MEDICAL PROBLEMS IN WAR

This is the first of three articles surveying the literature of neuroses in war

NEUROSES IN WAR

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Since the conditions of warfare now impose themselves in a much greater degree upon the civilian population, the number of psychiatric casualties in current hostilities is likely to be even larger than in the war of 1914-18. A survey of the observations and conclusions reached at that time, or more recently, may throw light on potential important psychiatric problems of the present day in civilian and military life.

Civilian Population

Bonhöffer, Roth, and Steltzner note that war, as we have all felt, arouses in the individual fear concerning the nation, the local community, and the family circle. The main sources of such fear are (1) the risk of attack and injury, (2) economic changes, (3) the threat of family separation, and (4) the threat of shortage of food and deprivation of luxuries and pleasures.

Individualism declines at the outbreak of war and is superseded by mass reactions, which show certain variations in spite of a general uniformity. The feeling of sharing a common danger leads to a strengthening of community ties and to a levelling of differences and opposition in social, economic, religious, and political spheres. In volunteers particularly the increased community feeling leads to a surrender of privileges and to self-sacrifice in the service of the country. Conversely, in some individuals anxious endeavours to protect the ego lead to a ruthless increase in selfishness. In most people the increase in community feeling results in a disregard of minor physical ailments, although hypochondriacal reactions may be observed in some. During the last war Bonhöffer noted a diminution in the number of those seeking medical advice not only in German luxury sanatoria but also in prisons. In his view a predominance of affective over intellectual values accounted for the amazingly widespread suggestibility, diminished critical faculty, and increase in wishful thinking which led to a distorted evaluation of the significance of news. Allied to this was the liability to the paranoid formation of rumours and the ideas of reference which lie behind exaggerated spy fears. With the alteration of moral standards in war (peace and war super-ego of Freud) latent aggressive tendencies became manifest. War, in general, releases taboos on aggressive tendencies which manifest themselves in sadistic fantasies and actions. At the outbreak of war a decrease in delinquency, not wholly attributable to the enlistment of criminals, was generally observed, and may be partly accounted for by the outlet provided for aggression. A corresponding increase of over 150 per cent. was recorded in Berlin during the period 1914-16; 97 per cent. of the 1916 cases were for larceny (Birnbaum, Liszt, Travers, Lindenburg, and Minde). The strain imposed upon the female population by the absence of their male companions resulted in

promiscuity and a statistical increase in prostitution and venereal disease (Dessoir). Very little has been reported on the psychological reaction of children: Katz observed anxiety states and a minor epidemic of bed-wetting in children under his care.

Some observations are available on civilians actually involved in warfare. Most German writers stress the infrequency of psychological disorders in severely bombed French villages, but no confirmatory French observations can be traced. According to Redlich, in refugees from invaded areas the resistance and capacity for adaptation were remarkable. In predisposed individuals states of depression and anxiety and hysterical syndromes were seen. Dealing with the effect of Zeppelin raids, R. P. Smith described conditions similar to those found in soldiers. An inquiry made at various London hospitals about the behaviour of patients during air raids showed the absence of any marked reaction. Similarly, according to Hoche in Germany and, more recently, Mira in Spain, the civilian population stood up surprisingly well to the terrifying experiences of repeated air attacks. In Barcelona the air raid shelters, although adequate for only 10 per cent. of the population, were by no means crowded. Hoche described as the main sources of anxiety (1) forced passivity without any means of escape or retaliation, (2) the whistling of the falling bomb before the actual detonation, (3) the vivid and contrasting auditory and visual sensations resulting from the detonation, especially in darkness. In those not actually involved in the explosion the immediate results were the usual symptoms of anxiety—trembling, pallor, sometimes forced laughing, diarrhoea, and increased urinary excretion and hence marked thirst. These symptoms passed off quickly in the well-adjusted. People of advanced age tended to show an increased tolerance, and in some neurotic patients anxiety arising from internal conflicts was diminished in face of an acute external danger. In severely bombed towns the civilian population suffered from anxiety states lasting for weeks, with disorders of sleep, acoustic hypersensitivity, starting at the slightest sound, constant anticipation of noise, heart symptoms, polyuria, glycosuria, vomiting, diarrhoea, and amenorrhoea. In recent Spanish experience Mira reported a number of cases of a malignant type of anxiety characterized by lack of concentration, motor inactivity, tachycardia, and panting respiration, in some cases leading to death in three or four days. Typical hysterical fits, especially of screaming, were frequent in Hoche's observations (1916) but rare in Mira's (1938). As a rule only those in the neighbourhood of bomb explosions developed acute nervous symptoms. A psychic epidemic was reported by Wedekind in girls working near the front in a munition factory frequently visited by aeroplanes. Fits of trembling and prolonged loss of consciousness occurred on the slightest provocation: the sight of over a dozen girls lying on the floor in convulsions was not uncommon. According to Nöggerat and Mira, during air raids well-balanced children were indifferent, and anxiety and excitement were observed only in families where the parents were excited (Siegert).

