NEUROSES IN FIREMEN.

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WHEREAS much has been published on the psychological reactions, normal and abnormal, in the personnel of the armed forces, little has been written about the neuroses in Civil Defence personnel.

This paper is a survey of cases of neurosis occurring among firemen who were admitted to Mill Hill E.M.S. Hospital from the outbreak of war to October 1, 1944. Altogether 70 patients came from the Fire Service. 40 of them came from London (postal area). No figures can be given about the incidence per number of personnel or per area. But, considering that these 40 men were probably all the firemen in London, north of the river, who required in-patient treatment on account of neurosis during five years, it can be taken that the incidence of serious neurosis was very low. The group of neurotic firemen can be compared with a population of neurotics from the armed Services (as analysed by Eysenck, *Journ. Ment. Sci.*, 1944, **90**, 851).

TABLE I.

	Age above 30.	Married.	Total.
Firemen	39	63	70
Service personnel	270	463	700

As can be seen from Table I, the firemen, as a group, were older than the Service patients, and a higher proportion of them were married at the time of their admis-

TABLE II.

	Psychiatric family history.	Neurotic traits.	Total.
Firemen	23	27	70
Service personnel	275	488	700

sion. As Table II shows, a history of psychosis or serious neurosis in parents or siblings was slightly less frequent in our group; the difference, however, is not statistically significant.

A history of neurotic traits in childhood, or in adult life, is markedly less frequent in the firemen than in the controls; this must be read in conjunction with the frequency of war stress in the strict sense, i.e. the exposure to enemy action.

TABLE III.

	Bombardment.	Separation.	Domestic troubles.	Total.
Firemen	36	3	10	70
Service personnel	137	469	202	700

Table III gives the incidence of the more common psychological factors of aetiological significance in the firemen and the control group. It will be seen that exposure to bombardment (including bombing and shelling) is much more frequent in our group than in the controls. In contrast, domestic stress and separation and regimentation figure much lower, for obvious reasons. In one case resentment against the lack of discipline was noted as a precipitating factor. It is worth

noting how low the incidence of unsuitable employment as an aetiological factor ranks, which was mentioned in only 12 cases. The fire service consists of a nucleus of regular firemen, a large body of volunteers, and a very small proportion of conscripts. It is known from all services that volunteers are less likely to break down than conscripts, in particular when the numbers of volunteers for a particular assignment is large enough to allow for the exclusion of the less suitable—in other words, when the self-selection can be improved on by a rational selection process.

Volunteers in war time are of many shades; volunteering for one activity may mean trying to evade another less desirable one.

In our case-notes the reason for joining the Fire Service was stated only in 48 cases. Of those firemen in whose case-histories the reason was mentioned, 14 had volunteered before the outbreak of war (part time) and were called up for full time duties, 13 joined the A.F.S. because they found themselves out of work, and 5 frankly stated that they joined the A.F.S. in order to avoid any service with the armed forces. This latter psychological position may work in two directions: it may make for lower morale, and therefore lower resistance to stress, as compared with the genuine volunteer; or the desire to escape alternative duties may increase the tendency and capacity to stick to the chosen one. Finally, these antagonistic tendencies may clash, and so produce or prolong a neurotic illness.

The diagnoses in our 70 cases were:

Anxiety state in 36 cases.
Hysteria in 12 ,,
Depression in 17 ,,
Miscellaneous in 5 ,,

All cases of *hysteria*, with no exception, developed as the immediate result of enemy action. All had experienced near misses, most had suffered minor physical injuries, and the symptoms and signs for which they were admitted some time later were hysterical prolongations or exaggerations of these injuries. This uniformity of the clinical picture is probably due to the selection of cases; they were war cases, for which the E.M.S. (and in some cases the M.O.P.) had taken responsibility. In two of these cases causative factors could be discovered which might be called "fire-service-specific," i.e. pre-existent factors which accounted for the fear of continuing in the Fire Service. Both men stated in retrospect that they had always been afraid of heights and of climbing ladders; both of them had been able to control their fears in the normal course of duties, but once broken down, they were not able to regain their previous, precarious adjustment. Another man had suffered all his life from fear of the dark; he had managed satisfactorily as long as he worked in the team, but he had grown increasingly tense and anxious when on watch-room duty, while the other personnel went out to incidents. He broke down, with hysterical symptoms, after a near miss and could not face his responsibilities again.

The following is the history of a typical case:

Sub-officer D—, aged 42.

