# Papers and Originals

## Survey of Mental Illness in General Practice

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The first objective of this survey was to try to measure the incidence and prevalence of mental disablement in the community. The incidence is the number of new cases occurring in a known population at risk in the course of the survey year. Prevalence is the number of persons ill at one point in time, in this instance when the survey began, on 1 November 1961. For the sake of brevity these latter patients are referred to in the text as the old cases.

#### Method

The investigation was carried out in some 261 practices in Great Britain, with a population at risk of just over a million persons. The location of the practices is shown on the map. The general practitioners taking part in the survey completed a special card for each patient who qualified for inclusion. The investigation lasted for a complete year from 1 November 1961 to 31 October 1962. At the end of this time 8,955 cards were collected by the recorders, checked, and hand-sorted, and finally passed on to the Records and Statistics Unit of the College of General Practitioners for a more detailed analysis. A special note was made of patients who entered or left the practices during the survey year, and the figures for transferral and deaths are given in Table 1. This movement of patients is well below average. The mean rate of leaving a practice is about 8% according to Logan and Cushion (1958) and Eimerl (1964), and 13% according to Rowntree (1957). The transfer rate in this survey would thus not be sufficient to misrepresent the rates of illness calculated on all the practices.

TABLE 1.—Sex of Patients Who Transferred or Died During the Survey Year

Male	Female	Total	Percentage of Total Recor- ded Cases
42 80 108 —	62 115 112 3	104 195 220 3	1.2 2.2 2.5
	Male 42 80 108 	Male         Female           42         62           80         115           108         112           -         3	Male         Female         Total           42         62         104           80         115         195           108         112         220           3         3         -           -         1         1

The figures for England and Wales and for Scotland are considered separately as two parallel series of cases in the first half of the paper. In the second part the figures for the whole of Great Britain are taken together.

From Table 2 it can be seen that Scotland was represented by a much higher proportion of the population than was England and Wales. On the other hand, in both samples approximately

0.9% of the patients at risk were regarded by their doctors as being mentally disabled.

Since the end of the second world war there have been many surveys of psychiatric illness in general practice. Kessel and



Map showing the distribution of the practices in Great Britain.

TABLE 2.-Distribution of the Practices, Persons at Risk, and the Patients, in England and Wales and in Scotland

Area	No. of	Persons	Percentage of Popula-	No.	of Pati	Rates per 1,000 of	
	Tractices	at Ition	Census	New	Old	Total	at Risk
England and Wales Scotland	147 114	621,155 380,565	1·34 7·38	977 501	4,633 2,844	5,610 3,345	9·0 8·8
Total	261	1,001,720		1,478	7,477	8,955	

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Shepherd (1962) listed some 28 investigations of this nature. It was decided not to try to cover the whole range of mental diseases, but to confine attention to persons who were disabled mentally and to exclude transient and minor episodes of illness. The definition of mental disablement is not easy, and to avoid this difficulty seven categories were devised. Each patient included in the survey had to be placed in one of these seven groups. It was stressed to the collecting doctors that the correct choice of group was more important than the actual diagnosis. The seven grades were briefly as follows:

Group 1.—This consisted of all persons who were referred to a psychiatrist during the survey year. This category creamed off all the patients whose care was shared by the family doctor and the psychiatric services. Conversely, none of the patients in the other groups were seen by a psychiatrist during the survey year. The next five categories were arranged in order of the severity of the illness.

Group 2.—The patients in this group were so ill as to be virtually helpless, but they were cared for at home.

Group 3.—This consisted of all persons who because of a psychiatric illness had been unable to work for a year or more.

Group 4.—These patients because of some psychiatric illness had been on psychotropic drugs *continuously* for a year or more. They were able to work at least part of the time.

Group 5.—Persons in this group had caused a serious social upset because of their psychiatric illness.

Group 6.—This consisted of persons who while clearly psychotic were able to live and work in the community without the aid of either doctors or drugs.

Group 7.—This group was rather different from the others. It was made up of persons suffering from an acute confusional state which had lasted for more than 24 hours, but who had been treated at home or in a non-psychiatric hospital.

Each patient had to be placed in the highest category applicable to his case, and during the survey year some changed their category by qualifying for a higher group. For example, if a patient in group 4 had to see a psychiatrist he would move up to group 1. No person could qualify for more than one group. The following is a detailed analysis of the seven groups.

