (17) found that in low intelligence groups there was an increase in the incidence of hysteria and Eliot Slater (18) was of the opinion that subnormality of intelligence and temperamental instability reinforce one another and produce a failure of adaptation. This was confirmed by my own findings for of the 229 cases of mental deficiency among British Other Ranks (Table III) 93 had a secondary label, usually hysteria, but also psychopathic personality with emotional abnormality. Eysenck (19) found an excess of hysterias in the lower intelligence range and that among those who scored less than 24 in Raven's Progressive Matrices, there were twice as many cases of

hysteria as of anxiety state, while the reverse held in scores above 50. Yet, he strikes a cautious note, by saying that, while his figures are in accordance with clinical experience and the difference is significant, it is not a large one and merely indicates a trend. This need for caution is further emphasised by the figures in Table III, for while there is 8.8% of mental deficiency in British Other Ranks and 26.4% of hysteria, in R.A.F. Other Ranks there is 2.7% of mental deficiency and 23.4% of hysteria. In spite of the lower incidence of hysteria in the R.A.F., their index is smaller than the Army group, largely because of the greater incidence of schizophrenia.

Reference has already been made to Hogben and Johnstone's work of the relation of morbidity to age. As well as demonstrating the high incidence of schizophrenia in the younger age groups, he states that manic-depressive psychosis occurs mainly in the older groups, giving 81.92% (for cases discharged from Hospital), over the age of 30, in the United Kingdom. Unfortunately, as Hogben (who was Consultant in Army Medical Statistics) states, "our first available information for the exact age composition of an overseas force refers to the beginning of 1945".

To overcome this, he estimates the age composition by bringing the age incidence of certain "marker" diseases into close correspondence with the known distribution of these diseases among medical discharges. He does not divide his estimated age groups into the three divisions of officers, N.C.Os, and O.R.s, so very little real help can be gained from this source.

Assuming that the age factor does operate, the average age of the officer serving overseas in an operational theatre is likely to be less than that of those serving at home. While it is against the fundamental rules of any statistical work to generalise from one's own experience, I was struck by the youth of officers on the troopship with me. They were mostly junior officers who had recently completed their training, and were being sent out as reinforcements for combatant roles, but as a group were fairly representative.

A condition with a more marked affinity for the older age groups, was the Paranoid State with 82.8% occurring in age groups above 37 (Hogben). The significance of the paranoid reaction will be discussed later.

If the age factor exerted any strong influence in the senior ranks of the British groups, it would not explain the differences in reaction of the other groups and we are forced to look elsewhere for the cause - nationality, intelligence and age being unable to supply the complete answer.

PERSONNEL SELECTION AS A FACTOR.

In a general way, the groups differ from each other in the manner by which they have been selected. This is particularly the case in the British groups where, though nationality is the same, there are considerable differences in disease incidence which cannot be explained satisfactorily by differences in age or intelligence. A study of the methods of selection of the groups might help us to understand why some break down with hysteria and some with anxiety, some with schizophrenia and some with manic-depressive psychosis.

Prior to the outbreak of the 1939-45 War, the Army was able to assess a recruit over a period of time and if he were found to be unsuitable, he could be discharged under King's Regulations - "services no longer required". A similar arrangement operated in the Royal Navy and Royal Air Force. This method of trial and error proved very satisfactory in peace-time when the term of engagement was a long one and there was no urgency about the man's training. Furthermore, commissions from the Ranks were not common and the Army did not depend on the other ranks for its supply of officers. It need hardly be added that the over-all stress of a major war had not yet been applied, so that any weak points in the system that might have existed were not brought to light.

With the outbreak of war and the introduction of the National Service Act, large numbers of men were conscripted and the previous system of trial and error was no longer suitable. Selection procedure for recruits had been recommended by the War Office Committee of Enquiry into "Shell-Shock" (20) and some attempt was made to implement it. It must not be overlooked that selective influences are at work prior to the appearance of the recruit before the Medical Board. The grossly dull and backward and the very unstable will have already been weeded out, and when men up to the age of 40 were being called up, the Services were spared all cases below that age that had already broken down in civilian life and were cared for in mental hospitals. The Boards were expected to reject men on psychiatric grounds and in the first two years of the war 2% were thus rejected (21). This figure was later increased to 3.7% as a result of representations to exclude unsuitable men, but even then it fell far below the rejection rate of the Canadian Army which

between July 1943 and March 1944 rejected 23.4%.

These figures are not strictly comparable for in this country we had a large proportion of good military material reserved for industry which could be de-reserved from time to time, thus ensuring a continuous supply of good recruits even as late as 1944. The development of the Pioneer Corps with its Armed and Unarmed Sections was able to absorb a fair proportion of stable dullards and keep down the numbers rejected. Yet in spite of these modifying factors, the discrepancy is still high and indicates a more thorough degree of selection in the Dominion.

During his initial training, the recruit was subject to the early stresses of military service - separation from home, strange and often uncomfortable surroundings, discipline, lack of privacy and the probability of overseas service in an operational theatre. Psychiatrists at home were kept busy seeing cases who broke down after a few weeks' service and while many were discharged, a larger number were returned to duty in what was called a "sheltered category". This usually meant exemption from overseas service. This had an important influence on the quality of Army Personnel posted to the Middle East, for it meant that they had successfully emerged from the initial traumata of army life and had been considered fit by the Unit Medical Officer for service overseas.

It was not until July 1942 that the Selection Procedure inaugurated by the Directorate of Selection of Personnel was introduced to the General Service Corps Intake Scheme. The psychiatrist then became available for the examination of any recruit whom the Personnel Selection Officer referred to him. There was close collaboration between these two and the medical officer and it did tend to make the screening of recruits more efficient. This method, however, did not materially affect the nature or number of the psychiatric casualties admitted to the 41st General Hospital between March 1942 and September 1943. On the other hand, since the end of 1940, the Army had a well-developed psychiatric service and as it is well known that facilities stimulate the demand, the service was a very busy one. It saved many from an overseas posting which would have rendered them serious casualties and thus had a direct influence on the types and incidence of psychiatric breakdown.

While this arrangement was not as effective as that introduced in July 1942, it did much good work and compared very favourably with the Selection methods of many of our Allies. In Table III there is a group called Allied Europeans. They were a very mixed lot indeed, comprising Poles, Jugoslavs, Greeks, Czechs and French, and were recruited from populations which were largely refugee. Proper selection was out of the question and physical fitness alone was all that was required, and even then the standard were often allowed to fall to an inadequate level. Others (especially the Greeks) were recruited from the European colonies in the cities of the Middle East and many of the shiftless and unstable sought a solution for their failure in civilian life by volunteering for service in the armed forces of their parent country.

The African groups in the Middle East were intended primarily for labouring duties and the recruiting was often left to the head of the village, and one could not help thinking that many a village undesirable was got rid of in this way by an unscrupulous chief.

The Palestinians have been divided into two - Jews and Arabs, not because of their religious differences, but because of their cultural ones. The Palestinian Jew, even if he were born in the country, could be identified by his European background - the Palestinian Arab with few exceptions was a simple villager who showed very little of the impact of Western civilisation. Jewish recruiting was done by their own Agency and some poor material was accepted. Arab recruiting was done by our own administration, initially without psychiatric advice, but this defect was later remedied.

Mauritians were an interesting group. They were French-speaking, or rather spoke a kind of 'patois', and had also absorbed a fair amount of French culture. They included both Moslems and Christians and were intelligent, artistic and reliable. Although they were coloured, their cultural level was much higher than that of African natives. They were all volunteers, and many of them had left comfortable homes to serve in the Middle East. The Atlantic Charter and the fight against Hitler meant more to them than their African neighbours.

The Cypriots functioned in hospital as a group presenting a solid front against the others. Their attitude was very similar to that described by Kepecs (22) in Puerto Rican troops. Incidentally, he too found anxiety states rare - only 4 out of 100 cases.

Prisoners of War differed in one important respect from the other groups. They were not admitted to hospital unless they were considered to be psychotic. Quite a few neurotics did filter through, but they were mainly those who appeared to be borderline psychotics and out of the 27 cases, 20 were labelled hysteria. The group consisted almost entirely of Italians. The most common form of hysterical reaction was the hysterical fit and so closely did it resemble a true epileptic fit that the diagnosis was often in doubt for some time. Among the "easier" cases were those who assumed the shape of the Cross when prostrate. The predisposition of these Italian Prisoners of War to simulate epileptic fits so closely and the fact that they were at one time regarded as psychotic makes one wonder if there is any connection between these observations and the American studies of race in the aetiology of mental diseases, which stated that the Italians have proportionately more epileptic psychoses than any other race (quoted by Henderson).(10).

