NEUROTIC AND PSYCHIATRIC STATES AS CAUSES OF INABILITY TO WORK IN ENGLAND, 1940-1

BY

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This study was undertaken in the hope that the statistical material available to me in my capacity as a medical referee to a large industrial insurance society might throw some light on the following points: (1) the actual incidence of neurotic and psychiatric illness in this country at the present time; (2) the relative importance of the "nervous factor" in causing delay in recovery from illness; (3) the probable amount of definitely psychiatric illness present in the community for which specialist psychiatric "treatment" should be provided in a reorganized medical profession.

The Material

With these general objects in view and after a preliminary discussion with Dr. Russell Fraser, who is engaged on the same general problem on behalf of the Medical Research Council, large samples of records made at the time of examination by three medical referees (working independently) for a large benevolent and approved society in the Midland area during the years 1940 and 1941 were analysed. I personally interviewed and recorded the notes of about one-third of the cases; the rest were seen and recorded by colleagues, without whose work the present study could not have been carried out. Series of 500 record cards were taken in alphabetical order from the files of both male and female patients for each of the two years under review—making 2,000 cases in all.

The Analysis

All the clinical notes were read by me and each case was allocated to one of the three clinical groups. (All doubtful cases were classed as physical.) In consultation with Dr. Russell Fraser the following categories were selected.

Group I.—Physical diseases uncomplicated by evident neurosis.

Group II.—(a) Physical diseases complicated by "neurotic" symptoms of such a kind or degree as to make it clear that the mental element in the case was significant as a cause of the disability or its undue prolongation. (b) Minor or secondary neurosis—i.e., cases in which psychiatric disorder was the main cause of the disability, though often a feature complicating other illness, and treatment was probably simple.

Group III.—Cases of frankly psychiatric origin: that is to say, major psychiatric disability—viz., the psychoses, and also cases probably requiring expert psychiatric attention not within the competence of the ordinary practitioner.

TABLE I.—*Nervous and Psychiatric Illness (Rate per 1,000 Cases in Brackets)*

Description of Material	"Population"	Group II: Neurotic or Psycho-somatic	Group III: "Major Neurosis" or Psychiatric	Combined Groups II and III
(1) Cases of "ordinary sickness" seen by medical referees ..	1,693	272 (160)	202 (119)	474 (280)
(2) Analysis according to sex:				
(a) Males	809	112 (140)	87 (100)	199 (246)
(b) Females	884	160 (190)	115 (129)	275 (320)
(c) 1940 males only ..	410	63 (153)	47 (110)	110 (260)
(d) 1941	399	49 (120)	40 (100)	89 (220)
3) Analysis according to age (if recorded):				
(a) Males under 30 years ..	176	24 (136)	18 (102)	42 (239)
" over 30 years ..	624	77 (123)	63 (100)	140 (224)
(b) Females under 30 years ..	480	84 (185)	68 (142)	152 (317)
" over 30 years ..	404	76 (188)	47 (113)	123 (304)
(c) Males and females:				
Under 30 years ..	656	108 (165)	86 (131)	194 (295)
Over 30 years ..	1,028	153 (150)	110 (107)	263 (255)
(4) Analysis according to marital state (females only):				
(a) All single women ..	438	89 (203)	72 (165)	161 (369)
All married women ..	446	71 (160)	43 (96)	114 (256)
(b) Single women under 30 years ..	282	55 (195)	48 (170)	103 (366)
Single women over 30 years ..	156	34 (208)	24 (154)	58 (378)
Married women under 30 years ..	198	29 (147)	20 (101)	49 (246)
Married women over 30 years ..	248	42 (168)	23 (93)	65 (262)
(c) Age in 1940 and 1941:				
1940 All single women	235	51 (217)	31 (134)	82 (348)
1941	213	38 (178)	41 (193)	79 (370)
1940 All married women	207	39 (188)	24 (116)	63 (304)
1941	239	32 (135)	19 (80)	51 (214)

TABLE II.—*Distribution of "Population" in the Various "Social Classes" (Males only)*

	Social Class i: Managers	Social Class ii: Under-managers	Social Class iii: Skilled Workers	Social Class iv: Semi-skilled	Social Class v: Unskilled
(5) Occupation recorded in 915 cases ..	3 (3.4)	51 (56)	460 (505)	308 (338)	93 (103 per 1,000 examined)
(6) Distribution in standard population*: E. and W. Census, 1931	— (25)	— (142)	— (499)	— (181)	— (167 per 1,000 employed)
(7) Incidence of "nervous disease" according to "social class" (Total, 915)†	1 (—)	11 (—)	83 (180)	65 (200)	15 (160) Total 175 (181 per 1,000 examined)

* All occupied and retired civilian males.

† For this analysis accidents were included to enable a sufficient number of cases to be obtained for analysis. Occupation was not always recorded in the notes made by the referees.

The material was further analysed from a variety of points of view: into the *age groups* in respect of Groups I, II, and III for both male and female cases; in respect of *married or single state* with regard to the female cases only; into *occupation groups* in respect of the male cases only. (It is generally recognized that an occupation analysis of women workers does not yield reliable results.)

