CHAPTER 60

PSYCHIATRY

"It is a disease of the soul which I am to treat, and as much appertaining to a Divine as to a Physician" (Burton, *Anatomy of Melancholy*)

THE future may show that a fuller and juster comprehension of the "mind-body" entity in states of disease began during the war of 1939-1945. War seldom initiates change, but vastly accelerates it, as was shown by the powerful forward movement of technical medicine since the war of 1914-1918. The medical world is still being borne on by its impetus. Surgeons show even greater resource and dexterity, physicians more deeply explore disordered function and seek to restore it with yet more dangerous remedies; the chemist improves on nature's molecular workshop, and the obstetrician and paediatrist influence the make-up of the generation which is to inherit these advantages. Psychiatry has for some time been warning us that there are fallacies even in measurement, and that the technical bias of medicine has been responsible for the neglect of certain factors which are rejected because they appear as imponderables. Psychiatrists, besides being few in number, have to contend with three criticisms of their claim for adequate recognition. In Australia there has been some mistrust of psychiatry because its basis was largely empirical, because of a fear that its influence might dangerously affect manpower during war, and because its work was still confused by archaic notions of the madhouse. Just as the surgeon has been pilloried as the man with a knife, and the physician as a man of inaction, so the psychiatrist has been thought to be merely a doctor of the insane.

During the 1914-1918 war there was a hard fight to gain recognition for scientific medicine, particularly for medical research in time of war. During the 1939-1945 war there has been a struggle against that "organic bias" of which psychiatrists and all thoughtful physicians complain.

A. Graham Butler, in the *Official History of the Australian Army Medical Services, 1914-1918,* gave an admirable account of the earlier history of the study of disorders of the mind. He pointed out how the nature of fear and anxiety and of psychic conflict were clearly recognised, but even the most influential psychiatric teaching of the day was unable to prevent undue emphasis on the material factors. From this imperfect understanding came such unfortunate names as "shell-shock" and "disordered action of the heart". Not only did the lay public seize on the seemingly obvious connection between certain violent manifestations of war and "neurotic" symptoms, but doctors as a body did not favour a psychogenic explanation of many disturbances which suggested strongly to them at least a predominant corporeal component. During the inter-war period even sound teachers would deplore the use of the word "neurotic" as something to be passed over lightly, and pointed out how important it

was to try to discover an organic cause. Experience and wisdom with deeper insight solved many of these problems, but more by knowledge of life than by knowledge of medicine. "Investigation" in the medical sense has meant chiefly radiological, biochemical and other similar special enquiries: inclusion of psychiatric methods, particularly those which explored the deeper psychic levels, has not been much favoured in Australia.

At the outbreak of war psychiatric clinics were gaining in strength and value, but trained workers were few. The magnitude of the mental problems raised by war was realised with some clarity by all interested in military medicine. There was, however, a feeling that the problem was rather one of disposal and accommodation than of method, and that experienced general physicians could handle the psychoneuroses in hospitals, while the lessons of the last war could be applied by the junior medical officers in forward areas with some help and instruction. Nevertheless Brigadier G. W. B. James, Consulting Psychiatrist to British troops in the Middle East, even admitting the recent interest taken by the medical profession in psychosomatic disease, has stated that "the doctors of the Empire, no matter where they were trained, were, with few exceptions, bewildered by the psychiatric casualty; they looked upon him with distaste, and were quite unable to deal with him effectively". To this hard saying with its firm core of truth, might be added the remark that they often did not recognise him when they saw him in his early stages.

In this young medical graduates were not to blame, it was their education which was lacking, for with instruction and opportunity they showed aptitude for dealing with such problems as those of acute exhaustion and fear state. At the other end of the scale the Repatriation Department during the inter-war period had faced increasing difficulties with psychosomatic and psychoneurotic maladies. This was largely due to the prevailing attitude to these conditions, which in itself was intensified by a pension system based on a non-medical point of view.

In 1939 the practical applications of scientific advances in medicine lagged, as they always must, behind the science itself, and this disparity was considerable in the knowledge of mental diseases. In this mental environment grew up the concept of "war neuroses", a term which, unhappily today, still carries a suggestion, even a belief, that damage through the violence of war is alone responsible for the mental disorders of servicemen and servicewomen.

IN THE MIDDLE EAST

Let us trace first the evolution of psychiatric services in the Australian armed forces, and the nature of the problems to be solved. When the 16th Brigade of the 6th Division left Australia in January 1940, a small nucleus of a larger force detached itself from a steadily growing number of volunteers at home, and became self-contained overseas. It was not hard to forecast that this contingent would contain many keen soldiers in the making, but also a not negligible percentage of misfits. Recruiting

had been done hurriedly, examinations were carried out under extemporised conditions, and among those who "leapt to arms" there were those who were over-bold, over-age, or otherwise unable to maintain physical and mental health under conditions which restrict individuality and independence. Within a few months there were numbers of men awaiting repatriation; of these at least one-third were suffering from an illness mainly psychogenic. Review of the first batch of men (some 325) returned to Australia on the first trip by hospital ship showed similar findings.

The types of mental illness seen in the Middle East in 1940 were purely of civilian pattern. There were few psychotics, only 12 out of 325 repatriated in the first batch, and 8 epileptics. The psychoneurotics ranged from men with the severe forms of depressive states admitted to hospital to those with the lesser anxiety neuroses and the psychosomatic groups, including asthma and peptic ulcer. Headaches and "blackouts" were common symptoms, but it was early evident that the most frequent somatic fixation in the army was digestive. Surgeon-Commander H. W. Gault, R.A.N., has, however, pointed out that headaches were a predominant symptom in neuroses and anxiety states in the navy. The correction of small refractive errors was not found beneficial. Major N. V. Youngman has suggested that questioning about any previous eye trouble is a useful adjunct to the examination of recruits. Where the appropriate stimuli were operative, cardio-vascular fixations were occasionally seen, but the "effort syndrome" was not common. The frequency of functional dyspepsia did not surprise physicians at all: familiar civilian types, such as the men who could not eat this and that, appeared at consultation clinics and sick parades. The large numbers of men with demonstrable peptic ulcers were noteworthy, 13 per cent of the first batch sent home. In the early days delays and difficulties in having investigations carried out increased the often obvious tension in these patients, and the long wait for a hospital ship made this component of their illness still more obvious.

Psychoneurotic patients were better to be admixed in the general wards, but even at this early stage it was evident that to group patients in the same wards because they complained of similar symptoms, had many objections. Treatment of psychoses was difficult, as only tents were available, and even with the help of several trained male mental nurses the handling of acutely confused or manic patients was trying to all concerned.

Meanwhile, in May 1940, the question of military psychiatry was discussed in Australia. A conference was convened by the D.G.M.S., Major-General Downes, to consider "war neuroses": representatives of the army, the Repatriation Commission and The Royal Australasian College of Physicians discussed a memorandum on prevention and treatment of psychiatric disorders. This body recommended that the term "shell-shock" should be forbidden, and that the name "anxiety state" should be used in forward areas. The influence of the last war can be seen in this latter recommendation which would have perpetuated a confusion of acute fear or exhaustion states with the ordinary civilian types of neuroses. The usual terminology was recommended for these latter. This conference recognised

a pressing need for instruction of the public and the medical profession concerning the nature of nervous disorders, and advised that acute nervous casualties should be treated as far forward as possible, particularly by regimental medical officers, and also by mobile groups of experienced physicians and psychiatric specialists. Emphasis was laid on prompt disposal and on plans for treating intractable neuroses in repatriated men. One interesting recommendation of this conference was the need of a psychiatric specialist for each division.

Shortly after this, in July 1940, Brigadier Burston, D.D.M.S. I Australian Corps, convened a meeting of physicians in Palestine to discuss psychiatric problems. This body, which included a psychiatrist, advised chiefly on the recognition and disposal of the acute psychiatric casualties expected under action conditions, but also dealt with the methods of handling psychoses and neuroses. Neuroses were classified as mild, moderate or severe. Patients with the mild type, having no gross psychological lesion, might be expected to recover in one month, and were best treated in a convalescent depot and returned to their unit. Those in the moderate class had a reasonable prospect of recovery within two months, and needed hospital treatment before transfer to a convalescent depot. The accepted disposal of this group was by reclassifying by a medical board as class "C" (temporarily unfit) and returning to Australia. The severely affected were to be regarded as unfit, and required hospital treatment while waiting return.

This physicians' committee suggested that the term "exhaustion" be used for acute neurotic casualties arising in action, and that all other terms suggesting bodily or mental damage should be avoided. For other grades of psychoneurosis the usual terms could be employed, such as anxiety state, psychoneurosis, or conversion hysteria. The recommendations of this body were used as a basis of current psychiatric practice in Palestine.

At this time members of the staff of the 2/2nd Australian General Hospital, whose own hospital site was not as yet ready, took over the mental ward of the 2/1st A.G.H., and in a separate area in appropriate building treated the psychotics and severe psychoneurotics. The civil practice was followed of not admitting patients to a psychotic ward unless they were thought to be certifiable. Some months later Colonel G. W. B. James reported on Australian psychiatric patients in the 2/1st and the 2/2nd A.G.Hs. Jointly with the senior physicians of these hospitals, he recommended that a centre be established for the treatment of Australian patients with psychoneuroses, particularly those with somatic fixations, and that this should be preferably at a convalescent depot where occupational treatment could be undertaken. "Effort syndrome" was instanced as one of these types, but at that time only small numbers had occurred, and the experience of the 2/1st A.G.H. led the medical staff to recommend that this name be abolished altogether. Later Brigadier Burston suggested that the name "temporary neurovascular debility" should be used, but little need arose there for a diagnostic label at all, as few men with neuroses then showed vascular symptoms.

At this time huts were being built at Gaza for a semi-permanent hospital, and it was with considerable difficulty that the non-medical hospital designers were restrained from building an enclosed compound for all psychiatric patients. It was evident that psychiatry was still suffering from the stigma of the "asylum".

