

NEUROSIS IN THE WOMEN'S AUXILIARY SERVICES.

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PSYCHIATRIC disorder, according to the recently published statistical report on the Health of the Army,* constituted one of the most common medical causes of discharge of A.T.S. from the Army, and was among the most frequent causes of admission to hospital.

Although fairly extensive literature exists on psychiatric disorder in soldiers, very little has been published on neurosis in the women's services. This is indeed surprising in view of the importance of the subject judged, not only by the magnitude of the problem and its bearing on wastage of man-power and loss of working capacity, but also by its measurement in terms of human suffering. Furthermore, the matter is of special interest since World War II saw the entry of women into the forces in large numbers, involving from the Service point of view, new problems of military organization and training, and for the individual, special problems of adjustment to the transition from civilian to military life.

The striking success of the part played by women in the forces makes the need for study of the causes and form of psychiatric breakdown even greater. The importance of these factors in the present recruiting drive needs no special emphasis.

In a survey of neurotic illness in women service patients the following interesting questions immediately crop up :

1. What is the form and symptomatology of neurosis among women service personnel? Are women service patients prone to special forms of neurosis or symptoms?
2. What are the main causes of psychiatric illness in the women's services?
3. What is the importance and nature of constitutional factors in the predisposition to neurosis?
4. The precise role played by extrinsic or environmental influences in the causation of psychiatric disorder.
5. Are there any special conditions of service that impose a particular strain in adjustment for women and, if so, what part do they play in the development of neurotic illness?
6. What is the prognosis for return to duty and the factors influencing response to treatment?

* Statistical Report on the Health of the Army, 1943-1945. H.M.S.O., 1948.

7. What proportion have to be invalided from Service? What proportion of those returned to duty perform their duties satisfactorily?
8. What measures can be taken to achieve effective preventive psychiatry?

In this article an attempt will be made to answer some of the questions from data obtained on 2,000 women service neurosis patients successively admitted to Mill Hill Emergency Hospital from 1942-1944. Special reference will be made to a group of 500 women service patients personally treated by the author.

DESCRIPTION OF POPULATION.

The group of 2,000 auxiliaries were mainly A.T.S. Included in the group are also some 10-15 per cent. W.A.A.F. patients and a small proportion of W.R.N.S. As the groups from the three services resembled each other closely it was not thought necessary to consider each service group separately.

The group cannot be taken as a representative sample of the psychiatric material of the women's services as there was a negative selection of mental defectives and psychotics, and when these were admitted it was a result of error in diagnosis or selection. The patients were positively selected because it was considered they required investigation or treatment at a neurosis centre and would not, therefore, include milder cases treated as out-patients or those discharged directly from a unit or other hospitals on grounds of neurosis.

TABLE I.—*Age Distribution.*

	Neurotic group (1942-1944).	A.T.S. (1943).
Age 16-25 . . .	75%	76%
„ 26-30 . . .	13%	16%
„ 31-40 . . .	19%	10%
„ 41 and over . . .	2%	4%

The age distribution roughly corresponds to that of the A.T.S. in 1943. The 31-40 age group shows a higher proportion in the neurotic group. It is difficult to assess the significance of this difference as the age distribution of A.T.S. varied at different times of the war, mainly depending upon the age groups of recruits.

Fifteen per cent. of the group were non-commissioned officers. Twenty per cent. of the group were married, and 19 per cent. engaged to be married. The proportion of married auxiliaries showed considerable fluctuation during the course of the war. The statistical report on the Health of the Army estimated the proportion of married auxiliaries as 1/7th. Again it is difficult to attach any significance to the difference since various factors are involved which cannot be adequately controlled.

Regarding civil occupation, 13 per cent. of the group were in skilled occupations; 31 per cent. semi-skilled, and 48 per cent. unskilled. Only 7 per cent. had not been in the labour market.

