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PSYCHIATRIC MORBIDITY IN A LONDON GENERAL PRACTICE

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This paper presents an account of morbidity in a suburban practice in London with special reference to psychiatric disability. Clinical and administrative features of this practice (Chalke and Fisher, 1957) and its social and demographic characteristics (Stein, 1960) have also been described, and an outline of the present investigation has been presented elsewhere (Shepherd, Fisher, Stein, and Kessel, 1959).

All registered National Health Service patients aged 15 years or over whose surnames began with four randomly chosen letters (A, B, U, V) were surveyed for one year (March, 1956, to February, 1957). These 911 adults represent about 10 per cent. of the practice and are all included in the 20 per cent. sample described by Stein (1960).

In accordance with the method of Backett, Shaw, and Evans (1953), an illness was defined as any disturbance of a patient's health resulting in at least one consultation. All attendances for preventive or administrative purposes were included, but routine ante-natal and post-natal attendances were omitted. Each patient who consulted the doctor, either at the surgery or at home, was the subject of a discussion between the author and the practitioner who had been principally responsible for his care during the study year. At this discussion the patient's record card was examined in detail; the presenting complaint, the diagnosis, and the number of consultations recorded for each separate illness were noted, together with the total number of consultations during the year. The entries on the patients' record cards had not been designed for future research, but in discussion the practitioners were generally able to complete any necessary details of the recorded illnesses.

Psychiatric morbidity in general practice is best considered within the framework of general morbidity, but to do this it is necessary to modify the

International Statistical Classification of Diseases, Injuries, and Causes of Death (W.H.O., 1948-9). The Classification is based mainly on pathological criteria, but general practitioners are often forced to work on a symptomatic basis. This is especially true of trivial or self-limiting conditions and of cases of acute illness in which the need for prompt treatment precludes diagnostic precision. This raises problems for the taxonomist which have been considered by Howard (1959) who, though he used an extended classification designed for general practice, was still unable to classify 18 per cent. of illnesses. Members of the Social Medicine Unit of the Medical Research Council (Backett and others, 1953) found in a single practice that nearly half of the reported "diagnoses" merely described symptoms or signs. These, using the I.C.D., would mostly be relegated to Category XVI (Symptoms, Senility, and Ill-defined Conditions).

To avoid this difficulty, symptom diagnoses were, in this study, referred to the relevant systems of the body, and Category XVI was reserved for cases coming under the general heading of "Debility" (see Table I, opposite). Some latitude was taken in assigning all complaints of headache, dizziness, or faintness without further qualification to the group of nervous system diseases (Category VI), in relegating diseases of the eyes and ears to a separate subgroup, and in assigning infectious diseases to the bodily system principally affected. It also seemed preferable to favour the respiratory system rather than the circulatory system where the symptoms fitted both, and to create a special group for patients being treated for obesity, whether at their own or their doctor's suggestion. If two conditions presented at the same consultation, they were considered as separate illnesses, but a single illness classifiable under more than one system was placed in the system principally involved.

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TABLE I
COMPARATIVE MORBIDITY RATES
Numbers of attending patients having at least one illness in system stated

| Sex | Males | | Females | |
|----------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------------------------|---------------|-------------------------------------------------|
| | All Attenders | Patients with Conspicuous Psychiatric Morbidity* | All Attenders | Patients with Conspicuous Psychiatric Morbidity |
| International Classification Category (modified) | | | | |
| V. Mental, psycho-neurotic and personality disorders .. | 13 | 12 | 35 | 24 |
| VI. Diseases of the nervous system | 27 | 8 | 54 | 12 |
| VI. Diseases of the eyes or ears | 51 | 6 | 67 | 13 |
| VII. Diseases of the circulatory system | 14 | 1 | 29 | 8 |
| VIII. Diseases of the respiratory system | 105 | 11 | 148 | 27 |
| IX. Diseases of the digestive system | 60 | 7 | 85 | 22 |
| X and XI. Diseases of the genito-urinary system, including complications of pregnancy, childbirth, and puerperium .. | 10 | 3 | 81 | 16 |
| XII. Diseases of the skin and cellular tissue | 53 | 6 | 81 | 14 |
| XIII. Diseases of the bones and organs of movement | 77 | 9 | 116 | 25 |
| XVI. Ill-defined conditions, chiefly debility | 14 | 3 | 40 | 10 |
| — Obesity | 4 | — | 32 | 4 |
| — Complaint not ascertainable, including pyrexia of unknown origin | 17 | 1 | 19 | 2 |
| — "Well" attendances | 13 | 1 | 26 | 1 |
| Total Numbers of Attending Patients | 253 | 28 | 367 | 58 |