I have tried to indicate in a general way that the degree of selection can influence the nature of psychiatric breakdown. Up till now the emphasis has been on the screening process of selection - the weeding out of the unfit. Thus it is understandable that in the selection of the British Officer group, where there has always been a certain amount of care exerted, the hysterical and the potential schizophrenic would be largely eliminated. This is reflected in the figures in Table IV where approximately 15% were diagnosed as hysteria and 5% as schizophrenia, the latter group including 60% paranoid reactions. Similarly with the N.C.O. group, a process of selection was in operation. The soldier who was given a stripe had to fulfil certain requirements as to proficiency and his officers regarded him as a reliable man who could undertake responsibility. The principle of trial and error was also brought into play, for if the man failed to make the grade, he lost his stripe.. One would expect that this method, under the ordinary stresses of military service, would be successful in holding back a large number of the hysterical group and those prone to develop schizophrenia.

In the case of the Other Ranks, the selection process was not nearly so thorough, for the requirements were correspondingly lower, or rather were thought to be so. The exacting standards which modern warfare sets for the private soldier were not yet appreciated, and many a man was pushed up to a medical category which reflected the optimism of those responsible rather than the potentiality of the soldier.

But this is only one side of the coin. Men also break down with anxiety states and manic-depressive psychoses and these conditions are an even greater problem in the better selected groups. In the British Army Officer group they accounted for nearly 80% of the casualties. Even in relative incidence of breakdown, the officer often exceeds the other rank. Major T.W. Salmon (23) in his report stresses the excess of War Neuroses in officers, and gives the following ratios of officers and men:

At the Front	1	: 30
Wounded	1	: 24
Psychiatric Casualties..	1	: 6

Careful selection does not appear to reduce the incidence of psychiatric breakdown, but merely changes its nature - the emphasis is shifted to anxiety states and manic-depressive psychosis.

The common psychopathology of these two conditions, with their relationship to the Super Ego, has already been mentioned. Freud has shown how the parental Super-Ego is incorporated in childhood and that later, identification with it takes place, thus helping to build character. When this process is well-established, the resulting character would be one with a strong sense of duty and a tendency to be over-conscientious. Such an individual would be hard-working, scrupulously honest and in time of war his unconscious guilt would manifest itself by a higher degree of self-sacrifice. He would naturally be considered a good candidate for a position of responsibility. Even if the condition were no longer within the limits of the normal and could be recognised clinically as anxiety or depression, to the layman, it might appear as a heightened sense of duty and strengthen the claim of the candidate. These Super-ego qualities are sought for and are often the criteria for promotion. It is in the light of this explanation that we can see why there should be

a preponderance of anxiety states and manic-depressive psychosis in the more carefully selected group.

When the incidence of disease in the various groups was presented in Table III, the paranoid reactions were listed separately and no explanation for this step was given at the time. Freud, in his lecture on "The Anatomy of the Mental Personality" (13), discusses the paranoid reaction. "One group of them suffer from delusions of observation. They complain to us that they suffer continually, and in their most intimate actions, from the observation of unknown powers or persons .... How would it be if these mad people were right, if we all of us had an observing function in our egos threatening us with punishment....The actual content of the delusion is only a first step towards conviction and punishment, so that we may guess that another activity of this function must be what we call conscience....I will henceforward call this function in the ego the 'super-ego'. "

It is this connection between the paranoid reaction and the Super-Ego which has induced me to separate it from the ordinary schizophrenic reaction. The numbers of this condition in the British Groups are interesting (Table XIII). While the age factor might be expected to play some part in the relatively high incidence in the Officer and N.C.O. groups, it could not account for the discrepancy between the O.R. groups. The differences cannot be overlooked and may even be significant, for there is a definite gradation of incidence as one approaches the less well selected groups. The matter cannot be left here, for the paranoid reaction is essentially a mixed one, for in each case of schizophrenia the paranoid element can vary enormously and in the paranoid state too, the schizophrenic element has a wide range of expression. Thus quantitative estimation is essential here as in all the reaction-types and will be discussed later.

THE PLACE OF MORALE IN PSYCHIATRIC BREAKDOWN.

There is one very important factor which must be considered in any discussion on the reactions of man to stress and that is morale. The influence of morale on psychiatric breakdown is of particular significance in group situations and this has been widely recognised (24). Palmer (25) who was in charge of a psychiatric unit at Tripoli (N. Africa) attributed two-thirds of the 12,000 cases that passed through his hands to impaired or broken morale. He divides them into two groups, the High and Low Morale Groups. These latter are classified according to the degree of unconscious dissociation. The least, he bluntly calls "wind-up or loss of grip" and the most, provide his cases of Motor and Sensory Hysteria. Kennedy (26) couples hysteria with low morale, saying that it is an escape into functional incapacity and is determined by fear. Parkinson (27) who dealt with troops repatriated to Australia on psychiatric grounds, stressed the importance of fostering good morale as a method of treating neurotic disease and pointed out the infective nature of the condition.

Parfitt (28) found that a high sense of duty helped many R.A.F. Ground Personnel to struggle against nervous debility and that on the other hand, malingering complicated 30% of the hysterias. Craigie (29) who worked in the Middle East prior to the establishment of the 41st General Hospital, found that if group morale was impaired by the inability to retaliate, battle neurosis increased. This finding was fairly general and naval psychiatrists, in particular, stressed the greater frequency of neurotic breakdown in stokers compared to gun crews.

An interesting example of a similar nature occurred when I was engaged in the psychiatric assessment of our recently repatriated Prisoners of War. A regular infantry battalion which had been stationed in Malta since the beginning of the War was subjected to severe and continued bombing without being able to retaliate. When the Mediterranean was cleared they were transferred from Malta to the Middle East and eventually sent to Leros in the Aegean. Here they again experienced intense bombing without air support and the whole battalion was eventually taken prisoner. I found the incidence of neurosis particularly high, while the medical officer at the camp was struck by

the almost complete absence of wounded. At the same camp, I had to assess the remnants of the Rifle Brigade, whose epic defence of Calais has been described by Linklater (30). They included many Territorials, but their morale was higher than the Regular battalion previously described. Several had been captured the day before the port fell and explained that they were part of a patrol looking for German prisoners! The incidence of neurosis among them was not high, although they had also endured 5 years of captivity.

Spiegel (31) in an effort to define the psychological component of morale, describes an "X" factor, which when present indicated good morale. He states that it was enhanced by good group loyalty and that the fostering of hatred was of less importance and more difficult to achieve. (He was dealing with American troops).

Storring (32) attributed hysteria in German troops in the first world War to a lack of a constructive political idea which the soldier could grasp and be ready to die for. He claimed that the defect was remedied by National Socialism and consequently, he rarely met severe hysterical reactions. To emphasise the high morale of the men he had to deal with, (they were flying personnel) he states that soldiers being led to execution for an offence, looked aware of their need for punishment and refused to have their eyes bandaged. This certainly demonstrates the severe super-ego which these airmen had incorporated, but a more enquiring psychiatrist would have been interested in the deep sense of guilt shown by the offender and explored the possibility of the situation being one of endogenous depression. He also gives other causes for the diminished incidence of hysteria, such as the victorious nature of the war (he was writing in 1942), sports, training, lectures, and other activities. These, of course, have been universally adopted as "morale boosters".

Vernon (33) in a questionnaire and using Burt's group factor technique, found that good citizenship and moralistic opinion went together and even though in professional classes the attitude might be critical, they were highest in good citizenship. The oft-quoted dictum "A good civilian makes a good soldier" was proved over and over again in the recent war and Vernon's questionnaire, while contributing nothing new, is a useful piece of confirmatory work.

Fairbairn (34) in discussing the neurotic soldier, attributes the problem to a failure to identify with the original love objects within the family. He expresses the opinion that good group morale would counteract this infantile dependence. Slater (18) found that there was a greater frequency of return to duty in men who had philosophic and religious values in their lives. Of these, he returned 32.8% more to duty than the average. He attributed this difference to ".....a greater frequency among them of a type of personality that takes religion and probably also personal and social duties more seriously than the average man and is perhaps more imbued with a sense of conscientiousness and dourness of personality".