TABLE II.—*Type of Illness.*

Anxiety state	Acute severe	5%	} 42%
	Acute mild	15%	
	Chronic	22%	
Depressive state	Mainly reactive	24%	} 28%
	Mainly endogenous	4%	
Hysteria	Conversion type	24%	} 28%
	Dysmnestic type	4%	
Obsessional state		2%	
Schizophrenia		2%	
Paranoid state		0·2%	
Mental deficiency		0·4%	
Epilepsy		0·4%	
Organic mental syndrome		0·4%	
Physical disease not included under organic mental syndrome		4·0%	
No illness		1·0%	

TYPE OF ILLNESS.

Table II shows the percentage distribution of diagnostic categories in the group. It should be noted that in some patients multiple diagnoses were necessary, e.g. hysteria and mental deficiency or depressive state and psychopathic personality.

The high incidence of affective disorders (anxiety and depressive states) is striking, accounting for 70 per cent. of the total.

Hysteria was diagnosed in 28 per cent.; the majority showed conversion symptoms, whereas dysmnestic symptoms such as fugues, amnesia, etc., were only found in a small proportion of the group. Obsessional state was a comparatively rare syndrome diagnosed in only 2 per cent. of the female cases, just as it was a comparative rarity in soldiers admitted to Mill Hill Emergency Hospital (2 per cent.).

The low incidence of schizophrenia, mental defect, epilepsy and organic mental disorder was to be expected, since these would not normally be referred when diagnosed. The schizophrenics who were admitted were atypical, and often masqueraded as depressive states, the true nature of the underlying disorder becoming apparent only after investigation in hospital.

DIFFERENTIAL SEX INCIDENCE OF NEUROSIS AND SYMPTOMATOLOGY.

It is a matter of considerable interest to know whether women are prone to special forms of neurosis or to special symptoms. Comparison of some 200 items relating to history, aetiology, symptomatology, diagnosis, etc. between a group of 5,300 neurotic soldiers and 2,000 women service neurosis patients showed a general similarity in the distribution of the various items. Some features, however, showed significant differences.

Where statistically significant differences are found, they would not necessarily indicate a biological sex differentiation as the difference in distribution

may be due to other factors, e.g. age or selection factors which might be difficult to ascertain and control.

The male group showed a statistically significant higher incidence in the following features :

	M. %.	F. %.	Difference. %
1. Anxiety states	58	42	16
2. Somatic anxiety symptoms	46	28	18
3. Stammer	8	2	6
4. Tremor	27	17	10
5. Pain not demonstrably organic in origin	25	16	9
6. Stress of bombardment or exposure to enemy action as a contribu- tory factor	20	5	15
7. Duration of illness more than one year	67	33	34
8. Gradual onset of illness .	77	66	11

The most notable differences are in the significantly higher incidence of anxiety states and somatic manifestations of anxiety in soldiers.

The well-known differential sex incidence of stammering is borne out in this series.

The male group contains a higher proportion of chronic neuroses and the difference noted in incidence of anxiety state is attributable to the relatively high incidence of chronic anxiety state in men.

The higher incidence of stress of bombardment or exposure to enemy action as an aetiological factor in the male group was to be expected in view of the different degrees of exposure to enemy action.

The female group shows a higher incidence of depressive symptoms. The duration of illness before admission was shorter than the male group and a higher proportion had illnesses with acute onset.

It is desirable to consider the age distribution of the male and female groups in order to determine whether age factors could account for any differences. Comparison of the age distribution of the two groups shows that the female group has a higher proportion of individuals of younger age groups. There is, however, no evidence to suggest that the differences in symptomatology could be attributable to the age factor.

AETIOLOGY.

Multiple causation is the rule in the aetiology of psychiatric disorders wherein various intrinsic and extrinsic factors may interplay in infinite variation in the development of neurosis or other psychiatric illness.

The assessment of the relative importance of intrinsic or constitutional factors and environmental or exogenous factors is of great importance, both in treatment and assessing prognosis.

CONSTITUTIONAL FACTORS.

The concept of constitutional predisposition to neurosis has been considerably clarified by Slater (1943). The individual constitution is the sum total of physical, physiological and psychological attributes of a person, mainly determined by heredity, and only secondarily modified by environmental influences. Environmental influences can modify individual constitution either by organic disease or by physiological or psychological conditioning. Slater (1943) has clearly shown that the degree of stress that can be tolerated by an individual before neurotic breakdown is directly related to the degree of neurotic constitution.