In assessing psychiatric morbidity, great reliance was placed on the general practitioners' opinion, as this usually incorporated a knowledge of the patient extending over many years, together with experience of his family and awareness of social and economic difficulties. Preliminary discussions were held to delineate what were to be considered illnesses with important psychiatric traits, and it was agreed that there were three modes of presenting psychiatric disability:

- (1) Some patients pointed the way explicitly by complaining of being anxious, depressed or fearful, irritable, nervous, or unable to cope with life's routine.
- (2) Some patients presented somatic symptoms which could not adequately be explained by physical illness, *e.g.* some cases of insomnia, palpitations, and menstrual disturbances.
- (3) Some patients' psychological reactions to indisputable physical illness were in some way abnormal.

All such patients were regarded as displaying conspicuous psychiatric morbidity (C.P.M.) during the survey year. There remained a number of patients who had recognizable personality disorders but whose current illnesses were not, in the general practitioner's opinion, affected by these. When considering psychiatric prevalence rates (see Table II, opposite), these patients were listed separately ("Other Patients with Abnormal Personality"), but elsewhere they have been included with "Other Attenders". Hence the definition of C.P.M. was "attendance during the survey year for one or more

illnesses in which an important psychiatric component had been detected by the general practitioner".

Having classified the patients in this way (C.P.M. Group and Other Attenders) an attempt was also made to grade all illnesses according to the confidence with which they could be regarded as falling within the ambit of psychological medicine (Empirical Scale). The first category in this scale (Grade I Illnesses) included the most obvious cases—the psychoses and all those illnesses in which the patient made his complaint in psychological terms. In the remaining illnesses the nature of the symptoms was considered and use was made of the examination findings, hospital reports where available, and the doctors' knowledge of subsequent developments. Where it was considered that physical factors had not played a significant part in the causation of an illness, it was placed in the middle of the scale (Grade II); common examples were dizziness and sleeplessness and cases of dyspepsia where peptic ulcer had been excluded. The third and last category (Grade III) comprised all those illnesses with findings indicative of organic disease; as doubtful cases were also included here, the empirical scale probably understates psychiatric morbidity.

GENERAL MORBIDITY (Modified International Classification).—Table I shows the total number of patients with at least one illness during the study year and the number in thirteen diagnostic groups. The largest of these corresponds to respiratory illnesses, nearly half the attenders having had one or more such illnesses in the year. Orthopaedic, digestive, and skin disorders, together with disorders of

TABLE II
PSYCHIATRIC MORBIDITY ASSESSED BY PRACTITIONERS
One year prevalence rates (persons)