It was thence possible to allocate all of the male workers (whose occupation had been recorded) to one of the *five social classes* described by the Registrar-General in his Decennial Report of 1931, and to discover the "general structure" of the population at risk in respect of its economic and occupational conditions. In making this last analysis I used my knowledge of occupations and the names by which workers describe them.

Lastly, by the courtesy of the general secretary of the society some very useful information was obtained concerning the nature of the population at risk, its sex distribution, etc.

The results of these inquiries are summarized in the Tables.

Discussion

The interpretation of these results will depend largely upon the view taken of the degree of artificial selection to which the material is subjected before reaching the medical referee. Something must be said, therefore, concerning the methods and criteria by which the cases are chosen for "reference."

Cases for reference are summoned by experienced non-medical officers of the society: (a) because the period of disability is unduly long having regard to the diagnosis (e.g., a cold might be summoned after 3 weeks, but pneumonia only after 3 months); (b) because of recurrent trivial illness; (c) at the end of 12 months' disablement to ascertain whether the disablement is likely to be permanent; (d) cases of accident, suspected industrial disease, vague diagnosis, etc., to "ascertain liability"; (e) cases in which sick-visitors consider that alternative light employment might be undertaken. There is a definite tendency, therefore, for "neurotic" cases to be summoned, although some of them no doubt return to work rather than appear before the medical referee. No cases that are unable to travel appear before the medical referee.

It will be seen from Table II (item 5) that the membership of the society is chiefly drawn from the skilled and semi-skilled working groups. (The relative incidence of neurosis in the social classes deserves further study.)

The society consists of two sections: (a) the parent society, which is a voluntary benefit society (P), and an approved section, which is a national health approved society (A). A proportion of the members of both sections do not qualify for benefit. These have been excluded from the figures in calculating the population at risk. The two sections of the society (P. and A.) do not differ very greatly in size or sex distribution. The total numbers qualified for benefit (and therefore liable to be summoned to the referee) are 204,674 males and 72,459 females, making a total of over 277,000 members: but of these about 77,000 live too far from the office of the medical referee to be summoned. Hence the *basic population at risk* is about 200,000 persons. It is found that in regard to males, to females, and to the parent and the approved sections, a proportion of *one in three* of the members claim benefit every year. During the year 1940 the society received over 97,000 claims. (In some instances one member may make several claims in one year.) In respect of these 97,000 claims 5,522 persons were summoned to appear before the referee in 1940, and of these nearly 50% returned to work prior to the date of examination. The remainder were seen by the referee,

and constitute the records from which the material studied in this paper has been derived.

Interpretation of Results

The most striking fact about the figures in Table I is their general uniformity and consistency. There was an over-all incidence of 280 cases of all kinds of neurotic disorder in each 1,000 examined. We may conclude, therefore, (1) that about 280 per 1,000 of all cases of unduly prolonged disablement are due to or associated with manifest nervous or psychiatric disease, or that about 280 in every 1,000 disabled persons are likely to experience an *unduly prolonged disablement by reason of "nervous disorders."* (2) In the material surveyed there is a considerably higher incidence of nervous illness among the women than among the men (320:246). It will be noted that this excess is confined chiefly to single women (Table I, item 4) both below and above 30 years of age. (3) Item 7 (Table II) suggests that "social state" is not an important factor in the differential or actual incidence of nervous disorders—at least, in respect of Classes iii, iv, and v. (4) Finally, with all due reserve an attempt may be made to relate the figures to the membership of the society as a whole, and thence perhaps to the community as a whole, since it is improbable that the experience of the community is less favourable than that of a benevolent society of high standing.

Of the patients summoned for examination on account of unduly prolonged illness 50% returned to work before seeing the referees. There are two extreme and opposite assumptions that could be made: first, that in fact the referees saw *all of the cases* whose illnesses were unduly prolonged by "neurosis" and that there was no neurosis among those that returned to work; secondly, that the referees saw *only one-half* of those cases—i.e., only those who did not return to work. In my view it is probable that the truth lies somewhere between these two assumptions. Taking the first assumption, we can estimate minimal, and, taking the second assumption, estimate maximal, rates of the probable incidence of neurotic disorder as a factor in causing unduly prolonged illness in the population.

We know that 5,522 persons were summoned; our analysis shows that 28% of those actually seen were found to be "neurotic." Since the referees saw about 50% of those summoned, we may estimate that *at least* 14% of the persons summoned were "neurotic"—that is, 770 estimated cases. These cases were derived from a total insured population of about 200,000 persons, male and female. Hence we may estimate that neurosis as a significant factor causing prolonged disablement occurs in 3.8 per 1,000 of the population at risk—the members of the society. Since one member in three claims benefit each year, we may estimate that at least 1.2 per 1,000 of the insured population suffer from disabling neurosis each year. Our study showed also that out of 28 neurotics 12 would be classed by me as "psychiatric," as described above. Hence we estimate that at least 1.5 per 1,000 of the insured population require expert psychiatric help.