Slater (1943) maintains that the following are, in order, the best indicators of neurotic constitution :

1. Clinically abnormal personality.
2. Neurosis in childhood.
3. Poor work record.
4. Repeated nervous breakdown.

The assessment of these factors will enable us to obtain an estimate of the degree of neurotic predisposition in our group of female neurosis patients.

CLINICALLY ABNORMAL PERSONALITY.

Only 43 per cent. of the group were judged to have had a well-adjusted and stable previous personality.

The following is an item analysis of abnormal personality attributes in the group.

Anxious and highly strung	68%
Unstable and maladjusted	57%
Weak, dependent and timorous	36%
Hysterical traits	32%
Cyclothymic tendencies	30%
Obsessional traits	29%
Aggressive and rebellious	26%
Hypochondriacal traits	23%
Inert, lacking initiative	20%

Thus a high proportion of the service women who broke down with neurotic illness showed a high degree of neurotic constitutional predisposition as shown by various forms of clinically abnormal personality, with a notably high incidence of abnormality in the forms of dysthymic traits.

NEUROSIS IN CHILDHOOD.

Nearly half of the patients (46%) had a history of neurotic symptoms in childhood, such as enuresis, somnambulism, tantrums, anxiety reactions and other forms of maladjustment.

POSITIVE FAMILY HISTORY.

A family history of nervous and mental disorder occurred in 58 per cent. of patients as follows :

Neurosis	52%
Psychosis	4%
Epilepsy	1%
Mental deficiency	1%

Symptoms were similar to those of parents or siblings in 15 per cent. of cases. Here again we find evidence of the neurotic constitution as indicated by positive family history occurring in a high proportion of cases.

Poor work record is a very useful pointer of instability. Poor work record may take the form of unduly frequent changes of employment, becoming fed up easily with a job, and giving it up without adequate reason ; repeated dismissal after quarrels with colleagues or employees or because of inefficiency or unreliability. Further forms of poor work record are degradation in type of work. The data available do not permit of a complete estimate of this factor except to state that 16 per cent. of the group had considerable loss of working time before enlistment and 4 per cent. had a degraded work history.

Previous neurosis.—Twenty-three per cent. of the group had previously received treatment for nervous symptoms. This is a minimal estimate of previous incidence of neurosis, since many patients would not have treatment, or the condition may have masqueraded as a physical or psychosomatic disorder, and not been diagnosed as a frank neurosis. A definite illness was quoted in 16 per cent. and evidence of a clear predisposition to psychiatric disorder was noted in 40 per cent. of the group.

Therefore, analysis of these pointers of neurotic constitution indicates a high degree of constitutional neurotic predisposition in our group of female service neurotics.

The importance of this finding lies in the fact that from the outset there was clear evidence in the history and previous personality that these patients would only be able to stand a limited degree of stress before breakdown. Furthermore, degree of constitutional predisposition could have been fairly readily assessed on enlistment.

INTELLECTUAL ENDOWMENT.

Poor intellectual endowment and neurotic constitution according to Slater are the two most important factors in predisposing to neurotic illness. It is therefore also important to consider the possible role played by poor intellectual endowment in the predisposition of neurosis in our group.

An assessment of intellectual capacity can be made by—

1. School and work record.
2. Intelligence test scores.

School Attainment.

The following is percentage of educational level reached by patients in one group.

Elementary poor (Standard V and below)	7%
Elementary good (above Standard V)	64%
Central or secondary	31%
Higher education	1%

Only 7 per cent. of the group did not pass Standard V in elementary school, and this low percentage is a tribute to the efficiency of the selection procedures on enlistment.

Intelligence Test Results.

Each patient was tested with Raven's Progressive Matrices on admission to Mill Hill Emergency Hospital, and the following is the percentage distribution in various grades.

	Neurotic A.T.S. group (female).	Serving population.
Grade I (superior)	13%	8
Grade II (above average)	20%	19
Grade III (average)	40%	39
Grade IV (below average)	14%	21
Grade V (low intelligence or defective)	3%	7

The score shows a higher distribution of above-average intelligence grades, and a lower incidence of below-average intelligence scores. This inequality of distribution is probably due to the elimination of the majority of S.G.5 recruits by selection procedures on enlistment. The female group has a higher intelligence distribution than the group of neurotic soldiers.