| Sex | Age (yrs) | Persons | | Patients with Conspicuous Psychiatric Morbidity | | | Other Patients with Abnormal Personality | | |
|--------|---------------------------------|------------|-----------|-------------------------------------------------|-----------------------------|----------------------------|------------------------------------------|-----------------------------|----------------------------|
| | | Registered | Attending | No. | Prevalence Rates | | No. | Prevalence Rates | |
| | | | | | Per cent. of All Registered | Per cent. of All Attenders | | Per cent. of All Registered | Per cent. of All Attenders |
| Male | 15-34 | 117 | 84 | 9 | 8 | 11 | 6 | 5 | 7 |
| | 35-59 | 173 | 111 | 13 | 8 | 12 | 8 | 5 | 7 |
| | 60 and Over .. | 65 | 45 | 6 | 7 | 11 | 1 | 2 | 2 |
| | Not Known .. | 38 | 13 | — | — | — | — | — | — |
| | All Ages including Not Known .. | 393 | 253 | 28 | 7 | 11 | 15 | 4 | 6 |
| Female | 15-34 | 169 | 129 | 15 | 9 | 12 | 12 | 7 | 9 |
| | 35-59 | 200 | 147 | 31 | 16 | 21 | 15 | 8 | 10 |
| | 60 and Over .. | 99 | 76 | 10 | 10 | 13 | 7 | 7 | 9 |
| | Not Known .. | 50 | 15 | 2 | — | — | — | — | — |
| | All Ages including Not Known .. | 518 | 367 | 58 | 11 | 16 | 34 | 7 | 9 |
| Both | 15-34 | 286 | 213 | 24 | 8 | 11 | 18 | 6 | 8 |
| | 35-59 | 373 | 258 | 44 | 12 | 17 | 23 | 6 | 9 |
| | 60 and Over .. | 164 | 121 | 16 | 10 | 13 | 8 | 5 | 7 |
| | Not Known .. | 88 | 28 | 2 | — | — | — | — | — |
| | All Ages including Not Known .. | 911 | 620 | 86 | 9 | 14 | 49 | 5 | 8 |

the eyes and ears, were also large groups, and genito-urinary disorders were very frequent in women. This last category included all abnormalities associated with childbearing, but not routine ante- or post-natal attendances. For the reasons already stated, the proportion of circulatory diseases was smaller and that of disorders of the nervous system larger than in comparable surveys. Nearly a tenth of the women were treated for obesity during the study year. 5 per cent. of the registered patients (8 per cent. of attenders) had illnesses classifiable in Category V (Mental, Psychoneurotic, or Personality Disorders) of the I.C.D.

Age trends were observable for some of the disease groups, but were nowhere pronounced. Circulatory system disorders increased with age (both sexes), as did nervous system disorders and orthopaedic illnesses (females only); but genito-urinary disorders among women and skin disorders in both sexes were less frequent in the elderly. Other morbidity rates were independent of age.

PSYCHIATRIC MORBIDITY (C.P.M. and Other Personality Defects).—Close scrutiny of the practice records revealed 86 patients with conspicuous psychiatric morbidity out of 911 registered adults, giving a one-year prevalence rate for persons of 9 per cent. A further 49 patients (5 per cent.) were considered by the practitioners to have displayed abnormalities of personality independent of their

presenting illnesses. Table II shows the prevalence rates in three age groups for the two sexes. The well-recognized higher rate of psychiatric morbidity among women was confirmed, but, with the exception of an increased prevalence among women aged 35-59, the rates were not noticeably influenced by age.

Only three patients were recognized as psychotic during the year, and there were two mental defectives. For the remainder it was not always possible to arrive at a formal diagnosis from the available information, but anxiety, hypochondriacal, or depressive reactions characterized about 60 per cent. and hysterical reactions about 15 per cent. A few had phobic symptoms and in some cases the abnormality of personality had led to the consultation.

The practitioners had referred eight of these patients to a psychiatrist during the year, not always for the first time, and a ninth patient was referred by a hospital physician. 10 per cent. of the C.P.M. patients had therefore come to the attention of a psychiatrist during the year, including the three psychotic patients. These apart, it was often difficult to decide what factors had militated for their referral. Dr. Michael Shepherd and I interviewed thirty patients in the practitioners' surgery and found several with clinical states commonly encountered in routine psychiatric out-patient practice who had not been referred to hospital.

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Patients with conspicuous psychiatric morbidity had, naturally, a high rate of illnesses in Category V (Mental, Psychoneurotic, and Personality Disorders) of the I.C.D. They had also, men especially, a high rate of ill-defined conditions (Category XVI) and of nervous system disorders, not surprising in view of the composition of this modified category. Otherwise, the morbidity records of the C.P.M. patients resembled those of other attenders.

According to the empirical scale (Table III), slightly less than half of the C.P.M. patients presented psychological symptoms (Grade I) and the same number (36) had at least one illness in which physical factors did not appear to play a causal role (Grade II). There remained fourteen C.P.M. patients whose illnesses were explicable on a physical basis, the psychiatric component having been manifested by elaboration of the degree of suffering or by the protracted course of the disability.