Observations on Soldiers

The life of the soldier, especially in the front line, is characterized by the exclusion of individuality in a mass experience which alternates between the danger of death

and the desire to escape, and complete devotion to a task which requires no reflection but entirely consumes the will (Kronfeld). Change of occupation, separation from family, and submission to a new form of discipline form the initial stresses of the soldier. Meaningless petty restrictions, in the absence of any opportunity to retaliate, lead to emotional tension in those unaccustomed to submission. The suppressed individuality may find an outlet in the use of aggressive and obscene language or give rise to violent outbursts or attacks on superiors (war frenzy: Stransky and Laudenheim). According to the statistics of the German and the Swiss armies (Staely, Strasser, Uhlmann, H. W. Mayer) in a certain number of soldiers mobilization precipitated nervous symptoms, most frequently functional gastric and cardiac disorders, enuresis, disturbances of sleep, and anxiety states. In 0.15 per cent. of the troops of the Swiss army a "mobilization psychosis" characterized by delirious states was described by Uhlmann. Three-quarters of these cases were better in less than six months.

Hefele records that the boring monotony of prolonged non-combatant service in the rear leads to passivity, indifference, and depression. Autobiographic reports and observations illustrate the psychological changes engendered by front-line experience (Schneider, Stransky, Löwy, Neumann). Bartlett and Everth described the animal-like pleasure and the feeling of freedom in their new existence felt by many soldiers on arrival in the trenches. In contrast to the period of training, petty annoyances are over and there is a feeling of comradeship with superiors. In general there is an attitude of endurance and patience, with no marked enthusiasm except for the moments of ecstasy described in "going over the top." There is a general dulling of intellectual life; strong impressions are constantly repeated; the soldier tires of the scenery and uniforms around him and would easily break down if the constant physical danger and strain did not absorb his whole attention. As regards the risk of death he feels he shares his fate with many others. Bartlett differentiates two types of courage: the first based on indifference arising from the decreased mental activity mentioned above; the second, "genuine courage," involving the control of normal fear by sentiments, ideas of self-respect, social traditions, and morale. The main sources of mental stress for the front-line soldier are danger of death, guilt over killing, increased responsibility, separation from family, and sexual deprivation.

Danger of Death

Most soldiers on approaching the front line displayed uneasiness and apprehension by restlessness, irritability, artificial jocularity, or silence and withdrawal, or by unusual perspiration, diarrhoea, and frequency of micturition, lasting a few weeks. Inactivity under harassing fire is said to affect the mental health of the soldier more than active warfare (Rivers, Scott Jackson), while the prolonged uncertainty and fear of a land mine is regarded as the most potent source of mental tension (Hoche). Any protection, however ineffective or inadequate, as in covering the face with a cloth, serves to allay the mental tension of the soldier (Schneider). Constant emotional tension is discharged in various ways, as exemplified by the "go-getter," the panic-stricken, and the apparently calm individual who remains at his post. Courage, according to Kronfeld, is more of a mass than an individual phenomenon, and in the neurotic individual exceptional courage may arise from fear of ridicule. "Going over the top" relieves pent-up anxiety, which is transformed into rage, while cowardice was often revealed to be due to specific

phobias (Stransky). Aided by community feeling, patriotism, and a religious and philosophic outlook, the vast majority of the soldiers manage to adapt themselves to a situation that appears almost intolerable. Severe and prolonged stress may precipitate a breakdown in almost everybody. After exposure to severe shrapnel fire a whole company was noted by Redlich to develop hysterical symptoms—for example, crying fits and vomiting.