Thus, whilst on the one hand we find strong evidence of neurotic constitution in the group, we find little evidence on the other to support the contention that poor intellectual endowment was an important predisposing factor in the group as a whole; when operative this could apply only to a small proportion of the total.

Having considered the main constitutional or intrinsic factors, let us now turn our attention to extrinsic factors.

ENVIRONMENTAL OR EXTRINSIC FACTORS.

The main effect of environmental factors is to determine the time of manifestation and, to a lesser degree, the severity of the condition. Environmental factors may be precipitating, contributory or dominant in the aetiology of the disorder.

The following environmental or extrinsic factors may be important in the aetiology of neurosis in service patients :

1. Domestic stress.
2. Wartime separation and regimentation.
3. Marital problems.
4. Financial problems.
5. Unsuitable work.
6. Exposure to enemy action.
7. Physical strain or illness.

Stress of wartime separation and regimentation was considered to be a contributing factor in 52 per cent. Domestic problems constituted an important factor in 40 per cent. of cases; unsuitable work was a contributing factor in 24 per cent. Physical causes (infectious illnesses, etc.) were important in 8 per cent. only, and only in 5 per cent. was exposure to enemy action a contributing factor.

Thus the most common environmental stresses were wartime separation, regimentation, domestic stress and unsuitability of service work.

INTERPLAY OF INTRINSIC AND EXTRINSIC FACTORS.

Psychiatric disorder is nearly always of multiple causation resulting from an interplay of intrinsic (endogenous, constitutional) and extrinsic factors. The various factors may be additive or synergic in the production of neurosis. In considering environmental stress one has always to consider the individual predisposition and reaction to the particular stress under consideration because, people not only vary in the amount of stress that can be tolerated before breakdown, but differ in the specificity of main causative factors. Thus, in the development of neurosis in A.T.S. and other women service personnel, constitutional factors will determine the degree of stress tolerance, and also to some extent the response to various factors.

Thus we have to consider :

1. Constitutional predisposition.
2. Environmental stress.
3. Personal and individual reaction, interests, motivation, drives, ambitions, attitudes, etc., which may conduce to the development of neurosis, or, on the other hand, hinder the manifestation of neurosis in a predisposed person.

Service life to women presents certain features which require special adjustment as they conflict with habits and attitudes established in civilian life.

1. *Uniformity*.—Enlistment in the service means a greater degree of conformity in dress, régime and daily routine than women are accustomed to. There tends to be a sinking of individuality in service life which women are inclined to resent, whereas in civilian life the trend was to be distinctive and individualistic within socially accepted limits.

2. *Discipline*.—Women are not so accustomed to discipline in daily life as men. They often enjoy a relatively high degree of independence at home or work and resent the rigidity of service discipline.

3. *Lack of privacy* in eating or sleeping is another feature of service life which women specially dislike. The desire for privacy is a need strongly felt by many women, and many spontaneously remark that the comparative lack of this in service life is a constant source of irritation.

4. *Breakdown of class differences*.—This may constitute a particular stress for some individuals who have difficulty in mixing with people of different social strata or with different standards, attitudes and interests.

These aspects of military life constitute stresses and strains in adjustment to normal service personnel as well as those who develop neurosis; they can only

be given a minor rating in the causation of neurosis but are probably of contributory significance in individuals already highly predisposed to neurosis and maladjustment.

MOTIVES.

Motives underlying voluntary enlistment may greatly influence adjustment to military life, and contribute to success or failure in a military career.

Some volunteer for purely patriotic motives ; others in order to avenge the loss of a dearly loved person, such as fiancé, brother or other member of her family. In some, enlistment offers an opportunity of overcoming feelings of inadequacy or unwanted attributes of femininity. The military uniform, the activities and regimentation of service life in some cases is an opportunity for meeting a desire for masculine identification.

These motives, in the appropriate setting, can help adjustment to military life and contribute to a successful career. Other motives are less salutary. Some women volunteer impulsively for glamour and excitement ; others join out of pique following a quarrel with fiancé or family.