At the end of 1940 the commonest psychiatric disturbances in the Australian forces in the Middle East was of the psychosomatic type. The proportions of others corresponded closely with those already described on the first homeward trip of the hospital ship *Manunda*. The existing problems were summarised in a special report from the officer-in-charge of the medical division of the 2/1st A.G.H. in January 1941. By this time the first North African campaign had begun and the 6th Australian Division was committed to action in the Western Desert. Anxiety states were of the civilian pattern. Somatic fixations produced such states as asthma, shortness of breath associated with nasal conditions, digestive disturbances including peptic ulcer, post-traumatic headache, rheumatic disorders such as lumbar "fibrositis" and minor joint affections with muscle spasm. A very common complaint of the nature of an hysterical conversion was that of "blackouts", one of the popular terms of the day. Arising possibly from the familiar disability of airmen under great centrifugal strain in aircraft, and no doubt copied consciously or unconsciously from one man to another, this term was often used by men who had no clear idea of what they meant by it.

Prompt recognition of the various factors concerned and treatment were essential with these men. Mixed with these were a certain number of misfits and delinquents. The need for a trained full-time psychiatrist was felt. The situation was summed up as follows. "The staff of the hospital has had in the past the opportunity of gauging the standard of health of the Australian forces so far sent to this country, and in the light of their experience the importance of psychological disorders in the A.I.F. is emphasised even at a time when only a small proportion of troops have encountered conditions of active service in a war zone. The future importance of such disorders is likely to be very much greater."

At the time that this report was made the services of Colonel J. K. Adey, commanding the 2/1st A.G.H., were available for psychiatric consultation, and were of the greatest value, but there was no full-time working psychiatrist.

Meanwhile the position had eased somewhat with regard to the disposal of psychotics and severe psychoneurotics in the Middle East. Accommodation was extended in hospitals and the convalescent depot, and a regular line of evacuation to Australia was now open. It may be remarked that the frequency of digestive disease, with or without demonstrable ulcer of the stomach or duodenum, was not related to any special local conditions, for the Middle East experience paralleled that in other parts of the world. Indeed, pre-war civilian experience might have enabled physicians to forecast the predominance of these disorders, though the proportion of radio-

logically demonstrable ulcers was apparently higher in military than in civilian clinics.

From the beginning of winter 1940 till the end of summer 1941 several campaigns tested the stability of the as yet untried Australian troops. Conditions differed in all these. The swift victorious advance to Benghazi, with its two well-prepared assaults on Bardia and Tobruk, gave the 6th Division experience that helped them in the brief frustrate action in Greece, where a difficult active withdrawal was a challenge to morale. The one-sided air fighting of Greece helped the men to withstand the moral shock of the impossible odds of Crete. The withdrawal from Benghazi imposed a strain on the 9th Division, thus grimly completing its training. In Tobruk an important active role in defence awaited these men exposed to air attack to which virtually no reply was possible. In Syria the 7th Division was tested in a brief campaign in which there were trying episodes of hard fighting and setbacks in difficult country. Here too malaria was for the first time an enemy to be considered seriously.

IN THE WESTERN DESERT 1941

Fear and exhaustion states were seen in the 6th Division in the first desert campaign, but the brief and not formidable resistance of the Italians was perhaps less responsible for temporary breakdowns than the nightmarish isolation of a force for the first time dispersed in those sandy wastes. The men of the 9th Division, however, arriving in Tobruk after a perilous retirement were at once committed to hard tasks in an area which was isolated except by sea. Here only an important degree of incapacitation would lead a casualty on the way to a safe base, and that way was difficult and dangerous. The ability of the defenders to reply to air action was limited; it dwindled and disappeared. Few places were safe unless underground. The active tactics adopted were much better for morale than passive defence, but psychogenic exhaustion and anxiety were to be expected. The 2/4th A.G.H. in Tobruk established a neurosis clinic in the early days of the siege. At first patients with nervous disturbances were treated in the hospital, which was within the town area, and later in a non-surgical section on the beach. Both sites were subjected to bombing with some loss of life, and superadded neuroses were seen in patients admitted for wounds or sickness. It was noticed that neurosis arising while men were in hospital was more likely to occur in the sick than the wounded. Infections appeared as a predisposing cause, in particular dysentery, and, in the early days of the siege, venereal disease. A treatment centre was then opened in an underground concrete shelter where there was safety, though the ward reverberated with shellfire and bomb explosions. This clinic was a divisional centre; no man could be returned to the base for psychiatric illness except through this channel. In the first three months 110 men were sent back out of 207 patients treated in this clinic. Facilities for treating such men in Palestine existed in the Australian convalescent depot, though delays in the sea movement from

Tobruk through Egypt to Northern Palestine were considerable and not calculated to improve the mental state of nervous patients.

Cooper and Sinclair followed up the work of this clinic and published a review of the results. The original version of this was not entirely approved by the general staff of the army, partly for security reasons and partly because of the frank description of certain types of fear state which it was thought might disturb morale. It may be remarked, however, that such descriptions were widely published in other parts of the world and were freely available to the lay press and public. Cooper and Sinclair considered that some factors in producing neuroses in Tobruk were the conditions of withdrawal from Cyrenaica, with risk of air attack and capture, lack of experience in some men of the partly-trained division, and the suspicion that no attempts were being made to relieve them once they had been shut up within the defence perimeter. They described "undisciplined and animal-like" manifestations of fear in some men under the stress of bombing raids to which no reply was possible. Dramatisation of their emotional condition was sometimes a feature, and some men had visual hallucinations. One occasional instance of the physical components of fear states was the recurrence of blood-stained stools in patients treated for dysentery. Men with uncomplicated fear states were not sent back to the base, and the diagnosis "fear-state" was written on their field medical card, so that any future assessments by medical boards would not be confused by vaguer and less accurate terms.

Of the 207 men analysed in this series 79 (38 per cent) were returned to work within the fortress area, and after periods of two to four months were still working with their units. Of the remainder 48 men treated at base were returned to duty with the classification "A" (fit for active service with field formations). An additional 48 were classified "B"', fit for base duties. Thus 61 per cent of the patients were returned to duty. Most of these men recovered quickly from what was only a temporary fear state; in others a morbid fear of shelling and bombing persisted. In others again an anxiety neurosis remained, some with associated physical symptoms. Anxiety states were by far the most common type of mental illness. Conversion hysteria was infrequent, 16 per cent; it usually occurred in young men. The outlook was not good with them on account of the liability of relapse. Few psychotics were seen, only four with schizophrenia and one with a depressive psychosis.

Care was taken in the original examinations to record the family and personal history of each patient in detail in order to ensure that a full record would be available to other medical officers. The desirability of continuity of treatment under the same attendants was recognised, but this is difficult to ensure in war. Fifty-eight per cent of the men examined were found to have some inadequacy of personality. In 23 per cent there was a history of previous breakdown, and 17 per cent of a severe head injury. As a rule these items in the patient's history had not been disclosed on enlistment.

Fear was one of the most important precipitating causes, but in this series physical exhaustion was not very significant, though some of the affected men had suffered from loss of sleep owing to the military conditions. Diet was not a factor; though monotonous it was of good quality and vitamin supplements, *B* complex and *C*, were given. It was noticed, however, that with some deterioration of physical condition, due to innate causes or to cumulative fatigue, the strain told more, particularly in those men who had defects of personality.

Cooper and Sinclair confirmed the general teaching that treatment to be effective should be begun promptly near the front line and continued as long as possible without intermission. Repeated examinations tended to confirm bodily fixations, even to create them, and prompt decision should follow prompt appraisal of each man's condition. The usual technique of explanation and encouragement was followed. In view of the limitations imposed by local conditions the results of work done at this forward centre were very good, though occupational and recreational measures were not readily possible in Tobruk, and could be applied only to patients sent back to the convalescent depot in Palestine. H. R. Love in a study of neurotic casualties in the field has added some interesting points about Tobruk. He considered that it was highly creditable to the morale of the force that there were not more casualties. In April 1941 the strain on the 2/4th A.G.H. was lessened by sending nervous casualties through the 2/3rd Field Ambulance. In five months 174 men were passed through; the mildly affected were treated and drafted back to the units. One hundred and forty of these men had anxiety states, and a large proportion of them had a history suggestive of previous breakdown. Age over 35 years was a predisposing factor. It is remarkable that eleven out of eighteen men with hysteria had a fugal syndrome. Treatment was carried out in dugouts and the position of the unit permitted some swimming. An effective form of occupational therapy was the employment of the men in building the dugouts in which they lived. Love, in emphasising the part played by fear in these states, suggests that an unduly sensitive fear reflex becomes facilitated, conditioning takes place from innate or external causes and finally infection or other mechanical factor may initiate a frontothalamic breakdown.

The importance of the continued effect of fear was well illustrated in naval experience. Men often had to be held on a ship still committed to combat and remaining in dangerous waters: it was found that under these conditions, fear states were often intensified and the patients needed more care and deeper sedation. This problem is further discussed in the history of the naval medical services.

Some difficulty was found in Tobruk as elsewhere when combatant officers wished to use medical channels for the disposal of unsuitable men. Where sufficient evidence of physical or mental unfitness could not be produced, this was of course inadmissible.

During the campaign in Greece few acute psychiatric casualties were observed, as might be expected in the midst of such swiftly moving events

which vitally concerned the well-being and safety of all members of the force. It was noticed, however, that many of the men on their return to Egypt and Palestine were exhausted and shaken. Had these men been then required to carry out responsible or tiring duties in less safe and comfortable places than training areas, the issue would probably have been different. The value of rest was well seen here. Its importance was also realised at this time under conditions of prolonged strain on ships, for instance those on the run between Tobruk and Alexandria. Such recurring strains made rest desirable after long spells of sea service, especially as breakdowns sometimes occurred after unduly prolonged periods of strain and even after the strain had been lifted.[1]

IN GREECE AND CRETE

Reverting to army experiences it will be noted that there were at least some favourable circumstances for recovery of exhausted men in the actions of Greece and Crete. Many men reaching Crete from Greece had an opportunity of resting there for a time until the terrific strains of the air invasion began, and those who escaped from Crete were quickly placed under conditions of safety and comfort once the often terrifying ocean crossing was over. Those who became prisoners of war are in a different category, for life as a war prisoner with all its trials and horrors does not characteristically produce neuroses of the usual civilian type. Australians who were ill or wounded or were returned to Greece by the Germans had the fortune to be cared for in a well housed hospital (2/5th A.G.H.) whose staff was singularly successful in maintaining the morale of its patients at a high level.