James (35) puts the matter in a general way, to which most people would subscribe. He states that morale in war and no doubt in peace, is inevitably linked with the mental health of the community. A graphic description of the influence of high morale is given by Student in Arms, quoted by Hurst (36). "Hunger and thirst do not depress them. Rain could not damp them. Cold could not chill them. Every hardship became a joke. They did not endure hardship. They derided it - As for death, it was in a way, the greatest joke of all". He goes on to describe the high morale of the individual - "...Your teeth may chatter and your knees quake, but as long as the real you disapproves and derides this absurdity of the flesh, you can carry on".

The association between low morale and the development of hysteria in servicemen and the features common to high morale and the super-ego diseases, such as depression and anxiety, bring the work of the psychiatrist into a wider field, namely the assessment of the normal. While good morale can be fostered by external agencies, and it is an encouraging thing that this is so, the potential of morale in each man varies. Some can display it only in response to a group stimulus, others to an accepted leader, but there are men who are richly endowed with an individual morale which is independent of external factors. It appears that these men are in the ranks of the anxiety and depression prone and their detection, which is of supreme importance to an army, can be undertaken with greater efficiency by the psychiatrist. This is one of the main problems in personnel selection and will be dealt with under that heading.

THE QUANTITATIVE ESTIMATION OF PSYCHIATRIC DISORDER.

Up till now, although an arithmetical index of psychiatric reaction has been described, the emphasis has been mainly on the qualitative aspect of the reaction - whether it was hysteria (H), or anxiety state (A), schizophrenia (S) or manic-depressive psychosis(D). The relationship between A & D and H. & S has been discussed and one might think that the only quantitative differences lay between A & D and between H & S, as in these pairs, the overlap has been discussed. If this were so, it would mean that in cases which were entirely neurotic, the diagnosis would be one of hysteria or anxiety state, and in the psychotic cases, the diagnosis would be one of schizophrenia or manic-depressive psychosis. But mixed states do exist and they are very common in military psychiatric practice, yet their acceptance and definition has met with considerable resistance.

Timofeev (37) stated that in World War II the psychiatrist must forget his State hospital psychiatry and pay more attention to actual clinical pictures he meets on the battle front. It is not easy to forget State Hospital Psychiatry. The basis of our experience , the criteria of diagnosis and the prestige of our teachers are bound up with our hospital experience. The nomenclature in use was also more valid there. The inaccessible, vividly hallucinated individual, grimacing and manneristic, gave admirable support to the classification of mental diseases - there was nothing else he could be, Similarly the deeply depressed, guilt-laden, actively suicidal patient raised no problems in diagnosis. The mixed reaction did not occur with sufficient frequency to be disturbing and could conveniently be placed in the category to which it mostly belonged.

It is not surprising that Kraepelinian nosology, devised in 1896 to embrace the psychiatric practice of his day, should be found wanting in Service psychiatry in 1942. Its use was confined largely to institutions, the psychiatrist being primarily an alienist. In addition, the stresses of modern life had not yet fallen upon the world. As admission was usually by certification, a man had to be very ill to be considered unfit for life outside the asylum. One can assume

that environmental stresses played a lesser part than they do today and that the constitutional element was paramount. He was dealing with cases with a high predisposition to dementia praecox and manic-depressive psychosis and the classical type of illness would tend to predominate.

Service conditions, on the other hand, supplied a large variety of environmental stresses and consequently, breakdown occurred in personalities which would probably never have broken down in civilian life. While predisposition was to some degree present, it was not predominantly so, and the reactions observed did not assume the classical forms, but mixed forms. This does not mean that Kraepelin's nomenclature had ceased to be of value, it was still valid and could even act as a basis for further development.

An illustration based on Jung's dichotomy of introvert and extrovert would explain this. If everybody belonged to these two categories we should find if we plotted a personality curve for the population that a few would fall into the extremes at either end, but that the majority would group in the centre. These would represent the average member of the community. As Servicemen are considered a relatively normal element, the majority would fall in the centre of the curve - they would possess an even distribution of introvert and extrovert tendencies. Slater (18) has pointed out that what a man was by heredity and constitution played a great part in the determination of the nature of his psychiatric illness and that the momentary environment merely determined the time of manifestation of the illness. It is not surprising therefore that symptomatology was mixed and that too few labels were available for a large variety of responses.

The quest for a suitable nomenclature provided the Service psychiatrist with many a problem. Various "dodges" were resorted to. The word "predominantly" began to creep in - "with schizoid features", "with depressive features", or even an honest N.Y.D. (not yet diagnosed). The picture was further complicated by the fact that the presentation of the mixed symptoms was not always constant. The clinical picture would sometimes vary from week to week and the entries on the Medical Record Card under DIAGNOSIS adequately demonstrated the doubt in the mind of the psychiatrist. Very often, ashamed of what he considered to be his and not the patient's vacillation, he would make out a fresh card

and thus remove the evidence of the fluctuations in the patient's mental state!

After a spell of duty as an Area Psychiatrist, I rejoined the 41st General Hospital, this time in India, and the old conflicts over accurate diagnosis were re-activated. I decided to try out a simple and somewhat crude method of dealing with the problem (38).

Quantitative factors in general medicine are just emerging from the stage when they were expressed by such adjectives as mild, moderate, and severe. There has been a strong prejudice against the use of numerals and even in the laboratory the symbols +++ are stillused for the number 3. The number, however, is a more accurate measure than the adjective and I decided to use it to help assess the quantitative element in psychiatric diagnosis. The difficulties which immediately arose, were almost sufficient to destroy any enthusiasm for the experiment. Questions such as "What are you trying to measure?" "With what"? "How"? just could not be answered satisfactorily, but it was felt that the idea was worth a trial.

At the outset, I had to decide whether the present nomenclature of disease, based on Kraepelin and Bleuler, was worth retaining and if so, whether a more accurate form could be built up around it. The arguments in favour of its retention were strong. Firstly, it was official, and to a serving doctor, that carried weight, Secondly, Kraepelin and later Bleuler, had evolved their nomenclature around the "classical case", such as they met in the mental hospital. The reaction in the Service casualty did not differ fundamentally from the "classical case". It was in its degree of purity that it varied and if this degree could be expressed numerically, the mixed reaction would become definable and a more accurate description result.

To do this, the reaction would have to be split into a number of subdivisions. It is a truism to say that the more subdivisions one makes, the finer and more accurate the diagnostic label will be, but for practical purposes, the number of subdivisions are determined by the limits of the clinical mind. With the help of a colleague (Major T.A. Muckle, R.A.M.C.) and using the method of trial and error, it was found that more than seven degrees (including zero) led to a false sense of accuracy, for the discrepancy in our interpretation

became apparent then. For example, when eleven degrees were used the same investigator could not distinguish consistently between 6 degrees and 8 degrees.

The work was done, originally, with psychotic patients, and the condition on examination was summarised as a 'vignette'.

Example (i)

$$\frac{\text{Manic-Depressive Psychosis}}{\text{Schizophrenic Reaction}} = \frac{5}{2} \quad 14.9.45.$$

The date was an essential feature of the vignette, for the condition would fluctuate, sometimes from day to day. To indicate the degree of fluctuation over a stated period, three numbers on each line were used - the first to indicate the maximum, the third, the minimum, and the second the clinical mean of the case. This central figure was written larger than the others, or printed in heavier type. Initials were used for the dominant clinical features (D for manic-depressive psychosis and S for Schizophrenia) and the whole vignette flanked on either side by the dates, indicating the period of observation:

Example (ii)

15.9.45. D 5 **4** 2 / S 3 **2** 1 20.10.45.

The interpretation of this formula would be read: The patient came under observation on 15.9.45. and was discharged on 20.10.45. During this time, the clinical picture was a mixed one, the depressive element being dominant, at one time it being almost a pure case of manic-depressive psychosis. Schizophrenic features were however always present, at one time quite markedly so, but on the whole not to the same extent as the depressive features.