A number of neurotic patients with life-long histories of symptoms joined the Army in the hope that service life would cure their nervous symptoms. Others joined in order to get change of employment because they had been unable to adjust themselves satisfactorily at work in civil life. Some enlisted in order to escape from an intolerable situation, e.g. to get away from a stepmother, a tyrannical father, or a cruel husband. These motives are not usually, *ceteris paribus*, salutary and are not conducive to stable and successful adaptation to military life.

FAMILY SITUATION.

The stresses relating to family situation are many and varied. In some cases the patient is overdependent and timid and cannot stand separation from home. Sometimes the parents are frankly neurotic and have an unsatisfactory attitude towards the patient. Parental discord ; loss of one of parents ; remarriage of father and inability to get on with stepmother are typical examples of family stress.

Sixteen per cent. of the group for various reasons had an upbringing other than by parents, and in these patients this seemed to be a predisposing factor. Unsatisfactory home atmosphere in early life occurred in 30 per cent. of the group.

In some patients a family catastrophe, such as loss of parents or siblings in air raids, or through sudden illness, or husband or near relative being reported missing, were the main precipitating factors.

Financial and housing problems, air-raid damage, parental discord, family quarrels, were precipitating factors in other cases.

ATTITUDES.

Certain attitudes were prepotent in predisposing to neurotic breakdown in some cases. Some patients had been over-protected by parents all their lives. They had always been regarded as delicate and were forbidden to play games

or participate in any form of robust activity. Some patients, on account of effort intolerance and possibly a functional murmur, had been diagnosed as "weak heart" or "undeveloped heart," etc., with a development of iatrogenic invalidism and hypochondriasis and, in some cases, incapacitating neurosis. The very serious consequences to the patient of a diagnosis of heart disease when none is present is strikingly demonstrated in these patients.

SPECIFIC DISABILITIES.

In one or two patients specific disabilities such as congenital alexia were dominant factors in causing breakdown, even when the individual was of high intelligence. The problems resulting from the presence of this specific reading disability in service life, together with the patient's sensitivity to it with emotional reactions of suspicion or aggression, may ultimately give rise to neurosis.

UNSUITABILITY OF WORK.

Some patients, though heavily predisposed, might have adapted satisfactorily if given suitable work in the Services. In fact, unsuitable work was found to be a causative factor in 15 per cent. cases. Work may be unsuitable in the following ways; it may be beyond the patient's capabilities or, on the other hand, may be too dull and monotonous, or not up to the intellectual capacities of the patient. The patient's interests may conflict with the nature of the work, or in some patients working conditions or location of the work may be the important factors.

In many of these cases change of occupation and reposting under the Annexure Scheme enabled a large number of patients to be retained for useful service who would otherwise have had to be discharged.

SEX.

Problems regarding sex matters played an important role in aetiology in very few patients. In 18 per cent. of cases sexual activity was subject to worry. This included worry over masturbation, guilt feelings regarding premarital intercourse, etc.

Homosexuality was rare and occurred in less than 1 per cent. Similarly, neurosis arising out of worry over illegitimate pregnancy was very rare.

MENSTRUAL FUNCTIONS.

In a certain proportion of patients premenstrual tension was severe and in some patients amounted to a severe temporary disability. The tension usually developed about two or three days before the onset of the period and usually passed off on the second or third day of the period.

The general increased tension was accompanied by anxiety feelings, irritability, depression, and in some cases by swelling in the legs, swollen, painful breasts, pruritus, etc. Progestin administered 10-14 days before the period appeared to help some of these cases. In one or two patients the premenstrual depression was very severe and of suicidal intensity, but again showing the characteristic recession at the beginning of the period.

PHYSICAL ILLNESS.

In the 8 per cent. in whom physical illness played an important part in the aetiology of the neurosis, the most common physical illnesses were infections, such as influenza, tonsillitis, bronchitis, etc., which sometimes left residual symptoms of depression, irritability, fatigue, dizziness, tension, etc. These patients responded well to general rehabilitative measures of hospital régime, and as a rule formed a group of good prognosis usually recovering sufficiently well to return to full duty.