Family history.—Nothing contributory.

Personal history.—No neurotic traits as a child. Joined the Royal Marines at age of 17 in 1917 and left after six years' service. Joined London Fire Brigade. Served in latter satisfactorily through the early blitz until September, 1940, when he was blown 20 ft. to the ground by the unexpected explosion of a time bomb. Had no injuries or unconsciousness, but was dazed, limp and speechless. In next two days developed weakness of right arm, jitteriness and intolerance of noise. Recovered and returned to duty after one month's rest, though he had still some pain and weakness in his right arm, but all symptoms, especially paralysis of right arm, reappeared after he received some minor injuries in another bomb explosion. He was a quiet, conscientious man with few interests outside his work and home. Hypnosis produced a state apparently similar to that in which he was on the night of the first incident. This patient was persuaded to acknowledge his fear, and recovered rapidly when he was found work as an instructor in fire-fighting away from London.

The type of *anxiety state* seen most frequently was gradual in onset. Increasing tension culminated in a breakdown when the stress continued long enough.

The stress in most cases was fear of bombing, often exaggerated by long hours of strenuous duty, lack of sleep and worry about wife and family. In a few cases, such as the following, a specific traumatic experience was the precipitating factor.

Fireman B—, aged 30.

Family history.—Nothing significant.

Personal history.—Enuretic until 14. Walked in his sleep as a child. Had a good work record and joined A.F.S. full time in 1939. Served successfully through the blitz, though considerably frightened. In 1944 during the flying-bomb period he became increasingly tense, and was most severely upset by rescuing bodies from wrecked buildings. Following this, he developed headaches, feeling of panic when planes went over, and other anxiety symptoms. He stopped eating meat because it reminded him of the dead bodies. On admission he was tense, anxious and apprehensive, preoccupied with his memories. He improved considerably with treatment, and following discharge from the N.F.S. was returned to civilian employment.

In a few cases the presence or the fear of responsibility was the main aetiological factor.

Lfm. T—, aged 34.

This patient complains of a feeling of inward tension with a nervousness that occasionally gets out of control, and which becomes manifest as a twitching of the mouth.

He has always been a sensitive, rather highly strung person, who none the less has made a good adjustment and who has always been a worth-while individual. He was a volunteer member of the A.F.S. before the war, and was mobilized to full time duty in September, 1939. He has since served with the minimum of sick leave and has always been considered a good man. Apparently he served efficiently throughout the blitz period.

He was promoted to leading fireman in March, 1943. He felt aware of his limitations, but nevertheless urged himself to the acceptance of responsibility. He had one or two setbacks, which he took to heart and which made him diffident in the role of leading fireman. He noticed that on instructional duties he was apprehensive of making mistakes, and that then it was that the feeling of anxiety came over him. Further administrative responsibilities made him feel worse. This dilemma between his timidity and his desire to be perfect made him want to give up his rank and revert to that of fireman.

In the following case, which belongs to the effort syndrome group, the patient illustrates the psychogenesis of the syndrome well; he also shows the effect of stress in an obsessional personality; the freedom from personal responsibility in the A.F.S. during the early stage of the war led here to a temporary improvement.

Ch. M—, aged 30.

Son of a strict, methodical father, and an anxious mother. Satisfactory school and work record. Diphtheria at eight, followed by palpitation; forbidden all sports. Sociable and ambitious; very obsessional. Joined A.F.S. part time before the outbreak of the war; felt the strain of his work and the additional A.F.S. duties; developed headaches and worried excessively. Called up for full time duties in September, 1939; found life much easier and health recovered. November, 1941, felt the strain of responsible work as sub-officer. While on leave he had to run for a train; felt palpitation and pain in his chest. Symptoms persisted, and became worse, when in 1942 his work became more complicated and responsible. Worried about his work; kept re-checking it; could not sleep. Developed various tics. On examination no signs of cardiovascular lesion. Depressed, worried, irritable. Recovered with psychotherapy.

Most cases which were admitted in *depressive states* had shown a previous tendency to a depressive reaction. Most of the cases diagnosed as depressions showed symptoms of anxiety as well. The following case is an example of this type of reaction. The patient is one of those men who joined the F.S. in spite of his fears of heights:

B—, aged 32.

Family history.—An uncle committed suicide in 1918.