Psychiatric breakdown overseas was often coloured by an organic or toxic element. In a convoy of 256 patients evacuated from India and "staged" at the 41st General Hospital prior to repatriation to the United Kingdom, 60% had a history of repeated attacks of malaria and bacillary dysentery. Other commoncomplicating features were sandfly fever, infective hepatitis, vitamin deficiency, and head injury. These could be

incorporated in the vignette using the letter P (Physical)

Example (iii)

15.9.45. $\frac{D\ 5\ 4\ 2}{S\ 3\ 2\ 1}$ P_3 (Bac.Dysentery) 20.9.45

In the process of evacuation, a casualty frequently passed through the hands of several psychiatrists, who had no facilities for prolonged observation. In such cases, the simple fraction with its physical component (if any) could be noted. The accumulation of such data would provide a useful record of the progress of the patient, and while not comprehensive, would give a reliable picture of a man's mental state.

The following two cases will help to illustrate the use of the vignette:

(a) L/Cpl R.P. aet 25. Service 4 years.

On 26.2.46. he was admitted to hospital complaining of pains in the head and insomnia since his return from L.I.A.P. (leave in advance of 'python' - a scheme for repatriating troops from overseas) two months previously. He then admitted that God spoke to him and that he had taken to the Bible but was generally reticent about his religious thoughts. He was diagnosed as a case of schizophrenia. On 3.3.46. it was noted that "he sits in a chair clasping the Bible between his hands and talks in a depressed tone of voice saying that it was God's influence he was alive today".
19.3.46. Confused and disorientated and appeared to have auditory hallucinations and was emotionally blunted. He insisted he could cure bad eyesight by means of his spittle, but was too confused to elaborate.
6.5.46. Very little change and was started on course of Electrical Convulsions (.E.C.T). Began to improve but was always sullen, solitary, and difficult of access and at times offensive and argumentative.
17.7.46. Has been very violent and had to have repeated doses of sedatives. Vividly hallucinated and completely lacking in insight. Regarded as a case of paranoid schizophrenia.
12.8.46. Became morbidly depressed. Full of ideas of guilt and sin and preoccupied with suicidal thoughts. Started on second course of E.C.T.
13.9.46. Has responded well - Cheerful and co-operative. Conduct reliable and working well in open ward. At times

rather facile but personality is reasonably well integrated.

Suggested vignette:

26.2.46. $\begin{matrix} D \\ S \end{matrix} \frac{5\ 4\ 1}{4\ 2\ 1}$ 15.9.46.

(b) L.A.C. D.F. aet. 24. Service 6 years.

Family history: One brother who was P.O.W. for five years was admitted on repatriation to Carstairs Military Hospital suffering from a psychosis. He recovered after a course of E.C.T. and was discharged after three months. No other neuropathic heredity elicited.

Personal history: Was always bright and cheerful and fond of sports.

History of Present Illness: 17.1.46: While on troopship on return from L.I.A.P. he reported sick to the M.O with the complaint that he was worried about his masturbatory habit which failed to give him any sexual satisfaction. He was tearful, extremely anxious, and believed his companions were annoying him.

18.1.46. Said people were always looking at him.

21.1.46. Deteriorating. Impulsive and violent. Resistive amd trying to escape. Regarded as suicidal.

20.3.46. On admission: Mute and stuporose and very depressed looking. Takes food satisfactorily but incontinent of urine. Following visit of mother 23.3.46. he became emotional, agitated and restless and expressed depressive thoughts : "Why don't you cut me up and experiment on me - I'm ready to die".

8.4.46. On examination: He talks a little but is essentially uncommunicative. Shrugs his shoulders with an air of hopelessness and asked "Are you suffering because of me?" He would not elaborate. Psychomotor retardation is evident , but there is no indication that he is hallucinated. Started course of E.C.T.

12.5.46. Bright and cheerful. Plays football - conduct is reliable. E.C.T. discontinued.

20.5.46.Beginning to relapse. Facile and childish. Tends to wander off and make inconsequent remarks to the N.A.A.F.I. girls. Confused - "There's something

funny going on". Probably hallucinated. The clinical picture is now a schizophrenic one.

Suggested vignette:

17.1.46. $\frac{D\ 5\ 3\ 1}{S\ 5\ 3\ 1}$ 20.5.46.

This method could also be helpful in assessing the prognosis of a case. If the schizophrenic reaction increased with the duration of the illness, the outlook would become less favourable.

A common criticism of the vignette is that it is too simple and does not take into account the variety of responses which are encountered. Factors like intelligence rating, paranoid element, and obsessional content are worthy of recognition, but at the outset of the experiment it was felt that if the vignette became too complex, it would cease to fulfil its function, namely, clarification,and confuse the issue still further. In time and if it proved satisfactory, it could no doubt be expanded.

This method could be applied equally well to the neuroses and a quantitative estimation of the amount of anxiety or hysteria made.

Wittkower, Rodger and Wilson (39) in a study of Personality in Effort Syndrome, describe 5 types. Out of a total of 50 cases, Group I comprising 20 cases showed an unusually keen sense of duty and a rigid superficial and deep morality with severe repression and aggressiveness. They had conflicts over the fear of showing fear and broke down after obsessional over-work.

Group II (11 cases) showed less repressed aggression but deep seated attitude of resentment arising from experience in early childhood.

Group III (3 cases) These were overtly aggressive and had conflicts re their over-aggressiveness.

Group IV (12 cases) These were similar to Group III but inferior in physique.

Group V (4 cases) These lacked the severe sense of duty universally found in the other groups and were described as "hysterical quitters", showing an escape into dependence in the face of apparently unsurmountable tasks and could not be trained as soldiers. Lewis (40) found that

43% of his cases of Effort Syndrome fell into 2 groups - (i) Anxiety states - Acute and Chronic (ii) Depressive States. 18% were labelled psychopathic personalities and 11% were diagnosed as hysteria. Jones and Lewis (41) in what was presumably the same series of 200 cases, found that 72% had anxiety attacks while at rest and concluded that there was in effect, no single psychiatric picture.

According to the official nomenclature, all these cases would have been described as Anxiety State, with Somatic dysfunction. This would have created a ten per cent error in diagnosis, for that percentage was almost entirely hysterical in type while several others shaded into it. It would therefore be more accurate to assess the anxiety component quantitatively. In view of what has already been said about the relationship between the anxiety reaction and the individual's morale, this quantitative assessment has an added significance.

The relationship between morale and neurosis keeps cropping up in military psychiatry and a restatement of the situation is not redundant. Sandiford (42) puts the issue clearly. "On active service, a soldier is constantly torn between the instinct of self-preservation and those forces compounded of self-respect, duty, discipline, patriotism, all of which may be summed up as MORALE".

It has been assumed in military circles that good morale is something which can be grafted on, or developed in, any type of recruit, but this is not always the case. There arecertain individuals who are so predisposed, that they are resistant to all attempts to foster their good morale. This is particularly so in those with a strong tendency to epinosic gain, of whom a large section of the hysterical group of psychiatric cases are composed. This exploitation of their neurotic symptoms for gain often coloured the whole clinical picture and one felt that the term "EPINOIA" would have been more appropriate for these cases. It appears that an individual's proneness to hysterical breakdown is also linked with his morale and the quantitative assessment of this is therefore just as important as that of the anxiety component.

The psychiatric index of $\frac{A + D}{H + S}$ is no longer the straightforward formula it appeared, for each conditionhas a quantitative as well as a qualitative

interpretation. For example, 14% of hysteria in British Officers cannot be compared with 47% of the same condition in African natives. In the former the diagnosis of hysteria would probably be coloured with anxiety in varying degrees and the total hysteria would be less than the percentage reading indicated. Similarly, in anxiety states, in the better selected groups, the anxiety element would be greater and the wide divergence between 44.5% in the officer group and 5.41% in the African natives would be even greater if each group were assessed quantitatively. One can assume, therefore, that in groups where the anxiety states are high, the index would be greater, and in groups where the incidence of hysteria is high, the index would be lower. This would tend to differentiate the groups even further and if the paranoid state were extracted the indices would tend to be affected in similar fashion (see Table XIII).

THE PSYCHIATRIST AND PERSONNEL SELECTION.

Now that we have seen that the nature of psychiatric breakdown can reflect the standard of selection, it would be of interest to see if this knowledge could play any useful part in the selection of personnel for military duties.