#### Group 1. Persons who were Referred to a Psychiatrist During the Survey Year

This group consisted of all the patients whose illness was severe enough to warrant referral to a psychiatrist, whether at a clinic, by admission to a mental hospital, on a domiciliary visit, or in any other way. It is appreciated that doctors have

Тае	ILE 3.	.—In	icidence an	nd Prevaler	ıce I	Rates by	Sex	for	England	d and	Wal	es
	and	for	Scotland,	Showing	the	Propor	tions	of	Cases	Seen	by	а
	Psyc	hiatr	rist									

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	Illness Started In Survey Year (New Cases)			Illness Started Before Survey Year (Old Cases)			Total		
	м	F	P*	м	F	P*	м	F	P*
			Engle	and and	Wales				
Referred to psychiatrist Percentage	282	444	726 74·3	841	1,309	2,150 46·4	1,123	1,753	2,876 51·3
Cared for by G.P. alone Percentage	86	165	251 25·7	912	1,571	2,483 53·6	998	1,736	2,734 48·7
Total	368	609	977	1,753	2,880	4,633	2,121	3,489	5,610
		1		Scotlar	nd	1	í	1	1
Referred to psychiatrist Percentage	154	231	385 76∙8	473	718	1,191 41·9	627	949	1,576 47·1
Cared for by G.P. alone Percentage	46	70	116 23·2	647	1,006	1,653 58·1	693	1,076	1,769 52·9
Total	200	301	501	1,120	1,724	2,844	1,320	2,025	3,345
Total Great Britain	568	910	1,478	2,873	4,604	7,477	3,441	5,514	8,955

\* P = Persons.

different rates of referral. The more psychiatrically orientated the general practitioner the greater use he is likely to make of the psychiatric services. He is likely to see the need for a referral at an earlier stage of the illness than most doctors, and a higher proportion of mentally disturbed patients will tend to consult him. Referral was the objective necessity of this group, but because of such between-observer differences the standard of which is a character of the standard

but because of such between-observer differences the standard of objectivity was classed as moderate only. This group was by far the largest, accounting for about half the patients in the survey. The rates of referral for new and old cases are shown in Table 3. As the ratio of males to females in both new and old cases is similar—namely, two men to three women—it can be assumed that both sexes have an equal chance of recovery. It can be seen that some 75% of all the new cases on both sides of the border were referred to a psychiatrist, but more of the old cases were referred in England and Wales than in Scotland.

There were slight differences in the referral rates for diagnoses between the two areas. These figures are shown in Tables 4 and 5 for the various diseases.

TABLE 4.—Incidence Rates for Diagnoses by Sex in England and Wales and in Scotland for Patients Seen by a Psychiatrist or Cared for by the G.P. on His Own

Discusio		E	ngla <b>nd</b> d	and Wa	les		Scot	land	
Diagnosis		м	F	Р	%	м	F	Р	%
Manic-	Ps.	100	186	286	35.4	50	99	149	33.0
psychoses	G.P.	17	43	60		5	16	21	
Anxiety { states	Ps. G.P.	74 16	116 38	190 54	25.0	28 15	49 20	77 35	22.4
Schizophrenic { psychoses {	Ps. G.P.	34 7	34 10	68 17	<b>8</b> ∙7		18 1	39 1	8∙0
Mental retar- { dation	Ps. G.P.	6 3	3 6	9 9	1.8	3 2	2 2	5 4	1.8
Senile dementia	Ps. G.P.	12 14	38 26	50 40	<b>9</b> ·2	9 4	22 6	31 10	8∙2
Hysteria {	Ps. G.P.	10 3	27 15	37 18	5∙6	6 1	10 4	16 5	<b>4</b> ·2
Addictions $\left\{ \right.$	Ps. G.P.	14 2	3 2	17 4	2.1	6 9	3	9 9	3.6
Psychopathy {	Ps. G.P.	11 1	1 2	12 3	1.5	<u> </u>	2	11 2	2.6
Epileptic {	Ps. G.P.	2 1	1 2	3 3	0.6	_1	_2	_3	0.6
Childhood	Ps.	7	8	15	1.5	5	3	8	
problems	G. <b>P</b> .		_	_	1.2	1	2	3	2.2
Pregnancy	Ps.		17	17	1.8	—	9	9	2.2
Other	G.P.	34	30	64	6.6	23	2 29	52 52	10.4
Total		368	609	977	100	200	301	501	100

Note.—The top line (Ps.) gives the figures for patients referred to a psychiatrist, and the bottom line (G.P.) those for patients cared for by the general practitioner alone. The percentage is of the total of the new cases collected in the survey for England and Wales on the one hand, and for Scotland on the other.