Another interesting feature of the retirement from Greece was the calmness of the nurses under the strain of a trying and occasionally dangerous journey. On their return to Egypt and Palestine they showed no evident trace of upset, being superficially at least most concerned about the replacement of lost belongings. This is of course what might be expected, as the nervous system of women resists strains of this sort remarkably well. Among some of the officers who had been subjected to great stress of responsibility signs and symptoms of an anxiety state appeared while on leave a little after their return. Examples of this latent period before the onset of clinical degrees of anxiety were seen in several soldiers of valiant character and strong personality.

IN SYRIA

During the brief Syrian campaign a considerable number of men with acute exhaustion states were sent down the short evacuation line to casualty clearing stations and hospitals in Palestine. Towards the end of the period the D.D.M.S. of I Australian Corps, after some delay due to transport difficulties, was able to establish a corps rest station. One of the officers

[1] It is interesting to note the record of two Royal Navy ships serving in this zone. James quotes them as only losing 5 men out of 480 as psychiatric casualties in two years.

of the field ambulance running this station was experienced in psychiatry, and useful preventive work was carried out there. It was thought that contributory factors to exhaustion were long marches, loss of sleep and other discomforts. Conversion hysteria appeared in rather increased numbers in the hospitals among these men: its well-known "infectious" nature demanded prompt treatment by suggestion and encouragement. Contact with the unsuitables who seek haven in hospital wards was specially avoided.

Analysis of 100 consecutive men from Syria with acute psychiatric disturbances at one A.I.F. hospital showed that 49 suffered from exhaustion states; 8 per cent of these had a background of instability, and the same proportion had recent infections. Most of this exhaustion group left hospital within a week. Forty-eight men had anxiety states, over half of them mild in degree. Of these 16 per cent had an unstable background, and 23 per cent had had a recent illness of some sort. Ten of them had hysteroid symptoms. The average age of the anxiety group was 25 to 27 years.

The immediate results of treatment of hysteria was good: symptoms included aphonia, anaesthesia, various palsies and an occasional fugue.

THE NEEDS OF 1941-1942

The need for more skilled psychiatric assistance was recognised at this time. The Consulting Physician to the A.I.F. reported that appropriate examination at enlistment should eliminate the over-age and the men with inadequate personality and history of previous breakdown, and advised that more specialised help was needed in the Middle East. The psychiatric adviser to the D.M.S., A.I.F., Colonel J. K. Adey, reported on the psychoneuroses in the Middle East in September 1941. He stated that about 20 per cent of men with combat exhaustion could be treated in forward areas and returned to their units, but that the more severely affected need treatment in hospitals. The latter were preferably sent as soon as possible to a convalescent centre where exercise and occupational therapy were prescribed under skilled guidance. Those improving sufficiently could then be returned to their units and others be brought before a medical board. As a matter of policy men under 40 years of age were retained wherever possible, even if classified "B". Older men and those with accompanying disease were returned to Australia. The object of this procedure was to discourage seekers after an easy way home, but it had the drawback of collecting numbers of men around base areas who were not particularly useful. Investigation showed that an unsatisfactory background was common among psychoneurotics, and also discovered a few men with congenital mental deficiencies which should have been a bar to enlistment. All psychotics were returned to Australia: in the majority of these cases war service played no causal part, indeed some of the patients had been treated for mental disease before enlistment. Colonel Adey in this report recommended that four more psychiatrists should be obtained from Australia.

Another measure taken to help the control of mental illness up to this period was the regular psychiatric examination of men in detention barracks whose record or conduct indicated some psychological abberration. For the further education of medical officers a medical technical instruction (No. 17 M.E. Series) was promulgated on the treatment of neuroses and a brochure on psychiatric casualties was distributed. Occasional instruction was also given by lectures. The official instruction simply set out the measures to be taken by medical officers in acute neurotic states, the emphasis being laid chiefly on rest, sedation and food. Obviously much of this work would fall on field ambulances, and in order to maintain continuity the policy was for these field units to retain such men as they could who were recovering rather than to pass them on in a stream to a casualty clearing station. At the C.C.S. a period of three days was advised, after which a man who had not recovered should be sent to a hospital. The booklet referred to was compiled by the Consulting Psychiatrist to the British Forces in the Middle East, and described in some detail the signs and symptoms of neurasthenia, reactive depression, hysteria, anxiety neurosis and obsessional and compulsive states. Epilepsy and self-inflicted wounds also received special mention. The division of military mental disorders into action or combat neuroses and other sickness due to neurosis was clearly pointed out, and the cause of breakdown traversed. Treatment, of both preventive and curative type, was adequately described. Welcome personal help was also given by this consultant, especially in the earlier days before the Australian force was more or less self-contained. The influence of a psychiatric consultant to the A.I.F. who could give his whole time to instruction and clearing up problems was really needed at this time.

A word may be said here about self-inflicted wounds. These were observed as early as January 1941 in more than one unit outside Tobruk, later at one stage of the siege of Tobruk, and occasionally in other combat areas; occasionally self injury was also seen in troops in base areas. Official enquiry was always made and some of these men came also before medical boards, but it is a pity that no systematic psychiatric investigation of these men was undertaken.

EXTENSION OF PSYCHIATRIC SERVICES

Meanwhile in Australia plans were being made for the extension of the psychiatric services of the army. Following the meeting convened by General Downes further steps were taken by Major-General Maguire, who had then been appointed as D.G.M.S. at army headquarters. Advisory committees on "war neuroses" were set up in New South Wales and Victoria. Most of their activities were directed towards the provision of accommodation for military mental patients, and the establishment of special psychiatric sections of the base hospitals in the capital cities. Maguire laid down procedures for the reception and disposal of psychiatric casualties from overseas as a guide to the deputy directors in the military districts. In view of the differences in existing legislation governing

mental hospitals in the different States an amendment of the supplementary National Security Regulations was made a little later. This permitted admission of service patients to mental hospitals without certification, and also allowed the States responsible for such care to apply their usual powers, provided the medical director of the Service in question was notified of any moves, leave, or discharge of any such patient from hospital.

Steps were taken to provide suitable occupational training at base hospitals. The question of psychiatric group-testing of recruits was also discussed, and also the best methods of instructing all medical officers in the rudiments of psychiatry in the Services. This last was of course very restricted in its influence; what was more useful was the intensive training of a number of medical officers in psychiatry. A three months' course was arranged, and later eight officers were trained, four in the A.I.F., one in the navy, and three in the air force. This policy might have been applied even more vigorously for, in spite of discernible attitude of distrust in and opposition to the work of such partly trained officers, they were of distinct value. It was of course understood that psychiatrists could not be fully trained by such brief special courses.

In response to the request for more psychiatric help Lieut-Colonel W. S. Dawson (Professor of Psychiatry in the University of Sydney) was sent to Palestine, where he took over direction of the neurosis clinic at the 2/1st Australian Convalescent Depot at Kfar Vitkin on the northern coast of Palestine. Major R. Whishaw had previously established this clinic within the convalescent depot after many difficulties and frustrations, and by the end of 1941 had the help of two other physicians trained in psychiatric work, Captains A. J. M. Sinclair and G. B. Murphy. None of the officers of this clinic were officially entitled psychiatrists; officially they merely worked as medical officers to the clinic. The number of psychoneurotics was for some time more than the available staff could handle, but Lieut-Colonel Dawson with the further help of Major A. Stoller obtained better conditions. This clinic was at first attached to the convalescent depot, but the commander of the depot, Lieut-Colonel G. Burston, and the medical officers were dissatisfied with its location. Access to alcohol and gambling were serious handicaps to its work, and immunity from ordinary punishment for misdemeanours made the inmates undesirable contacts for other convalescents.

In December 1941 the centre moved to Nathanya where there were better facilities for exercise and occupational work, including instruction in various trades and technical callings. The previous title of "war neurosis clinic" was changed to the "psychiatric centre"; this was highly advisable, for "war neurosis", in itself an inaccurate name for conditions not necessarily related to war at all, is highly undesirable when describing a clinic designed for the rehabilitation of men with a wide variety of psychiatric states. In the first six months 528 officers and other ranks were examined there and 326 discharged. A physical and mental investigation of each man was made, and a copy of the findings supplied to the Medical

Board before which he appeared. Medical boarding of all nervous and mental patients was carried out at this centre. The scope of treatment was widened, and "Cardiazol" was used for shock therapy, "Somnifaine" for narcosis and insulin for full coma in a limited number.

Difficulties still arose over some matters of discipline, as delinquencies were often pardoned because the men were neurotics. This centre did some good work, particularly in its thorough investigation of the patients, and helped to emphasise the value of occupational therapy, which was beginning to be more used in military hospitals. Workshops for carpentering, plumbing and engineering had been established by Major Whishaw, but their work was hampered by lack of funds. In this connection the difference between true occupational treatment and diversional activities was not always strictly enough drawn. It was noticed when classes in arts and crafts were started at Nathanya with the help of the Red Cross Society that more men became interested in these than in the courses which involved more personal effort, and incidentally, were much more realistic in nature. The chief difficulty in the working of such a clinic was also its essential weakness, its distance from the home base. It was recognised that the sooner psychotics were sent home the better. With psychoneurotics the position was really more difficult, not only because of their greater number, but because every patient with a condition of the severer type awaiting return, even though relatively calm and comfortably occupied, was a possible hazard to the recovery of others. Even though three hospital ships were now available, their prompt return to Australia was not simply secured. Delays were a complicating factor in recovery for it is probable that most of the success of psychotherapy in these circumstances rests (in Dawson's words) "essentially on the fact that the patient is or soon will be downgraded so that he is removed from the stresses and situations he fears, or feels unable to face".