Head injury *per se* was not an important factor in many cases, and any resulting or residual disability or symptomatology complained of by the patient was, in the main, neurotic rather than physiogenic.

Previous physical illness or defect served to pattern the neurosis in some, e.g. post-diphtheritic paralysis which cleared up completely was followed by the development of hysterical paresis of the same muscles under stress; chronic otitis media with super-added hysterical deafness; hysterical blindness super-imposed on life-long myopia.

DURATION OF SERVICE.

The percentage distribution of the group with regard to duration of service was:

Less than 1 year . . .	23%
1-3 years	63%
3 years and over . . .	13%

It is interesting to note that, during the first year of service, only 23 per cent. developed neurotic symptoms of sufficient intensity to necessitate admission to a neurosis centre. The majority of patients had from 1-3 years' service before admission to Mill Hill. This indicated that the process of adaptation to the transition from civil to military life is not an important factor in precipitating neurosis in many patients.

DURATION OF ILLNESS.

Less than 1 month . . .	3%
1-3 months	16%
3-6 „	23%
6-12 „	24%
Over 1 year	33%

It is interesting to note that patients are not as a rule referred to hospital in the early stages. This may be due to many factors, such as:

- (i) Trial with out-patient treatment or treatment at unit or postponement of treatment in the hope that the condition would improve with time.
- (ii) Gradual onset of illness.
- (iii) Referral to hospital may only be made when symptoms or behaviour develop to such a degree that patient is unable to carry out normal duties.

TREATMENT.

The treatment of patients admitted to Mill Hill Emergency Hospital can be considered under the following findings :

- (i) General therapeutic régime.
- (ii) Individual and group therapy.

GENERAL THERAPEUTIC RÉGIME.

Every patient participated in an active régime of occupational and recreational therapy and physical training, together with educational lectures, entertainments and passes out of hospital. This general régime is considered to be at least as important as any other therapeutic measure.

Patients were encouraged to participate in all activities despite their symptoms, to take part in fire-fighting drill, stretcher-bearing, etc., and to have a well-developed sense of social responsibility.

Occupational therapy was as far as possible prescribed individually in accordance with clinical state, attitude, interests, intelligence and service occupation. Emphasis was laid on social obligation in occupational therapy, i.e. part of work was for the hospital or for such outside organizations as day nurseries. Handicrafts, pottery, art, sign-writing and gardening were some of the forms of occupational therapy. In addition to these forms of occupational therapy given at the hospital, some specially selected patients were sent for short courses in book-keeping and typewriting and elementary and mechanical and electrical and engineering courses at Hendon Technical College. These courses had a great therapeutic influence and enabled the instructors to give detailed reports on behaviour, efficiency and suitability for posting or further training in such work. These reports were invaluable in considering postings under the Annexure Scheme.

Physical training was given by Army Physical Training Instructresses, and every effort was made to build up team spirit in opposition to self-centred hypochondriasis.

Individual therapy.—In the background of a general therapeutic régime each patient was considered in respect to her personal needs and problems.

Physical disease was dealt with when present without over-investigation which would tend to induce neurotic attitudes ; no reinforcement of neurotic attitude was allowed.

Physical methods were used in certain cases, e.g. 1 per cent. had continuous narcosis, mainly for acute panic states or agitated depressive states ; modified insulin therapy (1 per cent.) was used mainly for depressed patients who had lost considerable weight, and electroconvulsive therapy for endogenous depressive states.

Psychological methods.—The majority of cases (83 per cent.) were treated by short-term psychotherapy in the form of discussion and re-education. Analytical procedures were used in 1 per cent. Intravenous sodium amytal, cyclonal and pentothal were used for purposes of narco-analysis in about 5 per cent. of cases and found to be valuable as a therapeutic aid for :

- (i) Uncovering amnesias or fugues.
- (ii) Removal of hysterical symptoms prior to dealing with underlying motives, conflicts, etc.
- (iii) To facilitate analytic procedures.
- (iv) To aid diagnosis, e.g. sodium amytal by release of muscular tension due to anxiety, revealed true nature of bodily symptoms produced by such tension.