Psychiatric opinion of methods and standard of selectionhas varied enormously. In December 1939 Mayer-Gross (43) suggested that schizophrenics often made good subordinates owing to their loss of spontaneity and shallow emotions. He also suggested that high grade mental defectives make good soldiers, as they are docile, dull and gregarious. These optimistic forecasts were modified by Esher (44) who in 1941 found that out of 904 consecutive admissions to a neurosis centre, 100 were mentally defective and 75% of these suffered from conversion hysteria. He suggested that to reduce neurosis in the Army, the dull and backward should be rejected and he set a mental age of 10 years as a minimum and that all between 10 and 12 years of age should be transferred to the Pioneer Corps.

Rees (45) who was Consultant Psychiatrist to the Army in the late War, stated that 30-40% of breakdown in the service might have been predicted and suggests the following:

(1) Recruiting boards to make use of a questionnaire.

(2) National Health Insurance and school medical records and a letter from the man's private doctor should be available.

(3) Police records should be consulted

(4) More time allowed for the examination

(5) Doctors from Recruiting Boards should visit Service units to gain experience of Service conditions and requirements.

These are all excellent suggestions but the first one needs modifying. A questionnaire can be a useful

indication of personality, but very few subjects are suitable for this method of investigation. Flugel (46) quotes work by S. Brahmachari, who pointed out that questionnaires on personal attributes and behaviour raise several problems such as attitude, conduct, and the discrepancy between the two - in other words, the difference between the ego ideal and the ego and the degree of conflict engendered by the difference. It was the degree of conflict which was often more revealing than the answers given to the questions.

Stalker (47) in a study of ex-Service patients, quotes Henderson in recommending that all recruits be required to present a statement of their previous medical history, endorsed by their own doctor.

The Directorate of Personnel Selection was established in 1942, and the psychiatrist became part of the Selection Team. Certain cases were referred automatically to him, such as all men who scored S.G.5 in Raven's Progressive Matrices and averaged S.G.5 in all the tests. These were:

(1) Bennet - a test of mechanical aptitude.
(2) Verbal
(3) Arithmetic
(4) Instructional
(5) Performance

Other referrals included men with a history of delinquent behaviour. At the discretion of the Personnel SelectionOfficer (P.S.O) men whose combatant temperament was low (? Grade III) and men with a significant history of nervous trouble or complaints such as stammering or bed-wetting, were put down for psychiatric interview. It is significant that the P.S.O. frequently detected in his interview symptoms which the Medical Officer had not elicited.

The Assessment of Combatant Temperament (C.T.)

The name itself has given rise to much debate. The P.S.O. interprets C.T.as the quality in a man which will make him a good combatant. He judges this as a combatant officer and has to decide whether he would feel confident inleading the recruit into battle. The name has its drawbacks. Modern warfare has multiplied the number of situations occurring in combat. It is a man's capacity for combat, rather than his temperament, which will determine his behaviour in action. A high degree of combatant temperament can be found in an aggressive psychopath who may nevertheless be regarded as unfit for military service just because of his temperament,

And conversely a man who has always been subdued and inoffensive, might demonstrate qualities of discipline, endurance, loyalty and good morale which, in terms of combatant capacity, place him in a high category.

A completed copy of the special form used for the Selection Procedure in recruits (S.P.100) is in Appendix B.

It is very comprehensive and in many ways admirable. A valuable collection of data is recorded and much of this is coded for use in the Hollerith System of filing. There is a "box" for the use of the psychiatrist and in this he enters his recommendation. He has a wide range to choose from and is very rarely faced with a situation which cannot be dealt with by the list of recommendations allowed him.

The fallacy that a psychiatrist is a person who is trained to recognise poor material only is still encouraged in this form of selection. It fails to appreciate that experience in psychiatric breakdown embraces the "good" material as well and that he is just as qualified to pass an expert opinion on the one as on the other. There is, however, a natural reluctance to send a man with good morale and who is not a dullard to see a psychiatrist - "There's nothing wrong with him" is the usual comment, yet it is important that the degree of his super-ego qualities be assessed accurately so that the proper recommendations are put forward or supported - such as O.R.1 (Officer recommendation ClassI) or potential N.C.O). The possibility that the man might develop an anxiety state or be prone to an attack of endogenous depression must be accepted in many cases, but as has already been shown, they only break down under severe stress and usually recover rapidly, Furthermore, the expression of the 'disability' may lead to heroic conduct.

Officer Selection raises similar problems. A detailed description of the method employed by War Office Selection Boards is given by Gillman (48). Here too the psychiatrist is used as a screen for the unfit, although, since the Board discusses each case, he is permitted to pass an opinion on the good qualities of the man. He thus tends to exert a positive influence in selection and while he may be taking some risk of increasing the numbers of the anxiety or depression prone, he ensures a high morale rating in the Army's leaders - the latter

contribution outweighing any adverse effects of the former.

The psychiatrist's positive function on a War Office Selection Board was illustrated during one of the tests - "The Leaderless Group Test". A situation is presented to the candidates and the response of each member of the group noted. One candidate made no spontaneous gesture and was condemned by the military testing officer as lacking initiative. He happened to be the most intelligent member of the group, and had a quiet confidence in his own ability. He knew that if he took the lead, he would be accepted as leader and impress the Board but felt that some of the others should have their opportunity and quietly withdrew from the competition, while giving full support to the candidate who assumed the lead. Were it not for the psychiatrist's support, this candidate would have been failed. The motives and mechanisms of the mind are often evident in the normal and lend themselves to psychiatric assessment.

. Murray's Thematic Apperception Test, which is used in Officer Selection, fails to give a reliable indication of underlying personality, and it is doubtful if it yields any more information than can be gained by the psychiatric interview. Raven (49) in a similar type of projection test, introduces an extra factor in order to minimise the inhibiting effect of concentrated attention. In this respect it has some advantage over the Thematic Apperception Test, but even then, in my own work with it, I have found it more useful in children than in adults. As it has to be administered individually, it cannot be used for the routine testing of large numbers. The Rorschach Test (50) would probably be more useful and if given and controlled as suggested by Harrower-Erikson (51) would prove satisfactory, provided that reliable interpretations were available. Its uses in military psychiatry are discussed by Brussel and Hitch (52). No doubt, in time, more accurate personality tests will be devised, but where a reliable report on the man is desirable, the psychiatric interview is still the most useful yard-stick.

DISCUSSION.

I can find no parallel instance in the literature where one hospital has housed so many groups of psychiatric cases. It is probable that such a situation could only arise in war-time, and as military psychiatry is a comparatively recent development, it is not surprising therefore that there are no comparable instances. While it provided an excellent opportunity for original research, the material to hand was so profuse that one soon became 'embarras de richesses', yet it was felt that to narrow the field of investigation would not adequately interpret the general impression gained by working in such a unit. Because of this, all the groups, with the exception of the British Army N.C.O. group, were dealt with in a broad way, as shown in the tables. The information derived from them, including the formulation of the psychiatric index, should not be taken as absolute evidence of the reaction of the various groups, but as indications of general trends. As has been shown, a quantitative estimationwould materially alter the figures, although it would probably strengthen the argument in the process.

The thesis itself has tended to be discursive, so a general discussion would only result in much repetition. There are a few points, however, which are worth stressing. The arbitrary distinction between neurosis and psychosis has very little place in military psychiatry. A complete disease incidence and preferably a relative one would be of value and then the accurate formulation of a psychiatric index might eventually become a useful guide to the standards of personnel selection.

There is another important source of "leakage" which has not yet been mentioned. Not all cases of endogenous depression were admitted to the psychiatric hospital. The opportunities for suicide in the Middle East were almost unparalleled - lethal weapons, lonely railway tracks, the Suez Canal, the desert, and for completeness, the enemy. The British representative at Ismailia told me that in one month

he had to deal with ninety-one cases of "accidental death" and he was of the opinion that a fair proportion of them were suicidal. This factor would, of course, apply equally to all the groups and would not unduly affect comparisons, except that in those with a higher incidence of depression, one would expect the suicide rate to be correspondingly higher. This, as with quantitative estimation, would tend to accentuate the differences. It is likely that some suicides would come into the paranoid state group, for they have a tendency for violent and destructive action.

The paranoid reaction has interesting connections with the manic-depressive group, as has already been shown, but its relationship with the schizophrenic is too well established to be ignored. Its capacity to exist with or without affective colouring appears to give it access to both 'camps'.