It was indeed suggested that a centre should be opened at Asmara in Eritrea, where the 2/5th A.G.H. had been stationed as a base for the longer term invalids, but this would surely have accentuated this difficulty. The same problem, more subtly concealed, arose in convalescent depots amongst men not obviously of psychoneurotic type. Earlier in the year 1941 Colonel Hailes, Consulting Surgeon to the A.I.F., commented on the vicious circle of convalescent depot, training unit, hospital, convalescent depot—a chain which needed to be broken. He remarked that very few of the average patients at the convalescent depot at Kfar Vitkin spent time on the beach, in spite of the ideal conditions there. This weak spot in the scheme of medical care is really a reflection not so much on the system of medical care as on the inability of average persons to use and enjoy leisure.

IN THE WESTERN DESERT IN 1942

In 1942 after the return of most of the A.I.F. to Australia, the 9th Division remained to take part in the next phase of the desert campaign which finally pushed the enemy back. In this the division was faced with

action conditions of a different kind, in which it was part of a large force exposed first to the danger of being over-run by a powerful and highly mobile army, and later to a more prolonged engagement of great magnitude and severity. A conference of physicians was held in Cairo early in 1942, and amongst other subjects the types of neurotic illness seen on active service were reviewed. Emphasis was laid on the need for recognising the men of poor mental make-up, fit for little in active warfare, and the maladjusted. The importance of fatigue and illness as predisposing causes of breakdown was also stressed, especially in view of the opportunity given to prevent or forestall true combat neuroses.

When the division went to the Western Desert in June, fear states were again encountered. The men were treated in units as far as possible, but the noise of bombardment was often too great to make local treatment successful. Where it was not convenient to keep them in slit trenches near the R.A.P. they were sent to rearward positions. Some prophylaxis was found possible: many of the men likely to break down could be picked beforehand, and commanders often helped by sending fatigued men to the R.A.P. for a rest, which often restored them completely. When combat stress showed up men likely to become a liability, attempts were made to reclassify them if sufficient evidence could be obtained from officers and N.C.O's. The prolonged strain of the El Alamein battle caused the breakdown of numbers of men of certain units engaged in heavy fighting. A rest camp was established on the coast and was very useful: here psychiatric casualties needing treatment in hospital were held until the battle casualties had been cleared. At this rest station over 200 men marked "N.Y.D.N." (not yet diagnosed nervous) were classified and dealt with.

The value of early treatment and disposal of men suffering from exhaustion and fear states was well seen in the work of a psychiatric first aid post established by the 2/3rd Australian Field Ambulance. Major Stoller was seconded to take charge of this post, where he treated over 100 men, most of whom could be dealt with on the spot. The number of these men sent to hospital was very small and of those who subsequently appeared before medical boards was negligible.

Some medical officers held that too serious a view was taken of the conditions of patients sent back from some units. One battalion medical officer remarked that some of them reached medical boards classified as "anxiety neurosis" or "depressive state", whereas in Tobruk similar conditions were classed as fear states and the men returned to their units after treatment.

It is curious how reluctant we have been to acknowledge fear in medical terminology. We agree with the aphorism of Leonardo da Vinci, "Fear springs to life more quickly than anything else", and recognise it as a primal instinct, yet we hesitate to be frank when it obtrudes its universal influence into diagnosis and prognosis.

Hospital treatment for psychiatric casualties from the Western Desert was at this time undertaken at the 2/6th A.G.H. at Gaza and the 2/7th

A.G.H. at Rehovot and later at Buseili. The work of the psychiatrist centre at Nathanya correspondingly lessened, as it now served only one division, and useful work was carried out in the hospitals without much further transfer of patients.

The 9th Division, after its assignment was fulfilled, returned to Australia in 1943, where all available forces there were engaged in the defence of Australia and in the war against Japan.

PSYCHIATRY IN THE SOUTH-WEST PACIFIC

Early in 1942 psychiatric problems arose in the Pacific theatre of war. Questions for solution were the manner in which mental casualties should be dealt with in the forward areas in the Pacific theatre of war, and how these men were to be transported to a forward base, where necessary treatment could be given until they were sent to the base military hospitals in each State capital city. In all these base hospitals in Australia psychiatric services were soon available, varying with the size and priority of construction of the hospitals in different cities. Where full-time psychiatrists were available they were employed, and elsewhere visiting consultants and full-time physicians with psychiatric experience did the work. As in other specialties, there were distinct advantages in having full-time specialist officers as the size of the clinics grew. The expansion of the forces made the existing scarcity of trained psychiatrists even more acute.

It should be noted that for the first time in this war Australian volunteer and conscript forces were involved together in active military service. In New Guinea and the other islands the technical experience of the Middle East was more or less repeated. Psychoneuroses were more common in the base areas, and the problem of "B" class men with somatic fixations again arose when they were employed at forward bases. Indeed this became more acute owing to the policy of employing more "B" class men in base duties as the armed forces grew in extent. Psychoses on the whole were uncommon, but the relative and absolute increase in numbers of acute psychotic states of schizoid or confusional type was noteworthy. This condition had been noted in the Middle East, though only in small numbers; indeed it might perhaps have been predicted from previous experience in the 1914-1918 war.

Once more exhaustion and fear states were encountered in difficult combat, but these were fewer in number, and tended to appear in actions from which, although they were longer drawn out, relief was not to be expected. Infections were again noted as a contributory cause of breakdown. The great increase in skin diseases in the island introduced another factor of some importance; these conditions interfered with comfort and often caused anxiety to the patient. Conversely, it may be noted that repeated assaults on the nervous system may be a contributory factor of some importance in producing some dermatoses.

In forward bases which later became stable bases, such as Port Moresby, anxiety and fear states were commonly seen in the hospitals, with or without somatic symptoms, but hysteroid and confusional conditions were

rare. The convalescent depot in the Moresby area was at one time so near the advancing Japanese that it had to be moved temporarily, but it was interesting that in spite of this there were no adverse effects on the morale of the patients. This is no doubt a tribute to the men and also to the manner in which the unit was run. In an analysis of 100 consecutive patients needing psychiatric attention Captain A. G. Cumpston reported that over one-half were temperamentally unstable, and one-quarter had anxiety states. This total only comprised 1.6 per cent of the total admissions to the depot. Many of the unstable groups had a previous history of neurosis, but they had sustained the demands of civil life better than the restrictions of a disciplined army. Most of these patients showed satisfactory improvement under a regime of physical and mental activity.

During the Owen Stanleys campaign few neurotic casualties were seen; Robinson records that he saw only three who needed evacuation. In an action which called for fortitude and unselfish endurance of a high order, this again reflects the spirit of the men and their leaders.

During 1943 not many psychotics were seen, but as in the Middle East there was a certain troublesome proportion of these, whose acute confusional or manic episodes required control in a strong room or with restriction gear of some kind. Restraint of a violent man in a tent or fragile hut was a trying experience, even with powerful sedation, but forcible restriction was used as little as possible.

During 1944 a higher proportion of psychotics and acute manic states was seen: at the 104th C.C.S. at Aitape for instance, in 1944-1945, the need arose for special equipment. Early in 1944 the need for more skilled psychiatric help was felt in the corps area, but none was available at the time simply through shortage of staff. At Lae, which became the main forward base for New Guinea, accommodation for psychiatric patients was provided. There was still need for adequate training of medical officers, particularly those of forward combatant units, in the handling of psychiatric patients. The D.D.M.S. of Corps suggested that medical officers be attached to special centres for experience, and arranged for clinical meetings at hospitals to supply part of this need.

Later still at Bougainville acute psychoses were still common, chiefly confusional in nature. A psychiatrist attached to the hospital there was found most valuable. It was interesting that a series of gross hysterical states was observed here at a time when anxiety states were rare. This increase in hysteria is in conformity with experience in other New Guinea campaigns. The 2/9th A.G.H. and 2/5th A.G.H. at Moresby on occasion had their accommodation taxed. At the latter as many as 30 psychotics were sometimes under treatment, up to 20 being of acute and violent type, with only six single rooms available. Some 15 per cent of one observed series of psychoneuroses were hysterical in type. Sinclair notes that the incidence in officers exceeded that of other types of neurosis. The most frequent phenomena encountered were speech disturbances and alterations of consciousness such as amnesia. Actual fugues were rare. It was interesting that during unremembered periods when the soldier's

actions could not be positively traced, no additional risks seem to have been incurred by him, showing the curious semi-purposive nature of hysterical reactions Occasional convulsive attacks were seen in both frontline and base troops due to this cause, but never during action. Motor palsies were rare. Functional analgesia occurred at times; it was noted in a number of otherwise healthy soldiers in a group being investigated for thiamin deficiency by tests of sensation in the lower limbs.

It may be recorded here too that cardio-vascular fixations in anxiety states were much commoner in New Guinea than in other combat areas. Sinclair noted a 20 per cent incidence in New Guinea, but only 12 per cent in Palestine, 8 per cent in Australia and 5 per cent in Tobruk. Fitts has remarked that effort syndrome is now rare because the modern army does not march, and this bears out the same idea. In New Guinea even fit men frequently experienced breathlessness to the point of discomfort or even distress in that difficult country, and it is easy to see how a fixation might arise from the heaving chest and the pumping arteries.

In June 1945 at Morotai, which was purely a forward base, patients with confusional or manic states were again encountered, and lock-up cells, not included in the original plan of the hospital, 2/5th A.G.H., were much needed. During these periods in the islands the number of neuroses was relatively decreased, while a certain absolute and relative increase occurred in psychoses. Occasionally too mental defectives were still found among recent recruits. Men were even enlisted and classified "B" in spite of the record of a deficient mental state on their papers.