Similarly, hypnosis was often found to be valuable as a preliminary step in therapy.

Group therapy of an educative nature based on elementary anatomy, physiology and psychology to give patients a better understanding of their symptoms and to counteract neurotic and invalid attitudes.

Social work.—A team of psychiatric social workers was available to deal with family or domestic problems when they existed.

In short the treatment was comprehensive and multiple, using as many approaches as were indicated in a given patient, with the aim either of modifying the patient to suit the environment or, failing that, to modify the environment to suit the patient.

PROGNOSIS.

The prognosis in an individual case depended on a large number of factors such as neurotic predisposition, personality make up, attitude to service, degree of social conscience, emotional stability, the degree to which extrinsic causative factors can be modified, suitability of work and ability to effect suitable posting, response to treatment, etc.

The following factors were found to be of *good prognostic significance* :

- 1. Stable, well-adjusted personality (rather than a specific *type* of personality).
- 2. Low degree of constitutional predisposition as shown by negative family history, absence of marked neurotic traits in childhood and satisfactory work record.
- 3. Satisfactory attitude to service.
- 4. Good social conscience.
- 5. Precipitation by transient exogenic factors such as febrile illness.
- 6. Suitability of service work or precipitation by unsuitable work where this could be remedied by Annexure posting.

Poor Prognostic Factors.

- 1. Unstable, ill-adjusted personality and psychopathy in general.
- 2. Previous neurosis.
- 3. Positive family history and childhood neurosis.
- 4. Hypochondriasis, egocentricity and lack of social conscience.
- 5. Persistence of marital or domestic stress or other exogenic causative factors which cannot be rectified if patient remains in service.
- 6. Breakdown occurring under stress of wartime separation and regimentation, i.e. minimal stress.
- 7. Hysteria as the diagnosis, and an hysterical attitude to symptoms.
- 8. Prolonged hospitalization for any cause, physical or neurotic.

the proportion rose to 25 per cent. Category E discharges. By 1 year the proportion rose to 37·8 per cent. and by 2 years the proportion rose to 51 per cent.

At the end of 2 years approximately 40 per cent. of the original group were reported to be carrying out full duties efficiently and willingly. It is interesting to note that at least 60 per cent. of those eventually discharged Category E had carried out full duties efficiently and willingly for considerable periods before being discharged Category E.

PROPHYLAXIS.

I. Screening and Selective Posting.

Our analysis of the neurotic groups indicated that the large majority of patients showed evidence of marked neurotic constitution and were heavily predisposed to develop a neurotic breakdown under stress. It is therefore clear that the best method of prophylaxis is the discovery of the potential neurotic on enlistment. This study has shown that the predisposition to neurosis could have been fairly readily assessed by psychiatric history-taking and examination on enlistment. Shortage of psychiatrists will limit the application of individual psychiatric examinations and it is possible that efficient screening tests will be devised which will enable the potential neurotic to be detected objectively by group methods with a degree of accuracy comparable to that of individual psychiatric examination.

When the potential neurotic is ascertained, two courses are open :

(a) Rejection if the individual is deemed unlikely to give useful service in any capacity.

(b) Controlling exposure to stress in those individuals showing clear predisposition to neurosis and making the environment as suitable as possible by posting to work of low stress value and in keeping with their temperamental and intellectual capacities.

2. Improving mental hygiene in the Army by education and propaganda with a view to improving morale, increasing a sense of social responsibility and countering egocentric and hypochondriacal tendencies.

3. Education of physicians and surgeons in the principles of psychiatric care and management of patients with physical as well as psychogenic disorders in order to avoid iatrogenic illnesses or psychological invalidism by unwise medical management, over-investigation and unduly prolonged hospitalization.

4. Increased use of group therapy for the potentially neurotic as well as the frank neurotic.

SUMMARY.

1. The article describes the aetiology, form, symptomatology, treatment, prognosis, disposal and follow-up of a group of 2,000 women service neurosis patients admitted to Mill Hill Emergency Hospital, London, during 1942-1944, with special reference to a group of 500 personally treated by the author.

2. A multiplicity of causative factors was found to be the rule. Marked

constitutional predisposition was found in the majority of patients as evidenced by the following indicators of neurotic constitution.