If we accept the maximum hypothesis, each one of these rates would be multiplied by two. Thus:

7.6	per 1,000 insured persons will be disabled by neurosis
2.4	" " disabled
3.0	" " will require expert "psychiatric" assistance "

I find that during the last 3 years I have sent patients to psychiatric consultants at a rate of about 1 patient per 1,000 persons for whom I am responsible as a doctor.

ADVERTISING PROPRIETARY MEDICINES

The following rules governing the publication of advertisements for proprietary medicines were unanimously adopted at a recent meeting of the Newspaper Proprietors' Association:

1. No advertisement will be accepted by the newspapers represented in the N.P.A. which offers for sale to the public any medicine or treatment which is directly or by implication held out in terms calculated to lead to the belief that the medicine is effective in:

(a) The treatment of Bright's disease, cancer, tuberculosis or consumption, diabetes, epilepsy, fits, locomotor ataxia, cataract, glaucoma, disseminated sclerosis, osteo-arthritis, spinal, cerebral, and venereal diseases, lupus, or paralysis, or for preventing any of those ailments.

(b) For the cure of amenorrhoea, hernia, blindness, rheumatoid arthritis, or any structural or organic ailment of the auditory system.

(c) For procuring the miscarriage of women.

(d) For the treatment of habits associated with sexual indulgence or of any ailment associated with those habits.

2. No advertisement will be accepted from an advertiser who by printed matter, orally, or in his advertisement undertakes:

(a) To diagnose by correspondence diseased conditions or any particular diseased conditions in a human being, or to receive from any person a statement of his or any other person's symptoms of ill-health with a view to advising as to, or providing for, the treatment of such ill-health by correspondence; or

(b) To treat by correspondence any of the ailments specified in Section 1 above.

3. No advertisement will be inserted containing a testimonial other than one limited to the actual views of the writer, or any testimonial given by a doctor other than a recognized British medical practitioner unless it is manifest that the writer is not a British doctor of medicine.

4. No advertisement will be accepted containing illustrations which are distorted or exaggerated in such a manner as to convey false impressions.

5. No advertisement will be accepted which in any way may lead persons to believe that the product recommended emanates from any hospital or official source or is other than a proprietary medicine advertised by a particular manufacturer for the purpose specified, unless the advertising agent submitting the copy declares that the authority of such hospital or official source had been duly obtained.

The secretary of the N.P.A.'s Advertisement Committee informs us that the rules are now in operation in all the London morning, evening, and Sunday newspapers, and all advertisements will, in addition to conforming to these rules, be submitted to medical scrutiny and the product to chemical analysis if it is considered necessary. This is the first time that the national newspapers have unanimously laid down and insisted on a standard of control over statements and claims made in advertisements.

Correspondence

X Rays and the Colon

SIR,—I also was present at the meeting when Sir Arthur Hurst opened a discussion on the functional disorders of the colon and uttered a warning—in my opinion a timely one—against placing too much reliance on the help which radiology can give in cases of so-called colon spasm or irritable colon. Surely, most physicians and many radiologists of wide experience will agree that in many of these cases, essentially spasmodic in their manifestations, the colon may appear normal, whether examined by barium meal or enema.

I have had occasion recently to look through my case records of functional colon disorder and find that among the last 200 cases 78 were examined by barium meal and 35 by enema. In the opaque meals evidence of dysfunction, as shown by areas of spasm and of abnormal rates of passage, was found 51 times, and there were 27 normal results. In the 35 enemas 25 were normal and 10 showed some abnormality.

I have only a very limited acquaintance with the methods of studying mucosal patterns introduced by Forsell and elaborated by Berg and others. They may give more information, but they are laborious and time-consuming and do not appear to have been generally adopted in this country or in the United States as a routine procedure. The clinical picture of colon spasm was put on a sound basis by Howship, Hale White, and Hawkins without the aid of radiology, and, great and essential as its contributions have been and will be to the understanding of alimentary disease, in this particular group of psychosomatic disorders they have not as yet proved conspicuous.—I am, etc.,

Birmingham.

T. L. HARDY.

Psychiatry at the Cross-roads

SIR,—Psychiatry is at the cross-roads (Sept. 11, p. 331), and has been for some time, because one leg is trying to go one way and the other leg another. There is an almost complete divorce between those entrusted with leadership and those who have to do the bulk of treatment and research. In general medicine or surgery, when a specialist gives up his hospital beds, by which he continually adds to his skill and knowledge, he loses influence. In psychiatry the opposite is true. Here a doctor must give up active treatment as soon as possible in the hope of attaining the only positions of responsibility, security, and influence—as a medical superintendent behind an office desk or as an eminent consultant generally without hospital beds of any sort. Psychiatry is organized to-day as the Royal Colleges would be if an essential step to a seat on the Council, or even a Fellowship, were to give up active clinical practice for consultative work and the administrative control of other doctors. This state of affairs is more appropriate to religion than to science. The position will not be