Personal history.—Always disliked heights and ladders. Good work record. Joined the A.F.S. in 1938 and was called up in 1939. He has had several periods of depression in his life before he joined the A.F.S. During the blitz period he developed another depressive reaction due to loss of sleep and worry over air raids. He had suicidal thoughts, nightmares, loss of weight and was sent to hospital, where he was depressed, had fits of crying and felt he had let down his comrades. He made a steady improvement and put on weight.

It may be finally worth quoting a case of mixed aetiology; an old regular fireman in whose case age played some part in addition to the stress of responsibility, exposure to enemy action, and the relaxation from stress, the "delayed effect" first described in sailors by Curran and Garmany (*B.M.J.*, 1944, i, 144):

A.E.P. District Officer, L.F.B., aged 45.

Complaint.—Loss of grip and depression since October, 1940; headaches.

Family history.—*Nil* significant.

Personal history.—No neurotic traits. Good school record, both at lessons and games, and good mixer. Occupation: Joined Navy at 15 for eight years; became Petty Officer; served through the war and in several actions without any nervous symptoms. After the war joined the Fire Brigade; has worked hard and is now district officer in charge of 300 men and six fire stations. Married October, 1919; two children, both well. Very satisfactory home life.

Personality.—Keen, efficient, conscientious man. A home bird, with few interests outside his home and work. Liked entertaining at home. Felt responsible for his work all the time, and frequently went into the office on his day off. Had never known any real depression. Alcohol and smoking—moderate.

Present illness.—In September, 1940, he bruised his back; was five weeks off work. When he returned, the London blitz was in operation and his work and responsibilities increased enormously. He made every effort to keep up with them, but was not only prevented from getting adequate sleep by his work, but was unable to delegate much of his responsibility to his junior officers, and had to keep his eye on every detail of the job. About October, 1940, he began to feel run down and nervy. He trembled while waiting for a call after the warning had gone, although he felt all right when working. Became irritable and sleepless. He lay awake planning his job for the morrow, or thinking about the events of the day. Went off his food, and used to get a pain in the left chest and down the left arm when he walked. Began to feel a pressure on back of the head, especially after a night's worry. In November he took a week's annual leave, had a quiet time on a farm, and felt somewhat better, but relapsed soon after he returned to work. He began to worry whether he would be able to hold down the job, and lacked confidence. During the City blitz at the end of December he was on duty for a fortnight on end and felt very tired, but carried on, sleeping in snatches. After the rush was over he felt "right down on the floor," nervy, irritable, depressed and tearful, afraid others might see him in this condition and of then getting the sack. Early in January he saw a doctor and was given a month's sick leave. He improved a little and started work, but relapsed soon after he returned.

Condition on admission.—Quiet, co-operative, no over-anxiety, but tears come into his eyes when he talks of his job. Gunfire and bombs now make him want to hide, although he has never given way to these feelings when working. He finds it difficult to concentrate, and hard to leave off and rest. His mood is somewhat depressed, his sleep disturbed, appetite fair. His intellectual functions show a slight retardation, otherwise normal. Insight: He believes his condition is due to work, worry, responsibility and danger, but is very anxious to recover and go back to duty, and is scared he may be pensioned off.

Diagnosis.—Anxiety state in a conscientious, worrying personality.

Progress.—He has improved considerably in health, but remains depressed, mainly in connection with the fact that he has been discharged from the Fire Service.

Among the miscellaneous diagnoses was one case of traumatic personality disorder following head injury, one case of asthma and eczema, one of disseminated sclerosis with an hysterical overlay, and one "queer personality," a man who held peculiar religious beliefs and quarrelled with his colleagues and his superiors.

Summary and Conclusion.

A survey of all the cases of neuroses in firemen admitted to an E.M.S. neurosis centre shows that the total incidence of serious neurosis must have been very low. Exposure to enemy action was the most frequent causative factor in a population which had a lower incidence of neurotic predisposition than a group of neurotics from the armed forces.

The types of reaction did not differ materially from those of the control group. A small number of men had shown traits which should have disqualified them from fire-fighting duties, viz. fear of heights, fear of the dark, and previous nervous breakdown of a depressive kind. Though the men in question had stood up to a considerable amount of strain and given valuable service up to the time of their breakdown, they were unable to readjust themselves again to the same conditions once they had broken down.

Depressive reactions in the past are of ominous prognostic significance.

A man's attitude towards responsibility should also be taken into account before he is given promotion; a highly conscientious man who may be a valuable member in low rank may break down under the strain of responsibility for which he does not feel suited.

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