The acute psychotic states at this time raised a number of problems: these were the nature and cause of these illnesses, the best method of handling, and the transport of the patients to the mainland. The two latter were pressing, especially in a place as distant as Lae from the hospitals on the mainland equipped for psychiatric treatment. The only immediate question involved in the cause was whether there might not be some discoverable toxic factor. Atebrin was thought of, but it cannot be blamed as a significant cause of psychosis. Confusional states were observed in men on high atebrin dosages well above the level required for the suppression of malaria, but these were not the same as the psychoses. The pattern of toxic confusion due to atebrin was rather distinctive: in particular the patient had insight into his own mental state and might seek advice on that account. Moreover, all psychotic patients in a malarious area received routine suppressive doses of atebrin without any adverse effect on their mental recovery.

Before further consideration is given to the nature of this psychosis some of the difficulties in disposal of these patients may be discussed. At the 2/7th A.G.H., before June 1944, psychotic patients had been kept in an annexe to a general medical ward, and were transferred to the mainland as soon as possible. But the numbers began to rise and transport became increasingly scarce. A special ward was then built with ten lock-up cubicles, a great relief to the staff who, while waiting for its completion, treated fifty-one psychotics in tents. This period was very trying to all concerned,

but it gave opportunity to study the course of the disease when uncontrolled save for sedatives. When a ward of thirty beds was available, with adequate staff and facilities, convulsive therapy by "Cardiazol" was introduced in order to make the patients more amenable to travel. The beneficial effect on the psychotic state was soon apparent. Of the fifty-one men treated before this time, twenty-six had been admitted to hospital under restraint in order to make travel possible. An attempt was made to return eighteen of these patients to the mainland by air, but the first experiment was a harassing experience for the medical officer in charge and the aircrew. It was already known that these men were intolerant of air travel, from experiences during their removal from forward areas to the hospital. The long and inevitable delays occurring at airfields increased this trouble, and patients leaving a medical unit quiet under sedation often became maniacal when in the air. The hazards of mechanical restraint were considerable, too, and peripheral pressure palsies sometimes could not be avoided. The physical condition of the patients was often worrying. Their body temperatures often rose and they became dehydrated. Long journeys were particularly unfavourable in this regard. The anxieties of this experimental flight were too great to be repeated. There were no facilities for giving intravenous sedatives or other medication, drugs were not taken well by mouth, and morphine and hyoscine caused circulatory and respiratory depression at higher altitudes. However, instructions were given that air transport must be used for these patients, and it was imperative that early active treatment should be undertaken in New Guinea. Consequently "Cardiazol" treatment was begun in Lae. Of 236 psychotic patients, of whom 124 needed restraint on admission, 142 were treated by convulsive seizures, with such success that only sixteen needed restraint during their subsequent journey to the Australian mainland. Improvement was usually evident after three treatments, and was often dramatic, and injections were continued twice weekly until a plane was available. A few of the usual traumatic complications occurred, but no serious trouble remained. Sedatives were little required: paraldehyde was used if the need arose, as barbiturates had an unwelcome inhibiting effect on convulsive therapy. Fever was not uncommon on admission to hospital; this was seldom due to malaria, but to undue psychomotor activity in a hot humid climate. The free use of intravenous injections of glucose and saline relieved the dehydration so often present at this stage and was most beneficial. Suppressive atebrin was continued as a routine.

Further precautions were taken during the journey by air. The experience of the officers of the air force medical evacuation unit showed that it was important not to allow the mental state of patients to divert attention from their physical condition, as it was usually this which needed special care. In order to combat the proven lowering of the glucose reserve during and after manic phases of psychotic illness large doses of glucose were given by mouth to patients before they embarked on a long flight. If time did not permit thorough preparation, intravenous infusion of glucose and saline was given. It was important too to limit those factors which might

cause disturbance of heat regulation; canvas jackets were abandoned as a means of restraint, and towelling securing the wrists and ankles substituted. Intravenous "Sodium Amytal" was used occasionally for very restless men. Adequate spells of rest were found to be advisable on a long trip. The adoption of these measures revolutionised the treatment of psychotics in relatively forward areas, and experience showed that early convulsive treatment was an important factor in producing prompt remissions and in improving the prognosis of the illness.

Mention may be also made of psychiatric experiences in the operations in Borneo, in which two divisions were engaged. From these over a period of twelve weeks 360 men were sent to hospital with psychoses and psychoneuroses, the proportions being one psychosis to four neuroses. At least 60 per cent of the psychoses were of the schizophrenic type. In most of these electro-convulsive treatment was used before evacuation, and again the results were very good except in the depressive psychoses. In general, remissions were secured by early treatment, transport was facilitated and the degree of mental deterioration was lessened. Battle exhaustion also occurred in the Borneo actions, but education of the medical officers and a general understanding of the prophylactic measures caused a lowered incidence. It must be realised too that these operations, though producing some acute situations, were conducted on a rising wave of success, with efficient preparation and mastery of land, sea and air.

Some psychotics were also evacuated under restraint and heavy sedation without other preliminaries. Here the experience of the medical and nursing staffs of the R.A.A.F. medical services was of the greatest help.

A detailed analysis by Curtis showed that of 480 men seen in hospitals over a six months' period 144 were psychotics, 56 psychopathics, 270 psychoneurotics and 10 mental defectives. Of the neurotic group 206 out of 270 had anxiety states (including fear states), 25 hysteria and 20 neurasthenia or reactive depression. Of 343 psychiatric casualties seen at one hospital from 28th May to 8th October 1945, poor or bad home environments existed in 41 per cent. Battle stress was non-existent in half the total number, and severe in only 9 per cent. As an illustration of the difficulty in predicting a man's reaction to combat stress from knowledge of his history and personality, a few men with poor backgrounds broke down under heavy strain after having passed unscathed through engagements in other campaigns. The importance of continued or recurring strain was no doubt considerable. Insulin to sub-coma level was used for selected patients, and abreaction induced by pentothal for some of the acute fear states.

PSYCHIATRY IN PRISON CAMPS

In Germany and Italy the general conditions of camps for prisoners of war were far more humane than those conducted by the Japanese. Camp 57, at Gruppignano in Italy, was an example of a camp where conditions were poor and administration harsh and severe. Captain E. W. Levings noted here that the proportion of psychological disturbances among some

5,000 men was much higher than in better camps, such as those in Austria, but nevertheless the incidence of psychiatric states was very low. Even after nearly two years Major R. T. Binns records that only 8 definite cases of psychosis were recognised among these men of the 6th Division.

A different mental environment was experienced by the 8th Division in action and later in captivity. In Malaya these men experienced battle stress, the frustration of surrender, privation and cruelty, and dispersal of its force, conditions which imposed the severest strains on morale. C. R. Boyce has described the remarkably low incidence of psychiatric illness in this force. Before the outbreak of hostilities 165 patients with neurotic manifestations passed through the 2/2nd Australian Convalescent Depot. These were of the already familiar types, with one interesting feature, the universal existence of some degree of amnesia, attributed by the men to local conditions. During the brief action on the peninsula 89 patients were examined, and under great difficulties 51 were investigated. These men had suffered varying degrees of combat stress, but as the conditions at the depot were regarded as no better than those in the men's units, little rest could be assured. Notwithstanding this drawback, satisfactory results were obtained by treatment directed along the usual lines.

Under the rule of the Japanese the factors productive of mental disabilities were different. The natural depression resulting from military failure, loss of liberty, lack of news from home, and uncertainty of the future, were common to all prisoners of war. In addition there were the factors of inadequate diet, absence of hygiene and comfort, and inhuman treatment. Certain features were more or less common to all the psychoneurotic states seen in the force. All neuroses were of depressive type. Somatic symptoms commonly included rapid heart action with some subjective disturbances and muscular weakness. Continued physical strain and lowered nutrition doubtless had a determining influence. Headaches, tremors, even affecting the voice, and hysterical manifestations were also common. Disturbances of cognition were seen, such as amnesia, confusion, retarded ideation and lessened concentration.

The prisoners in fixed camps showed a good morale, and the high standard of discipline insisted upon by their commanders helped them greatly. In the working camps the conditions were usually very much worse, but in general the incidence of mental diseases of all kinds was extraordinarily low. In Nakom Paton, the huge hospital compound where gathered most of the survivors of those fallen ill in the railway working camps, a number of men with temporary disabilities were put into the mental compound, either because of fear states due to bombing or delirious conditions not specially connected with other disease. Fisher noted that this type of delirium was not associated with systemic disease: it was not seen in proven malaria, but appeared in overwrought men occasionally, usually producing some delusional ideas. After liberation had come to this camp all of these men were released, as they had been confined only for their own safety. There remained only 34 men with psychoses. Boyce treated only 11 psychotics in Changi in the first fifteen

months, drawn from 15,000 Australian prisoners. Four Dutch and 18 British patients were also seen. In all 31 psychotic patients were seen by him and 3 psychoneurotics. No facilities for special treatment existed, but as good a diet as possible was given, and all practicable social amenities were provided and participation in group diversions encouraged.

It would be difficult to arrive at any accurate figures of the incidence of psychoneurotic states in the 8th Division, having regard for the poor state of nutrition of the men, and the high rate of sickness, particularly of infective nature and remembering also the high death rate. But there is no doubt that nervous and mental factors in the production of illness were in the comparative sense very slight. Even admitting that a grim struggle for existence and neurosis are not readily compatible, the psychiatric history of the 8th Division is also a tribute to its high sustained morale.

PSYCHIATRIC CONDITIONS IN AUSTRALIA

Let us now turn from the forward action areas to the mainland of Australia, where the great expansion of the armed forces in Australia from 1943 onwards greatly increased psychiatric work. Many patients needed investigation, and had to be treated locally or sent, often over considerable distances, to larger centres. These patients ranged from those with mild somatic symptoms or anxiety, to violent psychotics. In base areas neuroses of the civilian type were common, and here helped to swell consultative clinics. It is of some interest that among the female staff of hospitals established for the care of servicewomen, neuroses had a high incidence. These women were themselves members of one of the women's services, and contributory factors were home conditions or the other familiar factors of emotional stress and isolation. Fixations of a gynaecological kind were of frequent occurrence.