- (a) Clinically abnormal personality. Only 43 per cent. of the group were judged to have had a well-adjusted and stable previous personality.
- (b) Neurosis in childhood occurred in 46 per cent.
- (c) Positive family history for nervous and mental disorder was found in 58 per cent.
- (d) Previous neurosis and clear predisposition occurred in 40 per cent.

3. Poor intellectual endowment was not an important aetiological factor in the group.

4. Environmental factors of various kinds determine the time of manifestation and degree of severity of the neurotic illness. The following were the main factors: Domestic and marital problems, wartime separation, regimentation and unsuitability of service employment. Infectious illness was a precipitating factor in 8 per cent., and in 5 per cent. only was exposure to enemy action a contributing factor.

5. Various aspects of military life which require special problems of adaptation for women, are considered, and on the whole play an unimportant role in aetiology and only operate in individuals already highly predisposed to neurosis or maladjustment.

6. Motives underlying voluntary enlistment and various attitudes to service life are described and their bearing on the development of neurosis considered.

7. Affective disorder (anxiety and depressive states) was the most common type of illness, accounting for 70 per cent. of the total. Hysteria, mainly conversion in type, occurred in 28 per cent. Other forms of psychiatric disorder were uncommon.

8. Comparison of some 200 items relating to neurosis between a group of 5,300 neurotic soldiers and 2,000 women service patients showed a general similarity in the distribution of the various items. Some features, however, showed a differential sex incidence. The male group showed a higher incidence of anxiety state and somatic manifestation of anxiety, stammer, tremor and longer duration of illness. The female group showed a higher incidence of depressive symptoms, hysterical traits and attitude and sudden onset of illness.

9. The treatment applied was described and included a general therapeutic régime, together with individual and group therapy, including various psychological and physical therapeutic procedures.

10. Factors of good prognostic import were:

- (a) Stable, well-adjusted personality.
- (b) Low degree of constitutional predisposition as shown by negative family history, absence of marked neurotic traits in childhood and satisfactory work record.
- (c) Satisfactory attitude to service and good social sense.
- (d) Precipitation by exogenic factors, such as febrile illness.
- (e) Suitability of service work or possibility of posting to more suitable work.

11. Factors of poor prognosis were :

- (a) Unstable ill-adjusted personality.
- (b) Previous neurosis.
- (c) Positive family history.
- (d) Hypochondriasis, egocentricity and lack of social conscience.
- (e) Breakdown under stress of wartime separation and regimentation (i.e. minimal stress).
- (f) Hysteria as the diagnosis and an hysterical attitude to symptoms.
- (g) Prolonged hospitalization for any cause.

12. *Disposal*.—Fifty per cent. were discharged Category E. Forty-eight per cent. were returned to duty, either directly (30 per cent.), or by special posting under Annexure Scheme (13 per cent.), or in other groups (2 per cent.).

13. *Follow-up* enquiries were made at intervals up to two years after discharge from hospital. At the end of two years 40 per cent. of the original group were reported to be carrying out full duties efficiently and willingly, and at least 60 per cent. of those eventually invalided from the unit were reported to have carried out full duties efficiently and willingly for considerable periods before being discharged Category E.

14. *Prophylaxis*.—It has been clearly demonstrated that the majority of individuals of the group were heavily predisposed to develop neurosis under stress and that the degree of predisposition could have been readily assessed on enlistment. The most effective preventive psychiatry will be achieved by detecting the potential neurotic on enlistment, and if not rejected for service, the tendency to breakdown can be minimized by posting to work of low stress value and duties in keeping with temperamental and intellectual capacities.

Improvement of Mental Hygiene in the Army by education and propaganda with a view to improving morale and increasing sense of social responsibility ; increased use of group therapy for the potential as well as the frank neurotic, and education of physicians and surgeons in principles of psychiatric care and management of patients with physical as well as psychogenic illness are further measures which can greatly contribute to the achievement of effective preventive psychiatry.

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REFERENCE.

- SLATER, E. T. O. (1943), *J. Neur. Neurosurg. and Psychiat.*, **6**, 1-16.