TABLE III
PATIENTS GROUPED BY EMPIRICAL SCALING OF ILLNESSES

| Grade of Illness | Patients with Conspicuous Psychiatric Morbidity | All Other Attenders | All Attenders |
|-----------------------|-------------------------------------------------|---------------------|---------------|
| I* | 36 | 11 | 47 |
| II* but not I | 36 | 152 | 188 |
| III* only | 14 | 358 | 372 |
| Total Patients .. | 86 | 521 | 607† |

* See text.

† Excluding thirteen patients who attended for reasons other than illness.

The following example illustrates this type of case:

Case 1, a 37-year-old woman, living by herself, made twelve consultations during the year for herpes zoster, a prolapsed intervertebral disk, and a twisted ankle. She became very worked up over the backache and would sit in the surgery twisting her hands and behaving melodramatically in a manner quite outside the bounds of normality.

Eleven further patients had psychological symptoms, but in these cases the practitioners felt that the mental distress could be laid at the door of physical illness. One case is particularly instructive:

Case 2, a middle-aged woman, complained of abdominal pain and was depressed. No abnormality was found on examination at hospital, and the depression worsened when the patient learned of this. Eventually she required E.C.T. for the depression. Shortly afterwards a carcinoma of the uterus was discovered.

In this case the practitioner considered that the depression was caused by the physical disease and therefore, despite its severity, he did not include the patient in the C.P.M. group.

Because of the retrospective nature of the study it was not possible to arrive at a reliable estimate of inception rates. Instead, attendances in the 12 months after the study year were scrutinized to discover how many of the 86 C.P.M. patients were still attending. Information was available for seventy of them, of whom 52 had the same symptoms as in the previous year, and by that criterion the illness had continued or returned. Nine cases were doubtful and nine had either not attended during the subsequent year or had consulted their doctors only for other, unrelated conditions.

CONSULTATIONS.—Both men and women in the C.P.M. group had higher than average consultation rates (Table IV). The women consulted more often than the men, a sex difference that did not obtain for the other attenders. The high rates were in part attributable to the fact that 40 per cent. of the C.P.M. patients visited their doctor ten or more times in the year, compared with less than 20 per cent. of the other patients. Conversely, it was uncommon for C.P.M. patients to have consulted only once or twice. Multiple attendance by some of these patients was not the only factor responsible, however. When only those patients who consulted less than ten times in the year were considered, high rates

TABLE IV
FREQUENCY OF CONSULTATION DURING THE SURVEY YEAR

| Sex | Reason for Attendance | No. of Patients | Proportion (%) of Patients having | | | | Mean Consultations per Person | Mean Consultations per Person (excluding patients with 10+ consultations) |
|--------|----------------------------------------------------|-----------------|-----------------------------------|-------------------|-------------------|-------------------|-------------------------------|---------------------------------------------------------------------------|
| | | | 1-2 Consultations | 3-5 Consultations | 6-9 Consultations | 10+ Consultations | | |
| Male | Patients with Conspicuous Psychiatric Morbidity .. | 28 | 14 | 25 | 21 | 39 | 8.82 | 4.88 |
| | Other Patients | 216 | 38 | 32 | 17 | 13 | 5.15 | 3.39 |
| | All Attenders | 244 | 35 | 32 | 18 | 16 | 5.57 | 3.51 |
| Female | Patients with Conspicuous Psychiatric Morbidity .. | 58 | 17 | 9 | 33 | 41 | 10.12 | 5.09 |
| | Other Patients | 305 | 37 | 26 | 20 | 18 | 5.26 | 3.64 |
| | All Attenders | 363 | 34 | 23 | 22 | 21 | 6.05 | 3.81 |

were still found. C.P.M. patients who attended many times during the survey year also did so in the years immediately preceding and following (Table V).