Although the investigation has been limited mainly to the four major diagnoses of anxiety state, hysteria, manic-depressive psychosis and schizophrenia, no mention has been made of the incidence of mania. There were very few cases of mania among those admitted to the 41st General Hospital. Tredgold (53) who worked in the Far East, describes an 'epidemic' of mania occurring after V.J. (Victory over Japan) Day. He attributes it to a state of restlessness developing without adequate outlet, or a sudden release of tension and a change in the tempo of work. His cases were mostly young officers who had presumably been passed by Selection Boards, and who had no history of previous breakdown. He describes the type as being over-conscientious, responsible, with obsessional tendencies and anxiety. It is not surprising therefore that in the Middle East between 1942-43, when the battle was "on" and the above precipitating factors absent, cases were few.

It has been fashionable in psychiatry to telescope conditions and seek common denominators and in an investigation such as this, it is tempting to do likewise. One could then divide all categories into two main groups:-

(1) The guilt-laden, including the manic-depressives, anxiety states, obsessional neuroses and the affective group of paranoid states

(2) The guilt free including the hysterics, schizophrenics, antisocial and asocial psychopaths, and the

affectless paranoid states.

But the problem does not lend itself to such simplification. Any tendency towards this that might be gathered from the thesis could only have resulted from the attempt at parcelling the large mass of data into discernible entities and not from any failure on the part of the writer to appreciate the complexity of the subject.

I will conclude by quoting Freud's humble words "What would one not give to understand these things better?".

SUMMARY

(1) A study has been made of the disease incidence in a variety of groups admitted to a Base Psychiatric Hospital.

(2) The relationships between the group incidence of anxiety state and manic-depressive psychosis and between hysteria and schizophrenia have been indicated.

(3) The influence of the standard of personnel selection and morale on the disease incidence has been discussed.

(4) The importance of the quantitative factor in diagnosis in military psychiatry has been stressed and a method of assessing it has been described.

(5) An argument has been put forward for the use of the psychiatrist in the positive aspect of personnel selection in addition to his usual role of weeding out the unfit.

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Appendix A.

STATISTICAL TABLES.

TABLE NO. 1.

Disposals of Psychiatric Casualties admitted to Hospital.

Group	Total Cases	Unchanged	Evacuated to U.K.
British Army N.C.O's	627	58%	20.2%
British Army O.R's (incl.N.C.O's)	898	40.1%	31.6%

TABLE No. 2.

Average number of days spent in hospital according to diagnosis.(British Army N.C.O's).

Diagnosis	Total No. of Cases.	Days spent in hospital.
Anxiety States	243	31.71
Hysteria	134	32.79
Manic.Dep.Psychosis	45	34.36
Psychopath. Personality	28	32.07
Schizophrenia	4	34.72
Obsessional States	2	36.50

TABLE No.3.

Disease incidence in groups admitted to the 41st General Hospital between March 1942 and Sept.1943.

Groups	Anxiety	Hysteria	Man.-Dep.	Schiz.	MD.& D&B.	P.P.	Epilepsy	Total
Officers -								
British Army	92 (37.5%)	32 (13%)	68 (27.8%)	12(7.P) (4.9%)	-	40 (16.3%)	1 (0.4%)	245 (99.9%)
R.A.F.	6 (30%)	2 (10%)	7 (35%)	2(1.P) (10%)	-	3 (15%)	-	20 (100%)
R.N.	11 (42.3%)	1 (3.8%)	9 (34.6%)	3(1.P) (11.5%)	-	2 (7.7%)	-	26 (99.9%)
Australian	1 (50%)	-	-	1(1.P) (50%)	-	-	-	2 (100%)
U.D.F.	4 (44.4%)	-	3 (33.3%)	2(1.P) (22.2%)	-	-	-	9 (99.9%)
N.Z.E.F.	1 (50%)	1 (50%)	-	-	-	-	-	2 (100%)
Indian	5 (14.7%)	8 (23.5%)	7 (20.6%)	5(1.P) (14.7%)	-	7 (20.6%)	2 (5.9%)	34 (100%)
Allied European.	3 (15.8%)	3 (15.8%)	4 (21%)	8(1.P) (42.1%)	-	1 (5.2%)	-	19 (99.9%)
Prisoners of War.	2 (15.4%)	1 (7.7%)	5 (38.4%)	5(1.P) (38.4%)	-	-	-	13 (99.9%)

Table No.3 cont..

Groups	Anxiety	Hysteria	Man.-Dep.	Schiz.	MD.& D&B.	P.P.	Epilepsy	Total
N.C.O's -								
British Army	260 (45.4%)	148 (25.8%)	79 (13.8%)	27(11.P) (4.7%)	-	55 (9.6%)	4 (0.7%)	573 (100%)
R.A.F.	34 (40.7%)	11 (18.6%)	10 (16.9%)	11 (18.6%)	-	3 (5.1%)	-	69 (99.9%)
O.R's.								
British Army	974 (37.4%)	688 (26.4%)	231 (8.8%)	164(30.P) (6.3%)	P229 S93 (8.8%)	293 (11.2%)	27 (1%)	2606 (99.9%)
R.A.F.	37 (16.4%)	53 (23.4%)	39 (17.2%)	56(13.P) (24.8%)	6 (2.7%)	34 (15%)	1 (0.4%)	226 (99.9%)
R.N.	28 (30.1%)	23 (24.7%)	9 (9.7%)	18(7.P) (19.3%)	2 (2.1%)	11 (11.8%)	2 (2.1%)	93 (99.8%)
Allied European	10 (4.5%)	28 (12.6%)	24 (10.8%)	118 (53.1%)	32 (14.4%)	6 (2.7%)	4 (1.8%)	222 (99.9%)
Cypriots	-	9 (25.0%)	8 (22.2%)	8 (22.2%)	7 (19.4%)	4 (11.1%)	-	36 (99.9%)
Palestine(Jews)	23 (17.3%)	40 (30.1%)	18 (13.5%)	15 (11.3%)	30 (22.5%)	4 (3%)	3 (2.2%)	133 (99.9%)
" (Arabs)	2 (3.5%)	23 (40.3%)	8 (14%)	7 (12.3%)	12 (21.1%)	5 (8.8%)	-	57 (100%)
Mauritian	48 (32.4%)	56 (37.8%)	9 (6.1)	20 (13.5%)	10 (6.7%)	4 (2.7%)	1 (0.7%)	148 (99.9%)
Africans	12 (4.7%)	105 (36.7%)	36 (12.6%)	69 (24.1%)	29 (10.1%)	24 (8.4%)	11 (3.8%)	286 (99.9%)
Prisoners of War	7 (3.8%)	20 (11.1%)	35 (19.5%)	77 (42.8%)	12 (6.7%)	29 (16.1%)	-	180 (100%)

TABLE No. 4.

Incidence and percentage of the 4 main psych. diseases among the groups admitted to the 41st General Hospital between March 1942-Sept. 1943.

GROUPS	Anxiety		Hysteria		Depression		Schiz.		Total	%
	No.	%	No.	%	No.	%	No.	%		
British & Dominion Officers.										
Army	92	45.10	32	15.68	68	33.33	12	5.88	204	99.99
R.A.F.	6	35.30	2	11.76	7	41.18	2	11.76	17	100.00
R.N.	11	45.83	1	4.17	9	37.50	3	12.50	24	100.00
N.Z.	1	50.00	1	50.00	-		-		2	100.00
Australian	1	50.00	-		-		1	50.00	2	100.00
U.D.F.	4	44.44	-		3	33.33	2	22.22	9	99.99
Totals	115	44.57	36	13.95	87	33.72	20	7.75	258	99.99
British N.C.Os.										
Army	260	50.58	148	28.80	79	15.37	27	5.25	514	100.00
R.A F.	24	42.85	11	19.64	10	17.86	11	19.64	56	99.99
Totals	284	49.83	159	27.90	89	15.61	38	6.67	570	100.00

cont....

Table No.4, cont...