Table 6 shows the percentage by diagnosis of patients who were referred to a psychiatrist. This table clarifies a number of features. For example, 97.5% of all new schizophrenics are referred in Scotland compared with 80% in the South, but in England and Wales more alcoholics are passed on to the psychiatrist. Taking the figures as a whole, the conditions which demand the highest referral rate are the manic-depressive and schizophrenic psychoses, behaviour problems in children, and psychoses associated with pregnancy. The lowest figures are for mental retardation, senile dementia, and psychoses associated with epilepsy. Almost three-quarters of the cases referred (73%) were made up of manic-depressive and schizophrenic psychoses and anxiety states. Three women were referred for every two men on both sides of the border, and the peak age for referral was the decade 35 to 44, a figure similar to that found by Taylor and Chave (1964).

# Group 2. Patients who were Helpless but were Cared for at Home

This small section made up only 8% of the series, and it consisted largely of aments and aged dements. The patients

were selected less objectively than those in group 1, because it involves making an estimate of what constitutes helplessness; for example, an old woman might appear to one doctor as a charming old dodderer, who was getting a bit forgetful, and to another practitioner as a severe and helpless case of dementia, completely unable to manage on her own. In both the main areas of the survey the mentally retarded and senile dements accounted for about 85% of the case load for the group. There were more dements in England and Wales, and more aments in Scotland. Table 7 shows the contents of this group.

The age scatter in this group was different from all the other categories. There were more cases under 25 years of age than

TABLE 5.—Prevalence Rates for Diagnoses by Sex in England and Wales and in Scotland for Patients Seen by the Psychiatrist or Cared for by the G.P. on His Own

Diagnosia		E	ngland	and Wa	ales		Sco	tland	
Diagnosis		м	F	Р	%	м	F	Р	%
Manic-	Ps.	198	571	769	25.5	115	288	403	22.7
psychoses ]	G.P.	148	264	412	25.5	55	217	272	25.1
Anxiety states {	Ps. G.P.	174 139	290 384	464 523	21.3	71 80	148 299	219 379	21.0
Schizophrenic {	Ps. G.P.	187 136	240 191	427 327	16.3	91 81	102 82	193 163	12.5
${}_{retardation}^{Mental} \Big\{$	Ps. G.P.	46 180	29 174	75 354	9.3	38 214	26 185	64 399	16-3
Senile { dementia {	Ps. G.P.	39 56	66 147	105 203	6.6	17 33	24 55	41 88	4.5
Hysteria {	Ps. G.P.	47 38	111 136	158 174	7.2	15 6	52 51	67 57	4.4
Addictions {	Ps. G.P.	44 35	16 23	60 58	2.5	55 71	19 27	74 98	6.0
Psychopathy $\left\{ \right.$	Ps. G.P.	36 50	12 19	48 69	2.5	30 22	20 18	50 40	3.2
Epileptic {     psychoses {	Ps. G.P.	22 36	18 40	40 76	2.5	12 53	10 36	22 89	3.9
Childhood ∫	Ps.	27	12	39	0.0	10	11	21	
problems [	G. <b>P</b> .	3	1	4	0.2	2	1	3	0.9
Pregnancy {	Ps. G.P.	_	19	19	0.5	_	1	1	0.0
Other		112	111	223	4∙8	49	52	101	3∙6
Total		1,753	2,880	4,633	100.0	1,120	1,724	2,844	100.0

Note.—The top line (Ps.) gives the figures for patients referred to a psychiatrist, and the bottom line (G.P.) those for patients cared for by the general practitioner alone. The percentage is of the total of the patients whose illness had started before the survey year for England and Wales and for Scotland.

 

 TABLE 6.—Percentage of Persons Referred to a Psychiatrist by Diagnosis for England and Wales and for Scotland

	New	Cases	Old Cases		
Diagnosis	England and Wales	Scotland	England and Wales	Scotland	
Manic-depressive psychoses	82.6	87.6	65·0	60·0	
Anxiety states	78.0	68.8	47·1	38·1	
Schizophrenic psychoses	80.0	97.5	56·6	54·3	
Mental retardation	50.0	55.6	17·5	15·7	
Senile dementia	55.6	75.6	34·1	31·8	
Hysteria	67.3	76.2	47·6	50·3	
Addictions	81.0	50.0	50·9	43·0	
Psychopathy	80.0	41.0	84·6	55·6	
Epileptic psychoses	50·0	100·0*	34·5	19·8	
Childhood behaviour problems	100·0	72·7	91·0	87·5	
Pregnancy psychoses	94·4	81·8	76·0	100·0*	

\* Figures too small for accuracy.