Apart from these manifestations of mental maladies in the thickly populated centres, special problems arose in several parts of Australia, particularly in the Northern Territory and Queensland. In the Northern Territory troops had been stationed from the early days of the war, in view of its relative vulnerability. The men felt a degree of futility in their military life there, they were isolated, local amenities were somewhat limited, and in some parts of the year the weather was hot and trying, though not more so than in many other parts of Australia. When the Japanese raided Northern Australia from the air there was at first a sharp reaction, particularly among the civilian population. The atmosphere had changed, but largely for the better. There had grown up in Northern Territory a bogey based on an assumption that the conditions were bad there. True, life was monotonous, but there was little if any warrant for the tradition that that vague entity of the text-books "tropical neurasthenia" flourished there. Even medical officers at times advocated that men should be sent south to rehabilitate after attacks of mild illnesses like dengue fever. Yet had they known Chesterton's words these men might have applied to themselves his couplet:

"The earth is enough and the air is enough
For our wonder and our war."

The remedy for this was in the hands of the force itself, and when the correct outlook was applied practically the importance of neuroses decreased. Colonel N. D. Barton, the D.D.M.S. N.T. Force, remarked in 1942 that "tropical neurasthenia" increased as temperatures rose, and commented on the importance to morale of physical factors such as cleanliness, care of the skin, and adequate supply of water and salt. Regular mail and good amenities were important, so too was the elimination of ineffectives from the force. It is again interesting that this much publicised tropical malady did not appear among the nurses. The same observations applied with equal force to other areas. It was noticeable that similarly trying climates and local conditions were better tolerated where there was more military activity.

Of course it is freely admitted that prolonged periods of inaction in an uncomfortable climate cause deterioration of health of the mind-body entity. A special technical instruction drew the attention of all medical officers to their duty in assessing mental and physical fitness in the tropics. The Director of Medicine, however, discouraged the carrying out of regular surveys for that purpose, knowing the ease with which suggestions of sinister significance may be attached to such routines.

In North Queensland large training areas were established on the Atherton Tableland, where two divisions could be accommodated for training or rehabilitation, and considerable bodies of troops were concentrated in other areas. In the hospitals of these areas, as indeed all over Australia, consultants visiting medical holding units found many beds occupied by patients with psychogenic maladies. In some hospitals patients with similar somatic complaints or at least with similar somatic diagnoses were admitted to the same wards for alleged ease of organisation. This applied particularly to the digestive diseases. Numbers of psychoneurotics found their way to these wards where there was a real risk of their confirming their fixations. Even negative results of special investigations might have this effect. A technical instruction (No. 9) was issued dealing with the management of the soldier with dyspeptic symptoms, and the indiscriminate admission of such patients to a dyspeptic ward was forbidden. It would be interesting to know how far dental care and dietetic improvements reduced the incidence of dyspepsia.

Facilities for psychiatric work on the Atherton Tableland were limited. At the 2/6th A.G.H. patients with acute mental states had to be held in tents, and moving them was slow and difficult. Sedation and convulsive therapy with "Cardiazol" were the only active methods of treatment available.

PRE-SELECTION

In 1943 some forward steps were taken in two directions, by preventing the induction of recruits unsuitable from the point of view of mind and personality, and by extending facilities for treatment of mental illness.

Efforts in the preventive field were intimately concerned with the development of psychological services in the Australian Army. The gradual evolution of these services has been described by Lieut-Colonel J. V. Ashburner from the early application of psychological testing for selection of aircrews in the R.A.A.F. to the formal establishment of a psychology service in the Australian Army in February 1945. Before this, civil industry had made cautious trials of such methods of selection, and civilian psychologists were banded together as a Volunteer Emergency Psychological Service during the earlier war years to assist in certain service problems. These problems were chiefly those of selection of staff for highly technical work, as in survey and signals units, and also those concerning the choice of the most apt procedures for army selection. In 1942 an Advisory Committee on Psychological Testing was formed which gave advice on the organisation and procedures necessary for such selective work.

The rapid expansions of the armed Services and war industries, particularly of the army after Japan entered the war, made correct allocation of men even more important, and a staff officer (Major H. L. Fowler) was appointed to organise the introduction of psychological testing procedures. Later Lieut-Colonel Ashburner took over this work. In September 1942 a psychological section was formed at Allied Land Headquarters in the Directorate of Recruiting and Mobilisation, and shortly after this testing sections began work in the eastern States. The volunteer body in Sydney had already been helping in carrying out aptitude tests, in which its members had accumulated valuable experience. Within six months all States were covered by the services of this section, and recruits and re-allocated men were subjected to a degree of psychological control. Investigations of delinquents were also begun. Though the work of the psychology section helped to raise the low standard of pre-selection it was hampered by difficulties in obtaining enough adequately trained testers, particularly in the field of emotional maladjustments.

By the middle of 1943 pre-selection boards for officers were introduced, and the need for vocational guidance of re-allocated men and of discharged men coming under the care of repatriation suggested further expansion of the psychology service. So far the work of this technical service was non-medical in its application, but where disorders of personality were suspected, or where deficient mentality was disclosed on testing, the need for psychiatric guidance was felt. Evidencing the need for this work, Major Youngman, psychiatrist attached to the First Army Psychology Section, found that of 103 men discovered to be abnormal, most had neuroses, but the majority had a mental defect as well, or were simply mental defectives without stability. In Victoria late in 1943 medical boards and the psychologists were not always in agreement. A special report to the D.G.M.S. Army by Major J. F. Williams pointed out that the lack of psychiatric facilities forced the psychological section to undertake diagnostic work which was really the province of a psychiatrist. A visiting psychiatrist was then appointed to examine men whose response to routine tests suggested mental abnormality. A psychiatrist and a psychologist were

also attached to the officers' pre-selection board, which began work in October 1943. More cannot be said here about the work of this board. Administrative complications prevented a critical test of the accuracy of this selection of candidates for admission to an officers' training unit, but the high percentage of passes of these candidates from the school was at least encouraging.

With regard to the success of preventive measures in excluding unsuitables from the Services, it is not possible to present any statistical evidence, but the impression was gained that the chief advantage accrued from the more correct allocation of men. The Royal Australian Navy using only volunteers did not feel the need for special pre-selection so much. The numbers were small and the fields of choice wide. In the R.A.A.F. special attention was given to certain aspects of pre-selection particularly for air crew, pilots, air gunners and air observers. Some automatic selection of recruits for these Services helped to reduce the numbers of men more likely to become psychiatric casualties.

The need for increased therapeutic facilities had been under attention for some time. Reference has already been made to the consideration of hospital accommodation for psychiatric casualties in Australia. Base hospitals in the capital cities had some special accommodation available, though this varied in the different centres. These hospitals could not be expected to act as other than clearing and diagnostic centres, or to treat patients other than those likely to be only a short time in hospital. Psychiatric clinics were set up in a number of convenient places, and used largely for diagnostic purposes. The work was done by full-time medical officers with psychiatric experience, in some instances by fully-trained psychiatrists. Visiting consultants assisted in directing these activities. In Western Australia psychiatric patients were admitted or transferred to the base hospital in Perth, or 108th A.G.H. at Northam, and were treated there, but no facilities existed for acute cases: these patients were sent to mental hospitals. One special convalescent home for psychiatric patients was established at "Rockingham" in Melbourne by the Red Cross, and here occupational work was carried out.

FURTHER PROBLEMS IN AUSTRALIA

It is natural that the most acute psychiatric problems in the Services in Australia should arise in Queensland, where large bodies of troops were concentrated, and where most of the returning sick found at least temporary accommodation. During 1943 some publicity was given in the Press to questions of psychiatry in Queensland, and the D.G.M.S., Major-General Burston, deputed Major J. F. Williams to report on the situation. Williams found that the difficulties in the handling of the psychiatric patients were many in the northern parts of Australia, and that extemporised methods were under existing conditions unavoidable. Good environmental conditions could really be obtained only in base areas.

There were special reasons for these difficulties. The important areas near the Queensland coast were potential target areas, and for some time

it was doubtful whether the construction of a base hospital would be continued at Brisbane, or whether Toowoomba and other inland towns would be regarded as the official bases for hospital treatment.

At 112th A.G.H. in Brisbane (Greenslopes) psychiatric patients became an embarrassment, owing to their number (about 25 per cent of the total bed state at one stage) and to the limited accommodation for acute psychotics. A visiting consultant attended twice a week. Therefore psychiatric patients were transferred to Redbank near Brisbane, to the 7th Camp Hospital. For a time here facilities were very inadequate, until in May a psychiatrist (Major G. B. Murphy) was appointed to the medical staff. Before this only periodic visits were possible by a consultant and by the Superintendent of Goodna Mental Hospital, who were unable in the time at their disposal to cope with over 200 patients. Acute psychotics were transferred to Goodna, and here some 60 to 70 patients awaited submission to overworked medical boards. The appointment of a full-time officer at the 7th Camp Hospital made early treatment more possible, and here with little assistance and by dint of personal training of staff he carried out good work, using insulin coma with satisfactory results.

In the other hospitals of Queensland many psychiatric patients were occupying beds at this time. In 2/11th A.G.H., for instance, at Warwick, in four months psychiatric patients filled about 10 per cent of non-malarial medical beds. In Toowoomba in the 117th A.G.H. this percentage rose to 25 per cent. On the Atherton Tableland also consultative clinics dealt with large numbers of men with varying degrees of neuropsychiatric disorders. There were no facilities for caring for acute psychotic casualties on the Atherton Tableland, where two divisions could be accommodated for rest, rehabilitation and training.