TABLE V

MEAN ANNUAL CONSULTATION RATE IN STUDY YEAR AND ADJACENT YEARS

| Year | Study | Preceding | Subsequent |
|----------------------------------------------------|-------|-----------|------------|
| Patients with Conspicuous Psychiatric Morbidity .. | 9.7 | 8.4 | 9.0 |
| All Other Attenders .. | 5.2 | 4.8 | 5.5 |
| All Attenders | 5.8 | 5.4 | 6.0 |

In terms of the empirical scale, C.P.M. patients made the same average number of consultations for physical illnesses (Grade III) as did the other patients (Table VI) and all the "extra" consultations were equally divided between Grade I and Grade II illnesses. Consequently, physical disease, as judged by the number of consultations, was evenly distributed between the C.P.M. and other patients. Taking the diagnoses directly from the record card, Stein found similarly, that the number of physical episodes were the same for those who had psychological symptoms recorded on the card as for other patients.

TABLE VI

MEAN ANNUAL CONSULTATIONS FOR EACH GRADE OF ILLNESS

| Grade of Illness | I* | II* | III* | Total for All Illnesses |
|-------------------------------------------------|-----|-----|------|-------------------------|
| Patients with Conspicuous Psychiatric Morbidity | 2.2 | 2.5 | 5.0 | 9.7 |
| All Other Attenders .. | 0.0 | 0.9 | 4.3 | 5.2 |

* See Table III—also text.

Consultations also show how the medical work was distributed. 38 per cent. of all consultations in the survey year were with men and 62 per cent. with women. 23 per cent. of all consultations were with C.P.M. patients, but half of these were for physical illnesses. According to the empirical scale, 7 per cent. of all consultations were for Grade I illnesses, 21 per cent. for Grade II illnesses, and 72 per cent. for Grade III illnesses.

SOCIAL FACTORS.—Though the C.P.M. patients did not differ from the other patients in respect of the social indices which Stein has reported, nevertheless the practitioners regarded social factors as

important determinants of the psychiatric morbidity in approximately 20 per cent. of cases. Usually these were domestic or family troubles which would have been difficult to detect without the practitioners' special knowledge.

DISCUSSION

CRITERIA OF IDENTIFICATION.—Using a modified version of the International Classification of Disease (I.C.D.), the pattern of psychiatric morbidity in the survey practice was found to be typical. Thus the one-year prevalence rate for Category V (Mental, Psychoneurotic, and Personality Disorders) was 3.3 per cent. for males and 6.8 per cent. for females. According to Logan and Cushion (1958), who studied 106 general practices in England, the corresponding rates for patients over 15 years were 3.8 and 7.9 per cent. respectively.

Though useful for this sort of comparison, the I.C.D. figures certainly underestimated the true prevalence of psychiatric morbidity. For when attendance records for the survey year were scrutinized and discussed with the general practitioners, it was found that no less than 7.0 per cent. of the men and 11.2 per cent. of the women in the practice had attended for illnesses which revealed conspicuous psychiatric traits (C.P.M.). The difference between the I.C.D. and C.P.M. estimates of psychiatric morbidity was due to the fact that there were many C.P.M. cases with physical symptoms—with or without established physical disease—which would lead them not to be included in Category V of the I.C.D.

The revised estimates of psychiatric morbidity were doubtless better than the original ones, but they still left unsolved an important problem. It will be recollected that only 36 of the 188 patients in the middle of the empirical scale (Grade II) were included in the C.P.M. group. Yet according to some authorities all Grade II illnesses—inasmuch as the symptoms did not appear to have a physical basis—should have been classified as psychological. It is obvious that, until there is a satisfactory and generally agreed classification of psychiatric diseases, the problem will continue to arise whether such diseases should or should not be regarded as psychogenic, and there will continue to be widely different estimates of psychological disorders in general practice.

The need for more precise criteria of psychiatric morbidity is shown by the absurdly different estimates which might have been derived from the present investigation:

| <i>Psychological Criteria</i> | <i>Estimate of Psychiatric Prevalence (per cent.)</i> |
|----------------------------------------|---------------------------------------------------------------|
| Category V of the I.C.D. .. | 5 |
| Grade I (Empirical Scale) .. | 8 |
| C.P.M. (as defined) .. | 9 |
| Grades I and II (Empirical Scale) | 38 |
| —do— plus "Psychosomatic Disorders" | 52 |

This is clearly a ridiculous state of affairs, yet even a ten-fold difference between the highest and the lowest estimates does not exhaust all possibilities: if all patients whose physical illnesses were complicated by a psychological overlay had been added to the above groups, well over half the practice would have been included.