 TABLE 7.—Number of Helpless Patients in the Community by Sex for

 England and Wales and for Scotland

Diagnosis	E	ngland a	and Wa	les	Scotland				
Diagnosis	м	F	P	%	M	F	P	%	
Main types: Mental retardation Senile dementia	123 54	138 114	261 168	53·5 34·5	89 18	71 38	160 56	63·5 22·2	
Total	177	252	429	88·0	107	109	216	85.7	
Other types: Manic-depressive psychoses Schizophrenic psychoses Addictions Others	4 5 3 11	11 5 1 19	15 10 4 30	3·1 2·0 0·8	6 3 1 10	2 3 1 10	8 6 2 20	3·2 2·4 0·8	
Total of all diagnoses	200	288	488		127	125	252		

in the decades which followed. Two factors may account for this fall—first, an increased mortality rate among aments, as is shown in Fig. 4 for mongols ; and, secondly, parents who can cope with a small child find the grown defective an impossible burden, as they themselves get old, and he is often taken over by the hospital authorities. There was a rise in the age-group 75 to 85 due to the increasing number of senile dements, with a valley between 25 and 75 having its nadir in the decade 45 to 54. In early childhood there were more males than females. The sexes were equal from 10 to 24, and thereafter there was a predominance of females, most pronounced in senility.

#### Group 3. Persons off Work for a Year or more Continuously by Reason of some Psychiatric Illness

Persons in this group had for some psychiatric reason been unable to work for a complete year or more. Here the objectivity was of a high standard. Doctors may argue at length about the relative importance of a psychiatric factor in a minor casualty, but when a man is off work for a year there is usually complete accord on whether he is suffering from a psychiatric illness or a chronic organic disease. Attempts to name the psychiatric disability might well give rise to difficulties. This group also included the housewife who had been off work for a year, or the pensioner who reached the age of 65 while off work because of some lengthy mental illness.

This section made up about 11% of the patients in the survey, with a slight excess of women. The peak age incidence for this group was between 45 and 64. Up to 25 there were more men than women, but after 25 there was a female predominance. The largest category in the group was high-grade mental defectives, not completely helpless like the patients in group 2, but unable to compete successfully in the struggle for employment. Table 8 shows that there was no great difference between the proportions of the other diagnoses.

 TABLE 8.—Number, by Sex, of Persons Unemployed Owing to a Mental

 Disability, for England and Wales and for Scotland

Diagnosis	Е	ngland	and W	ales	Scotland			
Diagnosis	м	F	Р	%	м	F	Р	%
Mental retardation Anxiety states Schizophrenic	106 27	77 55	183 82	32·9 14·7	108 11	97 34	205 45	48·4 10·6
psychoses	36	33	69	12.4	26	9	35	8.3
psychoses Hysteria and asthenia Epileptic psychoses Others	27 17 25 27	29 43 26 29	56 60 51 56	10·0 10·8 9·2 10·0	10 3 29 20	32 18 17 10	42 21 46 30	9·9 5·0 10·8 7·0
Total	265	292	557	100.0	207	217	424	100.0

### Group 4. Persons who had to be Maintained for a Year or more on Continuous Drug Treatment

This is the second largest of the groups, accounting for just over 20% of all the patients. Few patients are continuously on drugs before the age of 25 (Fig. 1). There is then a dramatic increase, especially among women, reaching a peak at 55 to 64 years. Fewer men over the age of 65 need continuous medication, but this trend is not so marked among women. Drug-taking seems to be a female predilection, as in this category there were three women to every man—a higher proportion than in any other group.

Some 70% of these patients came into the depressive-anxiety group. They were persons who needed tranquillizers to maintain a reasonable standard of health. They could keep at work, and in consequence were less of a social liability than those in group 3. To be permanently on drugs is expensive, but it is far less costly to the State than unemployment. Unfortunately little is known about how the tranquillizer drugs work, and so long as the treatment remains empirical it is bound to be wasteful, and often unsatisfactory, and for this section the indiscriminate use of these drugs is not advocated. However, there is no doubt that some depressed patients do respond in a remarkable way to anti-depressive drugs, and many patients are relieved of intolerable suffering. Phenothiazines can keep a schizo-phrenic well, from the point of view of both work and sociability. For example, in groups 3 and 4 there were some 339 schizophrenic patients. By the judicious use of drugs some 69% of these patients were kept at work, if not all the time at least for part of the year.