It was evident that there was great need for a hospital which could undertake the care of psychiatric patients. This need was supplied by the taking over of the Kenmore Mental Hospital at Goulburn, N.S.W., and its equipment as an army general hospital. Here, in addition to general medical beds, there were wards for dermatological patients, but these occupied only 27 per cent of the medical bed space, the remainder being reserved for psychiatry. In quiet and suitable surroundings with gardens and attached farms there were full facilities for all types of treatment, carried out by an adequately trained staff. The work at Goulburn, begun under Lieut-Colonel Gwyn Williams, continued under Lieut-Colonel A. J. M. Sinclair; it was of great interest as all aspects of mental treatment and rehabilitation were covered. Here, and later at Ekibin in Queensland, most of the major psychiatric casualties were handled for the eastern States. The difference made by good facilities was well illustrated when the hospital site of Ekibin near Brisbane was taken over by the 102nd Australian General Hospital from the American Army Medical Corps. Work was carried out here in excellent buildings, with ample accommodation and air conditioned rooms. At Goulburn temporary attachment of U.S.A. medical corps psychiatrists was found to be of great mutual benefit. A sergeant from the 2nd Australian Psychiatry Section was also attached

to the staff and was most useful, particularly in the testing of mental defectives. In three months 154 patients were psychologically tested for mental age, evaluation of personality, intelligence and aptitude. Large numbers of psychoneurotics and psychotics were treated at Goulburn till after the end of the war, when the Repatriation Department was able to assume the responsibility.

General physical treatment and psychotherapy were used. The latter was superficial, no deep analyses being attempted. Interviews were given every few days, and ample time allowed, from fifteen minutes to an hour. With psychoneurotics the amount of explanation added to encouragement depended on the educational level of the patient; with both neurotics and psychotics the opportunities for occupational treatment were fully used. With psychotics electro-convulsive treatment and insulin coma were used either separately or in combination. The former was not regarded as the ideal and only method for treating schizophrenia, but as a prelude to insulin full coma. A full course of shock therapy usually included ten shocks: it was valued for the improvement which followed, making patients more amenable for further treatment. The hazards of these methods were not found to be undue. About 20 per cent of patients showed radiological evidence of compression of the bodies of thoracic vertebrae, following convulsive shocks, but few symptoms were observed, no treatment was given and no sequels were noted. As many as eighty patients a day were given full coma insulin treatment. Four deaths were reported from 114th A.G.H. up to December 1945, a mortality rate closely approximating to that found in Great Britain and U.S.A. Consideration was given to the possibility that fatal results might be related to a fall in plasma proteins, as this had been described in such patients with circulatory failure. In general full insulin coma gave good results in schizophrenia: in particular it shortened the acute upset, and increased the length of remission. Sub-coma was found of particular value in neurosis with physical accompaniments, especially those of the gastro-intestinal tract. Convulsive treatment was found in the Goulburn series to be of great value in depressive states, both of neuroses and psychoses, and in the acute schizophrenic episodes.

Careful case histories were taken of every patient, and an attempt was made to discover any factors relevant in causing mental illness. Investigation of these brought to light some interesting findings and also emphasised the importance of social rehabilitation of these patients. Towards the end of the war a special organisation was set up to deal with psychiatric patients on discharge from the Services, particularly those who had had psychoses or severer forms of psychoneurosis. The ideal arrangement, described by Sinclair, allowed cooperation between psychiatrist, psychologist, social worker, rehabilitation officer, occupational therapist, physiotherapist, education officer and the commander of the patient's unit. It will be noted that most of these persons were carrying out duties whose specialised nature had only recently been recognised. After discharge the patient needed further liaison between the army allocation officer, "A" Branch, the manpower officer, Repatriation Department, employers of

labour, civilian social bodies, civilian hospitals and the Press. That difficulties were encountered was to be expected. Reasonably good contact was maintained with the allocation mechanism of the services, though occasional breakdowns occurred, but the link with manpower was weak, and that with repatriation and civil bodies sometimes broke down. Little help was obtained from the Press, as published statements were not always well-informed; some of these, though no doubt intended to help the men, produced the opposite effect. Much of the publicity given to mental disease has been harmful.

On the clinical side more may now be said of the types of psychosis encountered during the Pacific war. Sinclair reviewed 564 cases of psychotic states in soldiers, and Ross, Curtis and others have also recorded their observations. The usual manic depressive, delusional and confusional states were seen in the large Goulburn series, which fairly represents the experiences of all the services, but the most important was the acute "schizophrenic" disease which occurred in considerable numbers in the later years of the war. Of Sinclair's 564 patients 400 were classified as schizophrenics. This psychosis has attracted much attention, which its importance fully warrants. But it should be realised that if for convenience it is called "acute schizophrenia" it is with some mental reservation. The use of this classification does not imply that the personality is of that peculiar kind associated with the disease usually known as schizophrenia in civil practice. Curtis has suggested that as empiricism cannot be avoided in a good deal of even modern psychiatric work, it is neither necessary nor desirable to attempt to place mental illnesses in categories in their early stages. Action based on immediate needs is preferable.

There is general agreement that prompt energetic treatment is of great value in these acute schizophrenic states in causing amelioration of the patient's symptoms, simplifying his handling, and lessening the distress of his relatives. The later prognosis is thereby improved also, though some of the early enthusiasm aroused by the excellent immediate results of convulsive treatment has not been altogether sustained, for unless initial treatment was followed up relapse was prone to occur.

At Ekibin, from the 102nd A.G.H., Major J. F. Williams reported good results similar to those of Sinclair. He found that very few certifications were required, although the proportion of psychotics among the admissions was high, reaching 30 per cent of one consecutive series of 524 admissions. From January to December 1945, 1,648 psychiatric patients were admitted to this hospital.

The clinical aspects of these acute psychoses were striking because of the intensity of the disturbances of behaviour, which indeed obscured other features. Hallucinations were not a prominent feature, but confusion was common and often severe, and excitement was extreme. No toxic cause could be demonstrated. The clinical picture was not that of the typical schizophrenia seen in civil life, but Sinclair has emphasised that there are closer resemblances than appear on superficial observation. Though the impression given was that of a much more acute onset than

in civil life, he found that a gradual onset was common. At the time of admission to hospital the detachment familiar in civilian schizophrenia was not so evident, but in other features there was considerable correspondence. Sixty per cent of the 400 men in Sinclair's series began their illness with symptoms strongly resembling those of hysterical or anxiety states. Careful observation and enquiry after subsidence of the acute episodes showed that other psychotic symptoms were in evidence, and in 80 per cent of the patients these had been detectable for about one month. A past history of deviations of personality was frequently elicited. Most of the men were of solitary habit; 78 per cent were unmarried, and 30 per cent had poor school records.

An analysis of results obtained from the psychiatric treatment centres was very satisfactory.

A follow-up of psychotic patients from Goulburn showed that 81 per cent returned to their homes; the traceable figure for certification to mental institutions for the series was 4.75 per cent. Later enquiry showed that 69 per cent of the men were working full-time and 7 per cent part-time. It may be that these good results were due to early recognition and treatment rather than to any particular favourable character of the illness. Sinclair reported 292 of 400 schizophrenics as cured, 31 as partially cured, and 13 as having a result which was uncertain: in 262 of these the duration had been only two months or less.

It is recognised that these figures do not represent end results, as it is only by study of the after careers of these patients that any clear idea can be gained as to how they have stood up to the trials and problems of post war society.

Before consideration is given to the causes of psychiatric illness, particularly as seen in the later phases of the war, it is of interest to see what results were obtained in the treatment of psychoneuroses. In the 114th A.G.H. over 3,000 neurotics passed through the hands of the staff. These may all be classed as being of a type severer than average; otherwise they would have been dealt with from other medical units by return to work or regrading. Of this total 1,851 had anxiety states, 755 personality defects, 18 organic disease, 172 hysteria, 156 depressive states and 90 mental deficiency. There were 8 epileptics. Of the total only 153 were returned to their units.

Some of these people were a problem after discharge, just as they are in civil practice. They were sometimes worse after discharge. This was in some instances due to the strain of suspense while waiting at the General Details Depot: elimination of delays was found to be helpful. The men themselves were sometimes resistant: for instance, visits of social workers, who if well trained could be of considerable assistance, were often resented. Even if the importance of workers on the outskirts of the psychiatric field has perhaps been overstressed, there is no doubt about the need for them to be highly trained.

Before we leave the subject of the actual clinical handling of patients suffering from mental disease, the difficulties facing the services in this

huge task must be realised, especially as the average civil medical and nursing standards were not nearly so high in this branch of medicines as in, say, surgery. Diagnosis was far from easy. No period of observation in home surroundings was possible as in civil life—the environs of the servicemen were often a provocation in themselves. Special problems arose in some services. In the R.A.A.F., for example, arose the exceedingly vexed question of the "moral fibre" cases. Was a pilot merely exhausted and over-worked, or was he losing heart? Commanders and medical officers of squadrons had a difficult task in deciding the best action to take with men of intelligence who carried out highly individual technical work, and who had been trained at high cost of money and energy. The psychiatric diagnosis was often difficult to make in any class of patient. Was the man merely anxious? Was he of the unproductive hysteroid type, never likely to be really useful, or was he in the early stages of a psychosis? Examination of figures shows that little reliance can be placed on detailed diagnoses, differing so much with the experience and technical vocabulary of the medical officer.

The physical difficulties and anxieties in caring for the acute mental casualties have been mentioned before. They were often severe. To nurse patients in insulin coma in a camp hospital for instance is no mean feat. To send acutely excited men over a long evacuation route in an aircraft, where fatigue and anoxia will add to their troubles, is a great responsibility. These men would often be classed as severely and even dangerously ill in an ordinary medical ward. Even at the end of the war, when smooth air transport arrangements landed patients in Brisbane within a few days of their breakdown in Borneo, their physical and mental condition often caused embarrassment on their arrival. In parts of Northern Australia the climate could be as exacting as in New Guinea and other tropical islands. Heat effects were often dangerous in excited patients, especially if under restraint. Hyperthermia could and did occur: at least one death took place from this cause. Another medical difficulty associated with transport of patients was the need for labelling them in transit. In ambulance trains particularly, men naturally read the labels attached to them. Psychiatric patients were not necessarily edified or improved by this knowledge: even the use of initials and codes became transparent.