Groups	Anxiety		Hysteria		Depression		Schizophrenia		Total.	
British Other Ranks.	No.	%	No.	%	No.	%	No.	%	No.	%
Army	974	47.35	688	33.45	231	11.23	164	7.97	2,057	100.00
Air Force	37	20.00	53	28.65	39	21.08	56	30.27	185	100.00
*Navy	28	35.90	23	29.49	9	11.53	18	23.08	78	100.00
Total	1039	44.78	764	32.93	279	12.03	238	10.26	2,320	100.00
Other Groups- Officers.										
Indian	5	20.0	8	32.0	7	28.0	5	20.0	25	100.00
Allied European	3	16.67	3	16.67	4	22.22	8	44.44	18	100.00
Prisoners of War	2	15.38	1	7.69	5	38.46	5	38.46	13	99.99
Total	5	16.13	4	12.90	9	29.03	13	41.94	31	100.00
Other Groups-Other ranks.										
Allied European	10	5.56	28	15.56	24	13.33	118	65.55	180	100.00
Cypriots	-		9	36.0	8	32.0	8	32.0	25	100.00
Palestinian (Jews)	23	23.96	40	41.67	18	18.75	15	15.62	96	100.00
" (Arabs)	2	5.0	23	57.5	8	20.0	7	17.0	40	99.50
Mauritians	48	36.09	56	42.11	9	6.77	20	15.03	133	100.00
Prisoners of War	7	5.04	20	14.39	35	25.18	77	55.39	139	100.00
African (Natives)	12	5.41	105	47.29	36	16.22	69	31.08	222	100.00

*These included N.C.Os, but owing to the unfamiliarity of our clerks with Naval ranks, the distinction was often lost and it was thought better to group them together as one, rather than have incomplete differentiations.

TABLE No. 5.

Disease incidence in groups admitted to the 78th General Hospital between September 1943 and November 1944.

Group.	Anxiety	Hysteria	Depression	Schiz.	Psych. pers.	Ment. def.	Misc.	Total
British Officers (D)	37	4	7	4	1	-	5	58
" " (T)	32	-	9	8	2	-	2	53
British Army N.C.O's (D)	88	13	9	4	10	1	4	129
" " (T)	53	13	17	15	13	4	5	120
British O.R's (D)	273	64	20	23	61	52	10	503
" " (T)	146	70	60	127	80	58	14	555
British Africans (D)	1	9	4	21	7	9	4	55
" " (T)	11	32	18	54	19	25	8	167
R.N. Officers (D)	-	-	-	-	-	-	-	-
" " (T)	8	-	3	-	-	-	1	12
R.N., N.C.Os (D)	5	1	1	-	-	-	1	8
" " (T)	7	1	1	2	-	-	-	11
R.N., O.Rs (D)	8	-	2	5	5	-	2	22
" " (T)	14	6	7	18	10	1	5	61

(D) direct admissions; (T) transfers.

Table No.5 cont..

Groups	Anxiety	Hysteria	Depression	Schiz.	Psych. pers.	Ment. def.	Misc.	Total
Palestinian Jews (D)	12	9	6	1	20	-	-	48
" " (T)	6	4	2	5	8	3	-	28
" Arabs (D)	-	17	-	2	34	14	7	74
" " (T)	1	11	-	2	19	6	4	43
Cypriots (D).	3	7	1	4	7	4	1	27
" (T)	3	6	-	4	4	1	-	18
Mauritians (D).	-	4	-	-	2	-	-	6
" (T)	-	6	2	3	2	1	1	15
Singalese (D).	5	10	1	3	1	2	1	23
" (T)	-	8	-	7	9	-	-	24
Maltese (D)	2	2	-	-	3	2	-	9
" (T)	1	-	-	-	1	-	-	2
Sudan D.F. (D)	-	-	-	-	-	-	-	-
" " (T)	-	-	-	1	1	-	-	2

(D) direct admissions; (T) transfers.

TABLE No. 6.

Incidence and percentages of the 4 main psych. diseases among the groups admitted to the 78th General Hospital.

Group.	Anxiety.		Hysteria.		Depression		Schizophrenia		Total.	
British Officers	69.	68.31%	4.	3.96%	16.	15.84%	12.	11.88%	101.	99.99%
" N.C.Os.	141	66.51	26	12.26	26	12.26	19	8.96	212	99.99
" O.Rs	419	53.51	134	17.11	80	10.21	150	19.15	783	99.98
" Africans	12	8.00	41	27.33	22	14.66	75	50.00	150	99.99
Royal Navy Officers	8	72.72	-		3	27.27	-		11	99.99
" " N.C.Os.	12	66.66	2	11.11	2	11.11	2	11.11	18	99.99
" " O.Rs.	22	36.66	6	10.00	9	15.00	23	38.33	60	99.99
Palestinian Jews	18	40.00	13	28.88	8	17.77	6	13.33	45	99.98
" Arabs	1	3.03	28	84.84	-		4	12.12	33	99.99
Cypriots	6	21.42	13	46.42	1	3.57	8	28.57	28	99.98
Mauritians	-		10	66.66	2	13.33	3	20.00	15	99.99
Cingalese	5	14.70	18	52.94	1	2.94	10	29.41	34	99.99
Maltese	3	60.00	2	40.00	-		-		5	100.0
Sudan Defence Force	-		-		-		1	100.0	1	100.0

TABLE No. 7.

Disease incidence among U.D.F. Personnel.

Group.	Anxiety.	Hysteria.	Deppress'n.	Schiz.	Psych. pers.	Ment. def.	Misc.	Total.
U.D.F. European	937	245	34	38	32	57	84	1,427
" Cape Corps	96	61	6	23	1	4	6	197
" Native	44	45	14	52	4	11	27	197

TABLE No. 8.

Incidence and percentage of the 4 main psych. diseases in U.D.F. groups.

Group.	Anxiety		Hysteria		Depression		Schizophrenia		Total	
		%		%		%		%		%
U.D.F.	937	74.72	245	19.54	34	2.71	38	3.03	1,254	100.00
" Cape Corps	96	51.61	61	32.80	6	3.22	23	12.36	186	99.99
" Native	44	28.38	45	29.03	14	9.03	52	33.55	155	99.99

TABLE No. 9.

Disease incidence in Greek personnel.

Group.	Anxiety.	Hysteria.	Depress'n.	Schiz.	Psych. pers.	Ment. def.	Misc.	Total.
Greek Forces	32	51	27	49	7	10	16	192

TABLE No. 10.

Incidence and percentages of the 4 main psych. diseases in Greek personnel.

Group.	Anxiety	Hysteria	Depression	Schizophrenia	Total
Royal Greek Army.	32 20.12%	51 32.07%	27 17.00%	49 30.81%	159 100.00%

TABLE No. 11.

The 'Psychiatric Index' for the groups admitted to the 41st General Hospital between March 1942 and September 1943.

Group.	Total Cases.	Index.
British & Dominion Army, Navy and Air Force Officers.	258	3.6
British Army N.C.Os.	514	1.94
R.A.F.,N.C.Os	56	1.55
British Army O.Rs.	2,057	1.41
Indian Officers	25	0.93
European officers	18	0.82
Mauritians	133	0.75
R.N. O.Rs.	78	0.75
Palestinian Jews	96	0.75
R.A.F. O.Rs.	185	0.70
Cypriots	25	0.47
Ps.O.W.	139	0.43
Palestinian Arabs	40	0.34
African (natives)	222	0.28
Allied Europeans	180	0.23

TABLE NO. 12.

The 'Psychiatric Index' for the groups admitted to the 78th General Hospital between September 1943 and November 1944.

Group	Total Cases.	Index.
Royal Navy Officers	11	-
British Officers	101	4.05
British N.C.Os	212	3.71
Royal Navy N.C.Os	18	3.50
British O.Rs	783	1.757
Maltese	5	1.5
Palestinian Jews	45	1.36
Royal Navy O.Rs	60	1.07
Cypriots	28	0.33
Cingalese	34	0.21
Africans	150	0.209
Mauritians	15	0.15
Palestinian Arabs	33	0.031

TABLE No. 13.

Incidence of Paranoid States (including Paranoid Schizophrenia) compared with total incidence of Schizophrenia in British Groups. (41st General Hospital).

Group.	Schizophrenia.	Paranoid States.	Percentage of Paranoid States.
British Officers	12	7	58.3
British Army N.C.Os.	27	11	40.7
R.N., O.Rs.	18	7	39.0
R.A.F., O.Rs.	56	13	23.2
B.O.Rs.	164	30	18.3

NOTES ON APPENDIX B.

S.P. Sheet 100A.

Abbreviations:

C.T.	-	Combatant Temperament
E.R.	-	Employment Record
L.	-	Leadership
O,R.	-	Officer Recommendation
P.I.	-	Psychiatric Index

Shaded areas are for code numbers in the Hollerith Filing System.