Guilt over Killing

Normally our aggressive or sadistic tendencies are repressed by our civilization, mainly through the influence of early surroundings. In peace these aggressive tendencies may express themselves in a sublimated form in physical exertion and dangerous exploits. In war "a premium is put upon blood-thirstiness and the community extols the individual who is most effective in inflicting injuries upon the bodies and lives of the members of an opposing group. This becomes, in effect, a sublimation, for now the soldier can by the same acts give vent to his primitive passions and reap the approbation of his fellows" (MacCurdy). In some, however, the conflict between early teaching and the demands of war may precipitate a breakdown.

Such phenomena as the display of unrestricted aggression can be most easily understood as manifestations of a regression to an infantile type of behaviour, similar to the reactions seen in everyone in the face of a terrifying experience such as an earthquake. Archaic mechanisms are brought into action; but the well-balanced individual, after a period of temporary regression, readjusts himself at the new level, whereas the neurotic individual fails to do so.

Increased Responsibility

For many enlistment in the Army meant relief from responsibilities; but for N.C.O.s and officers, especially where they were subject to strain from the need to keep up an appearance of courage, their new position acted as a cause of mental unrest and contributed in no small degree to nervous breakdown. "The burden of increased responsibility may also account for the higher incidence of nervous disorders in married men" (Report of War Office Committee on Shell Shock).

Sexual Deprivation and Separation from Family

Terrifying front-line experiences affect the soldier sexually in two different ways. More often than not a diminution of sexual interest was observed (Wexberg and Löwy). In others spermatorrhoea and dreams with a sadistic sexual content occurred (Schneider). Homosexuals proved efficient and enduring soldiers (Burchard). In bisexuals a diminution of the relevant taboos relieved guilt about homosexuality in some, whereas in others guilt reactions were aggravated.

Classification and Incidence of War-time Neuroses

Neuroses in war time embrace the following groups: (1) pre-war neuroses which are continued unchanged; (2) pre-war neuroses aggravated in war time; (3) character disorders developing manifest neurotic symptoms; (4) neuroses occurring in apparently well-adjusted individuals, defined by MacCurdy as functional nervous conditions arising in soldiers, immediately determined by the conditions of modern warfare and with a symptomatology whose content is directly related to war.

A survey of the literature is complicated by the varying terminology of the classifications used in various countries by various authors. Aetiological and symptomatological

classifications were used indiscriminately, as in the labels "shell shock," "neurasthenia," and "hysteria." The ill-defined group "neurasthenia" probably contains exhaustion states, anxiety states (W. H. Rivers and H. Head), and depressions, while the term "shell shock" connotes a traumatic aetiology, is difficult in relation to pensions, and has largely been abandoned (Report of War Office Committee on Shell Shock). As it has become obvious that there is no fundamental difference between peace and war neuroses, the generally accepted terminology of peacetime neuroses is now used for both.

It is difficult to obtain an accurate estimate of the incidence of neuroses during the last war.

(a) British Expeditionary Force.—According to the *Official History of the War* the problem in the B.E.F. did not become acute until July, 1916, when several thousand patients were rapidly passed out of the Somme battle zone. An analysis of 1,043,653 British casualties revealed that neuroses formed 34 per 1,000 casualties. On occasions neuroses made up 40 per cent. of the casualties evacuated home. In 1918 out of a total of 160,000 pensioners 32,000, or 20 per cent., were receiving pensions for functional nervous and mental disease (Collie), while in 1921 this figure had risen to 65,000 (*Official History of the War*).

(b) Canadian Expeditionary Force.—Of 180,496 casualties occurring 24 per 1,000 were included in the category of nervous and mental disease (Briggs).

(c) American Expeditionary Force.—The total number of admissions of enlisted men suffering from functional nervous disease during the period April, 1917, to December, 1919, was 32,983, equivalent to 9.5 per 1,000 casualties. The attempt to eliminate potential neurotics from the American Expeditionary Force, and its comparatively short period of active service, must be remembered when considering this figure.