FIG. 1.—Persons continuously on drugs for a complete year or more, by age and sex, for Great Britain.

The number of patients in this group will differ widely from practice to practice because of prescribing habits. The variation in the use of such drugs was demonstrated by P. Walford (personal communication, 1963). Six doctors with accurate records gave figures for the use of antidepressive drugs. The figures were adjusted as for an average of 2,000 patients to make them comparable. Over the period of a year one doctor had used these tablets in only 13 cases whereas at the other extreme another had treated 54 patients with them.

Chronic anxiety seemed to be more common in Scotland, chronic depression in England and Wales (Table 9). It should be noted that epilepsy came into this survey only if the patient was psychotic or causing a social upset. Controlled epileptics were not included. Senile dementia accounted for only a very small number of cases in this group, which shows that some old people are being maintained in reasonable fitness by the aid of appropriate tranquillizing drugs.

 
 TABLE 9.—Number of Persons Continuously on Drugs for a Year or More, by Sex for England and Wales and for Scotland

Diagnosis		Er	ngland a	and Wal	les	Scotland				
Diagnosis		м	F	P	%	м	F	Р	%	
Anxiety states .	•	107	311	418	37.9	70	276	346	46.6	
psychoses	•	86	286	372	33.7	26	155	181	24.4	
psychoses Hysteria	:	54 12	103 59	157 71	14·2 6·4	30 2	48 32	78 34	10·5 4·6	
Senile dementia . Bpileptic psychoses .	:	7 5	22 6	29 11	2·6 1·0	3 19	12 17	15 36	2·0 4·9	
Others	•	15	37	52	4.1	22	30	52	7.0	
Total	•	286	824	1,110		172	570	742		

#### Group 5. Persons who had Caused a Serious Social Upset Because of a Psychiatric Illness

Selection for this group was subjective, depending on the interpretation of the term "serious social upset." The unmarried mother might appear as such a problem to one doctor but not to another. However, the group was only a small one, amounting to less than 5% of the series. This subjectivity might well acount for the disparity of figures between the two main regions, a difference more marked than in any other group. In England and Wales there was no predominant diagnosis. Manic-depressive psychoses, anxiety states, psychopathy, hysteria, and problems of addiction together account for about 75% of the cases, and there were four men to every five women. In Scotland almost 50% of the cases were problems of addiction, with the unusual state of an excess of males, there being five men to every three women, and even when cases of alcoholic addiction are omitted there is still a ratio of three men to two women. The figures are shown in Table 10. The peak age for social upsets was the decade 35 to 44.

TABLE 10.—Number of Persons Causing a Serious Social Upset, by Sex for England and Wales and for Scotland

<b>D</b> : .		Er	ngland a	and Wa	les	Scotland			
Diagnosis		м	F	ч	%	м	F	Р	%
Addictions Manic-depressive		25	12	37	15.5	62	20	82	<b>46</b> ∙6
psychoses		15	29	44	18.4	4	12	16	9.1
Anxiety states		8	30	38	15.9	6	7	13	7.4
Psychopathy		26	5	31	13.0	17	9	26	14.8
Hysteria		5	22	27	11.3	2	2	4	2.3
Schizophrenic									
psychoses		4	10	14	5.9	3	2	5	2.8
Senile dementia		2	10	12	5.0	5	1	6	3.4
Epileptic psychoses		6	4	10	4.2	1	1	2	1.1
Mental retardation		5	5	10	4.2	4	5	9	5.1
Others		9	7	16	6.7	6	7	13	7.4
Total	1	.05	134	239	100.0	110	66	176	100-0