T.R. (Training Recommendation)

0	-	Specific Trade - in this case, Clerk-Shorthand writer
5A	-	Clerical duties
1	-	Driving

This case was not referred for psychiatric opinion

Army Form B.178A.

Mental and Nervous Condition is assessed among other things by Medical Examiner No. 1. The space allotted permits only the most cursory examination.

Army Form B.183 (Revised).

S.P. Sheet 100A

QUALIFICATION FORM

CONFIDENTIAL

Do NOT write in this margin.

A. IDENTIFICATION PARTICULARS

1.—P.T.C. No. 45 2.—Army No. 21175660

3.—Surname HOLDEN

4.—Initials J. K 5.—Date of Birth 15 Oct 1929

6.—Date of Intake 12 Feb. 48 7.—Nature of Engagement AC/CF

8. Arm

9.—Army Trade, if any

10.—Nationality English 10a.—County Connection Derbyshire

11. I.R.C. FORESTERS

B. EDUCATION

13.—Age on leaving last full-time school 14 14.—Standard/Class 4

15.—Matriculation or School Certificate No 16.—Higher School Certificate No

17.—H.S.C. Subjects No.

18.—University — 19.—Subjects — 20.—Class —

12. E.S. 51

Elementary Chesterfield. Regular attend. Top class 1 year. Good scholar 2 sessions studying for civil service exam

21.—Subjects taken at professional courses, including technical courses and evening classes :—

Subject	No. of Sessions	Where taken
maths. English.	2	Chesterfield Tech.
Book keeping		College.

C. EMPLOYMENT 22.—

	Employer	Your job	How long	Usual wages
1	Allens. Grocer Shop	Shop Assist.	2 years	£1.10
2	L.M.S. Railway	Clerk.	2 "	£3.0

1 Grocers shop Serving behind the counter. Van driver mate delivering groceries left for more money.

2 General clerical duties. wages increasing.

Intends to take civil service exam Clerical section.

14/18. Foresters Cpl.

23.—Which of these has been your *main* job? L.M.S. Railway

24.—What exactly did you do? General clerical duties.

25.—What job do you intend to do when you leave the service? Civil Service

26.—What is or was your father's job? Engine Driver L.M.S.

D. OTHER EXPERIENCE

27.—Underline whichever of these you can drive :—

Car Motor-cycle P.S.V. Heavy Goods Motor Boat

28.—How long have you held a driving licence? From 19..... to 19.....

29.—Underline the type of vehicle for which you have passed a driving test :—

Car Motor-cycle P.S.V. Heavy Goods

30.—Underline any of the following of which you have had experience, either in your job or in your spare time :—

(a) Metalwork (e) Car repairs (h) Typing (l) Cooking
(b) Woodwork (f) Using precision tools (j) Shorthand (m) Morse Code
(c) Electrical repairs (g) Handling boats (k) First Aid (n) Photography
(d) Radio repairs

27. 8. H.P. 2 years. Passed test Nov 1947. no. accidents.

30b. At home. making model planes.

30c. Running repairs fathers car.

30n. very slight.

30j. 30. W.P.M.

31.—Previous experience in H.M. Forces (incl. Home Guard), Civil Defence, Training or Cadet Corps :—

Service	Approx. Dates	Rank	Nature of Duties
A. C. F	1944. 47	Pte	General Duties

31 3 years. Drill & weapon training

32 At the age of 14 second patrol leader.

Sports. Football local team. Swim 100 yds.

lives at home with parents. 2 bros. 1. R.A.S.C. 1 school. middle child Single left handed.

32.—Were you a member of any boy's organisation?

Which? Boy Scouts How long? 3 years.

Date 15 Feb. 48 Signature J K Holden

Good health

(365) 71244 50010/D4187 150M 3/47 SP/TBH Gp38 J/A326

Note: Form N.S. 158 and other accompanying documents must remain permanently attached to this record.

Army Form B178A. (Revised)
Naval Form B215.
R.A.F. Form 36A.
N.S. (M.C.) 14.

Serial No.....

MEDICAL EXAMINATION RECORD AND MEDICAL HISTORY SHEET

Surname..... N.S. Registration No..... Army No..... Enlisted at.....

Christian Names .....

Born at—Parish..... County ..... Posted to ..... Date .....

Examined at ..... Date ..... Transferred to ..... Date .....

Declared date of birth .....

Trade or Occupation .....

Other Information

Medical Orderly

Part I. Physical Condition on Examination.

Weight.....lbs. Height.....ft.....inches

Colour of Hair..... Colour of Eyes.....

Complexion .....

External Marks.....

Vaccination: Age..... No. of Marks.....

Inoculation: Typhoid ..... Diphtheria .....

Tetanus..... Other.....

Urine: Appearance ..... Albumen .....

Sp. Gr..... Sugar .....

Medical Examiner No. 1

Past history:

Tubercle.....

Rheumatic Fever .....

Fits .....

Grade

Other salient facts .....

(e.g., Breakdowns, Gastric Symptoms) .....

Mental and Nervous Condition .....

.....

Initials

Reflexes: Pupils..... Knee Jerks..... Ankle Jerks.....

Plantar Reflexes..... Romberg's Test.....

	Natural	With glasses in use
Vision R.	.....	.....
L.	.....	.....

Eyes .....

Medical Examiner No. 2

Ears R..... L.....

Hearing R..... L.....

Nose, Throat ..... Teeth.....

Physical Development .....

History of Injuries or Operations.....

.....

Grade

Flat Foot .....

Knock Knee.....

Hammer Toe .....

Other Deformities of Legs.....

Deformities of other Joints.....

Initials

Movement of Joints .....

Varicose Veins.....

Venereal and Skin Diseases.....

Ext. Genitals, Perineum, Piles.....

Hernia.....

Medical Examiner No. 3

Pulse Rate .....

Condition of Heart .....

.....

Grade

E.T.T. (if taken) .....

.....

Chest Measurement { Maximum..... inches
Range of Expansion..... inches

Suggested Final Grade

Lungs .....

Abdomen .....

Additional Examinations and confirmation of abnormalities.....

.....

Initials

.....

B.P. (if taken)
S..... D.....

Examined and placed in :—

*

Signature.....

Chairman of N.S. Medical Board.

* Insert Grade—see M.R.B.1, para. 6.

Medical Examiners' Remarks and Additional Clinical Notes.

(see M.R.B.1, para. 89).

Chairman's Remarks

(i) Visual standard.....

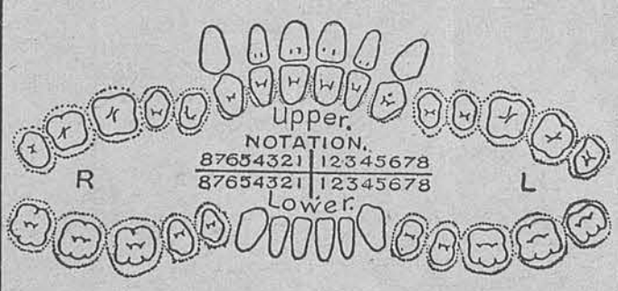
(ii) Hearing standard.....

(iii) Other remarks.

(iv) Details of Medical Certificates.

**Parts II and III for use of Service authorities only.*

Part II. Dental Condition on Enlistment.



Oral Hygiene.....

Remarks .....

.....

Signature, Dental Officer .....

Part III. Became non-effective by .....

.....

.....

Date .....

Signature .....

CONFIDENTIAL. Army Form B 183 (Revised)

Report on a Case referred for Psychiatric Examination

PART I.

No..... Rank..... Name .....

Unit..... Station.....

Service..... Age..... Medical Category.....

(a) O.C.'s Report.

The above-named was posted to my Unit/Company on ..... and the following is my considered report on him :—

1. Nature of Present Duties .....

.....

2. Efficiency and Response to Training.....

.....

3. Mental Outlook and Personal Habits .....

.....

.....

4. Behaviour and influence in the Unit/Company.....

.....

.....

5. Opinion as regards Retention or Disposal.....

.....

.....

Date.....

.....*Officer Commanding.*

(b) M.O.'s Report.

I have examined the above-named, and my report on him is as follows :—

1. Symptoms.

2. Results of Physical Examination.

(26643) Wt.51059/565 52,000 2/44 A.& E.W.Ltd. Gp.698
(27364) Wt.16120/2291 88,000 5/44 ,, ,, Forms/B.183/33

[P.T.O.