Observations in various armies agreed that (1) the incidence was relatively greater in fresh troops arriving in the front line, in battle-tested troops after prolonged trench life without a break (Russell), in men over 40, especially married men (G. Holmes, W. Brown), and in rapidly trained volunteers, as compared with the Regular Army (Bailey); (2) the incidence rose considerably after severe military operations. Actively advancing troops were less apt to break down than inactive or retreating troops; (3) analysis of the incidence in various branches of service showed that technicians working at the front under extreme hazard—infantry and machine-gunners, engineers, artillery, and tank corps—rank high in the list (Fenton and *Official History of the War*; and Ayres: Shell Shock Report).

Aetiology

The pathological findings in a few cases led early writers to attribute neurosis in war to physical causes (Mott, Oppenheim, and Von Sarbo), including carbon monoxide poisoning (Mott, Hübner, Soltau).

In cases with negative findings molecular changes in the nervous system were postulated; but the occurrence of severe concussion without ensuing nervous symptoms, the low incidence of nervous illness in groups sharing the same trauma, and rapid recovery under psychotherapy strongly countered this view (Culpin, MacCurdy, Eder, Viets, Wiltshire). The condition was ushered in by concussion in less than 10 per cent. (W. Brown, Holmes, Hart) or 25 per cent. (Graham Brown, MacCurdy). Concussion and concussion neurosis have to be considered as separate entities, the concussion acting as a precipitating factor in concussion neurosis.

The French school of thought (Roussy, Brisseau, D'Oelsnitz, L'Hermitte, and Lépine) distinguished the "commotionné" from the "émotionné." Under the

name of "physiopathic disturbances" Babinski and Froment described a group of "reflex disorders" which occupy a position half-way between organic affections and hysterical disorders. A reflex contracture, for example, was initiated by an organic nervous lesion and subsequently fixed by a psychological mechanism resembling that of hysteria.

Exhaustion

Fatigue, exhaustion, whether physical or mental in origin, exposure to inclement weather, loss of sleep, lack of food or water, may disturb the tense mental state of the front-line soldier. "The constant stress of exposure to something extremely distasteful, whether the distaste may be common to all mankind or an idiosyncrasy of the patient, as well as the struggle against symptoms already in existence," may lead to states of fatigue (MacCurdy). Nearly all cases admitted to casualty clearing stations were in a state of fatigue; associated symptoms described are perspiration, palpitation, feeling of giddiness and fainting, praecordial pain, breathlessness on exertion, and weakness of limbs (Jolowicz, Brugsch). Acute exhaustion states differ from chronic fatigue states seen after prolonged trench life. A true exhaustion state passes off after a few days' rest, but patients with "neurasthenia" and an anxiety state usually gave histories of fatigue reaction in the line that was disproportionate but not acute (MacCurdy). A special group labelled "exhaustion neurosis" is outlined in the American literature.

More often than civilian neuroses, military neuroses are preceded by terrifying experiences whose action can only be understood in conjunction with the mental make-up of the individual, and will be considered in detail under the heading "Psychopathology."

Predisposition

A majority of psychiatric authors believed that, given sufficient emotional stress, neurotic symptoms may appear in anyone, and that the existence of neurotic symptoms in civil life predisposes to their reappearance in an increased and altered form in war (G. Roussy, Forsyth, Dupony, Campbell). Psychopathic personalities are said to be "martial misfits" (Hurst). A review of the facts in the light of subsequent knowledge, however, suggests that there were many exceptions to this generalization. Individuals with previous anxiety symptoms, depressed, sensitive, timorous, and phobic individuals, were as a rule unable to stand the stress of war; whereas some obsessional, certain types of psychopathic personality, psychotics, and mental defectives often did very well as soldiers. Such patients not infrequently broke down on return to civil life.

Systematic statistical research on familial and personal predisposition in neurotic soldiers, undertaken without regard to clinical classifications, gave inconclusive results. Studies in small groups seemed to confirm the common belief in family and personal predisposition (Wolfsohn), but a comparison of findings obtained in an average regiment in the United States (Bowman) with those of a neuropsychiatric base hospital in France showed "that the preponderance of heredity for the mass of neuroses and psychoses is but a trifle more than for healthy individuals" (U.S. Army Medical Department). Sixty-three per cent. of neurotic soldiers, compared with 46 per cent. of average soldiers, gave combined positive family and personal histories; 52 per cent. and 39 per cent. respectively gave positive personal histories.