DOCTOR VARIATION.—Stein has shown that the patients of the four doctors severally differed in respect of age and sex. Further, the general morbidity pattern among patients of individual doctors displayed differences which suggest selection. As patients were free to choose which of the four doctors they consulted, it would be surprising had this not been so. On the other hand, the very availability of a choice of doctor probably prevented drift of patients away from the practice as a whole.

Variation in rate of diagnosing psychiatric cases persisted even after standardization for age and sex. Thus, for every case identified by the team as a whole, one doctor identified 1.30, another 1.24, another 0.92, and another 0.47. These differences are not compensated for by the addition of patients considered to have displayed personality abnormalities only. They are susceptible of two explanations:

- (1) Variability between doctors in their discernment of psychological causation,
- (2) Differences between the patients leading each to choose which of the four doctors they thought would be most responsive to their needs.

To distinguish between these, the equivalent of the "breeder" and "drift" hypotheses of ecological studies, was beyond the scope of this survey.

AGE TRENDS.—Despite popular opinion to the contrary, the prevalence of psychiatric disability was not affected by age, except for the relatively high incidence among middle-aged women. This finding is in close agreement with that of Fry (1957), and accords with the large studies of morbidity in general practice carried out for the General Register Office

by Logan (1953, 1955) and the community studies in Baltimore carried out by Pasamanick, Roberts, Lemkau, and Krueger (1957).

REFERRAL TO HOSPITAL.—That general practice and hospital figures seemed to differ in respect of age must reflect the referring habits of practitioners. Only 10 per cent. of the diagnosed patients were referred, and, the psychotics excepted, it was difficult to identify the factors which determined referral. Nevertheless, practitioners referred to the psychiatrist only those patients who had psychological symptoms, though some C.P.M. patients with physical symptoms may have been referred to medical or surgical clinics. Davies (1958) observed that many of the illnesses presented by consecutive out-patients at a general medical clinic warranted a psychiatric diagnosis and that the practitioner's referring letter often showed him to be aware of this. The selection of patients for psychiatric opinion remains an arbitrary process and requires mutual consideration by psychiatrists and general practitioners so that the existing services can be used most profitably.

SUMMARY

The one-year prevalence rate for persons with conspicuous psychiatric morbidity (C.P.M.) in a London group general practice was 9 per cent. A further 5 per cent. had personality defects not associated with their presenting illnesses. In both categories there were more women than men, but the rates were largely independent of age.

Only three out of 86 C.P.M. patients had psychoses. Most suffered from anxiety states, and 36 presented psychological symptoms. 10 per cent. of the C.P.M. patients were referred to a psychiatrist during the year.

Using a modification of the International Classification of Diseases, C.P.M. patients recorded an excess of mental illness, of illness loosely referable to, the nervous system, and of ill-defined conditions chiefly debility, during the survey year. Consultations for other reasons were similar to those for all other attenders. Most of the psychiatric illnesses persisted into the year following the survey.

The C.P.M. patients had much higher mean annual consultation rates than the other attenders, though the average number of their consultations for physical diseases was the same. The high consulta-

tion rates of these patients were also present in the years before and after the study year and were not solely due to an excess of very frequent attenders. C.P.M. patients were responsible for 23 per cent. of all consultations, but only half of these were for their psychological illnesses. 7 per cent. of all consultations dealt directly with psychological symptoms.

C.P.M. patients did not differ from others in respect of measured social factors, but the doctors mentioned domestic and family problems as important determinants in 20 per cent. of cases.

The difficulties of delineating and classifying psychological illnesses in general practice are discussed. The extent to which use of the W.H.O. system of classification underestimates such morbidity and the need for strict criteria are stressed.

This study is the result of collaboration between four general practitioners (Drs. Michael and Ida Fisher, Dr. Charles Benn, and Dr. Lilian Morgan), a medical

statistician (Dr. Lilli Stein), two psychiatrists (Dr. Michael Shepherd and the author), and a psychiatric social worker (Mrs. K. Colwell).

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