Finally it is not surprising that criticisms were levelled at the medical services. The subject of psychiatry was "news". For example a Returned Soldiers' organisation complained that psychotic soldiers were suffering because of lack of trained male mental nursing orderlies. There was a shortage, just as in every other skilled occupation, and orderlies under special training were used just as trainee nurses are in all hospitals. Where additional help was available from trained orderlies, as at Ekibin, where a number of skilled men were lent by the Royal Navy, this was greatly appreciated. Perhaps it might have been possible to find more trained men in the armed Services had occupational analyses been possible at that time. Unfortunately there had been great delays in installing statistical

machines, owing to difficulties in obtaining financial approval, and consequent wastages in manpower occurred.

Even within the armed Services lay critics expressed ill-founded ideas, as when the Inspector-General of Administration advocated segregation of "neurotics" from ordinary service patients so that they might have specialised treatment. The Director-General of Medical Services pointed out that segregation was practised where necessary, that many patients were better treated out of hospital, and although mental specialists were limited in number, general physicians of wide experience were also skilled and successful in the treatment of neuroses. It is obvious that such criticism is based on the belief that neuroses occurring during wartime belongs to an order *sui generis*. It is probably indicative of the views of the community in general.

THE CAUSES OF PSYCHOSES

In discussing the aetiology of psychiatric affections it is preferable in this instance to defer a general consideration till the last, and to examine first certain special features peculiar to the Pacific campaigns. The later stages of the war in the islands marked a period in which the community was exposed to the increasing strain of a long war. More and more men and women were involved, severe stresses were imposed on the spearhead of the forces concerned, yet there was an ever lessening national risk to Australia. It is of interest therefore to examine more closely the possible causes for the rising number of acute psychoses, and then to consider the general position of psychiatric disturbances of all kinds in the whole community.

During the Pacific war the decreasing importance of volunteer selection of the smaller forces of earlier years may be noted. Fitts had previously pointed out that it does not follow that lower figures for psychoneuroses should be expected in a volunteer force, which includes those wishing to escape from private difficulties, the emotionally unbalanced, who soon lose enthusiasm, and those who withhold information about their health. Sinclair could find no difference in incidence of psychiatric disturbances among volunteers and conscripts. His figures comparing the civil and military incidence of schizophrenia are interesting. The average rate for 1943-1944 in the army was 0.468 per thousand: the comparable rate for males between the ages of 20 and 35 years admitted to the public and private mental hospitals of Victoria was 0.503 per thousand. The latter figure is probably understated, as all civil schizophrenics do not go to hospital. If we assume accuracy of diagnosis, it thus seems fair to deduce that war has not increased the incidence of schizophrenia in the community as a whole. Yet the increased incidence in the later war years needs an explanation. It is curious that the rate in the army fluctuated considerably. It was highest (0.703 per 1,000) at the end of 1944 when the battle commitments of the troops were less heavy than during the periods before and after this date. Investigation showed that only 42 per cent of the patients came from combat zones, and that in only 3 per cent

of the cases could the precipitation of a psychosis be blamed on combat stress. In 244 of the Goulburn series of 400 no history of special combat stress was obtained. Average stress was experienced by 108 patients and severe stress by only 39. In his New Guinea series Sinclair estimated that psychoses and neuroses had their roots in pre-enlistment conditions in 34 per cent, that they were accentuated by war service in 51 per cent, and that they were wholly attributable to war service in only 14 per cent of cases. Some analysis of the military situation at the time of breakdown was attempted also; this seemed to be relevant in 110 cases, whereas pre-service conditions appeared to be of greater importance in 199, and a combination of factors in 42. Study of the individual patient's past history and personality confirmed the view that this psychosis tends to arise in persons of the schizoid type. Evidence of this has been previously outlined. The impact of service life on the solitary individual is probably more concentrated and severe than that of life as it meets and envelops the young civilian. Age had some selective influence, as has been shown, but more in determining acute psychoses than in neurotic disturbances in general. The drawbacks of an unsatisfactory background are undoubted, and it must be admitted that in the rapid expansion of the forces in 1942 many unfits were accepted for service. Illness was found to be significant in some series of psychoneuroses, as in Tobruk; wounds had little influence, but in general physical illness does not appear of aetiological importance. Domestic and sexual maladjustments were not of themselves found of major importance, though as part of an unfavourable background they were of significance. The loyalty, steadfastness and cheerfulness of women folk at home were of the highest value to the soldiers' morale.

Possibly further light is shed on the rising incidence of acute schizophrenic states in the army by the experiences of one area. The sub-base hospital at Lae and holding units farther north of Aitape both felt the strain of these increased numbers. These were drawn from a force engaged in the later New Guinea campaigns in which the task of the Australian troops was the elimination of the remaining Japanese from areas which were already lost to the armies of Japan. This applied to the Aitape-Wewak and Bougainville operations. The most striking medical episode of the former operations was the epidemic incidence of malaria, which is dealt with fully in the section on malaria. Though there is no causal relation between malaria and the onset of acute psychoses, it is possible that there may have been some similarity in some factors leading to a breakdown in malarial control and those predisposing to psychogenic illnesses. At the time in question, the early half of 1945, psychoneuroses were prevalent among the troops in the forward areas. Despite an apparently high military morale and a successful performance, there is reason for believing that frustration was felt by these men.

During the earlier difficult campaigns there were comparatively few acute psychiatric casualties, though for rather brief periods severe combat stress was in evidence. In any case, psychiatric experience does not indicate that battle stress was of itself a significant cause. But these "mopping-up"

campaigns, such as that carried out by the veteran 6th Division, had already raised some uncertainty in the minds of the troops and other more remote critics of their necessity. Undoubtedly the subject had been widely discussed.

In addition, the anti-malarial discipline and restrictions placed on the troops were strict to the point of harshness, though they differed in no essential principle from those imposed earlier. There was evidence too that these strains and those imposed by the continuance of a long war in an uncomfortable place were felt severely by the young men.

Turning to the wider aspects of the predisposing causes of psychiatric disorders, it is perhaps simpler to speak in general terms. The boundary between neuroses and psychoses has become more indefinite of recent years, and it is natural that in service practice uncertainty was often felt as to the diagnosis. A depressive neurosis might need the same symptomatic treatment as a depressive episode of a manic-depressive syndrome. Prognosis from the service point of view was often simple, but from the point of view of a civilian career it might be most difficult.

The wastage in the Services from mental disorders of all types was great: it is also great in the civil community.

CONCLUSION

In armed forces at war it is the duty of the medical services to bring clinical science to the individual, even in such matters as mental security. In military psychiatry Australia was at first unprepared, and the number of thoroughly trained experts was small. In the early days the extreme reactionary doctrine was voiced by those who trusted junior and relatively inexperienced unit medical officers to "detect the malingerer and bash back the neurotic". Gradually more confidence was shown in psychiatric advisers, but more help by consultants expert in this work was needed in medical units, particularly those in forward areas. There was some fear that over-enthusiastic psychiatrists might start a landslide which might sweep away a goodly proportion of the essential manpower through a broadened channel leading to the way out. Such exaggerated fears hardly did the psychiatrists justice. Towards the end of the war the psychiatric service became more adequate, and much good work was done by the exponents of a specialty somewhat of a Cinderella in Australia. The greatest need of all was probably the influence of experienced consultants who could teach by example, circulating through the forward units of the forces, helping to solve problems, learning for themselves how the men lived, and acting as educators in a field where so many felt unsure.

The special constitution of medical boards for psychiatric cases, the admirable hospital services established and the care given to the mental side of rehabilitation all demonstrate the influence of psychiatric medicine on the medical services of all arms. Military considerations also reflect upon the causes of mental disorders in the civil community. Speaking in the most general terms, influences stretching back into childhood are probably of more significance than recent or present domestic or social

maladjustments: the former may supply the key to the latter. Regression to childish or even infantile behaviour was not uncommon among psychoneurotics in the services, and was probably as significant as a history obtained by analytical interviews. It was dependence rather than independence that hastened the downfall of such individuals. This brings us to think of the conditions of life in the average modern community and to consider what bearing the inter-relations of men with their surroundings have on their capacity to adjust themselves to a state of war, even apart from the risks of combat.

The vast conflicts of the last two generations and the accelerated social changes of the same period have altered the contemporary life of peoples not yet conditioned to their new environment. Even social amelioration is a paradox, inasmuch as it increases man's dependence on a highly organised and artificial society. Men now rely on the State as an indulgent parent, and in proportion, while resenting control, become less able to take independent action. Aggression arises as a by-product of frustration, and the result is anxiety, or even some striking manifestation of mental maladjustment.

It would seem that the mental problems of the communities of the world are now so deeply serious that it is difficult to see the way of escape. Certainly an increase in psychosomatic and psychoneurotic disease, in other words, mental disease, seems likely. It is only necessary to review world history of the last century in the most cursory fashion to see that the most laudable efforts to effect social amelioration may produce also tensely unfavourable social conduct unless these benefits also help communities as well as individuals to attain mental equilibrium. Man is a relatively adaptable creature, but the tempo of his adaptability has been sadly overstrained. In an army a group of men thought to be mentally stable may show neurotic signs because of the collapse of the foundations on which they have built and trusted: an unstable group, even though intelligent and earnest, may fail because of frustration. The same may happen and does happen in civilised communities. Today particularly the primal instincts of self-preservation and self-reproduction are not fully satisfied, and social unrest is inevitable. These are the problems we have to face. The medical profession has a definite responsibility in the recognition, treatment, and prevention of mental illness. Specialties in medicine have a dual function, that of carrying out skilled work by special methods, and that of adding to the general store of knowledge necessary for all well equipped practitioners. They should guide but not dominate. This applies with particular force to psychiatry. War experience has emphasised the growing significance of the mind-body relationship, and the need for keen appreciation of the importance of mental health to individuals, to groups and to nations.

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