#### Group 6. Psychotic Persons Living at Home who were Capable of Looking after Themselves Without any Treatment

Group 6 is a small but curious collection of disturbed persons who in spite of being clearly mentally ill are able to live in the community and to work and look after themselves without the aid of doctors, drugs, or any outside help. They accounted for some 4% of the case load, but the accuracy of this figure is open to doubt. An examination of Table 11, which gives the various diagnoses, shows that the definition of the group was misunderstood by some of the collecting doctors. The patient was supposed to be clearly psychotic, but 43 of the cases were classified as anxiety states and hysterics, thereby inflating the group by some 10%. On the other hand, this kind of case could easily be missed in the survey, as these patients rarely call to see a doctor. The majority of such patients came into the manic-depressive and schizophrenic groups; some were mentally retarded and others were alcoholic wrecks. In past ages many of them would have been viewed as witches, hermits, tramps, and vagabonds. They were indeed all eccentric, and their stability was usually precarious. If for some reason this type of patient is forced to leave the security of a familiar environment or routine she tends to break down altogether. For example, the schizophrenic daughter cares for her aged father, and with his support manages tolerably well. When he

TABLE 11.—Number of "Psychotic" Persons Living at Home Who Require No Medical Help to Live in the Community, by Sex for England and Wales and for Scotland

		E	ngland	and Wa	ales	Scotland			
Diagnosis		М	F	P	%	м	F	Р	%
Schizophrenic psychoses		44	46	90	36.4	17	19	36	29.3
psychoses		26 14	30 8	56 22	22·7 9·0	13 8	24 5	37 13	30·1 10·6
Anxiety states		75	12 13	19 18	7.7	3	2	5	4·1 0·8
Senile dementia Psychonathy		-4	10	10	4·0 3·2	3 5	-4	3	2·4 7·3
Addictions		1	2 15	3	1·2 8·5	76	3	10	8·1 7·3
Total		107	140	247	100.0	62	61	123	100.0

dies she sinks into a state of filth and depravity, or she becomes paranoid and picks quarrels with the neighbours until intervention becomes essential. In the group there were more men than women up to the age of 45, but thereafter women predominated.

#### Group 7. Persons who Suffered from an Acute Confusional State which had lasted for 24 hours or more, and were Treated at Home or in a Non-psychiatric Hospital

This group was the smallest, amounting to less than 2% of the whole series. It differs from the other groups in being a syndrome and not a variety of diagnoses group by their social implications. Some 38% of the series came into the category of the toxic confusional state. The other 62% were associated with another form of psychiatric illness (Table 12).

TABLE 12.—Psychiatric Illnesses Associated with Confusional States by Percentage

A	ssociat	ted Illn	ess		Percentage of Total for Group
Anxiety sta Manic-depr Senile demo	tes essive	psycho	 oses		18 16 12
Addictions Other		•••	· · · · ·	· · · · ·	3
Other	••	••	••	••	13

The figures for this section are too small to be of statistical significance. The condition is not very common, occurring only once a year for every 7,000 patients at risk. As is usual with a psychiatric illness, women were more often affected than men, there being two women to each man. The peak of incidence for both sexes was in old age, 75 to 84 years. Women in the decade 35 to 44 have an increasing liability to confusional states. The total number of patients in this group was 145. During the survey year some 22 other persons with a confusional state were referred to a psychiatrist. If these figures are valid it seems that the general practitioner is able to cope with some 87% of these problems, without the aid of the psychiatric services. He may have to refer such patients to a general hospital.

#### Consideration of the Series as a Whole

A summary of the seven groups is given in Table 13.

TABLE 13.—Persons in the Seven Groups by Sex for Great Britain

	Crown Nie		Ma	le	Female		Persons		
_	Group No.				%	No.	%	No.	%
1. 2. 3. 4. 5. 6. 7.	Referred to a psychiatrist Helpless at home Off work for a year or more On drugs for a year or more Causing a social upset The working psychotic Acute confusional states	••• ••• ••• •••	· · · · · · · · ·	1,750 327 472 458 215 169 50	39 44 48 25 52 46 34	2,702 413 509 1,394 200 201 95	61 56 52 75 48 54 66	4,452 740 981 1,852 415 370 145	49.7 8.3 11.0 20.7 4.6 4.1 1.6
	Total			3,441	38	5,514	62	8,995	100.0

Objectivity is highest in groups 1, 3, and 4, and together these groups account for just over 80% of the cases in both the main areas. The sex ratio between the number of cases was similar on both sides of the border in groups 1, 3, 4, and 7. In England and Wales there seem to be more helpless females in group 2 and more psychotic women in group 6 than in Scotland. Only in group 5 in Scotland was there a predominance of males.

In spite of our efforts to make the study as objective as possible, there was a considerable spread of case prevalence in the practices, which is so characteristic of psychiatric surveys. The proportion of casualties varied from 0.02% to 5.29%. The peak rate was 0.6% to 0.8% and some 76% of the practices

had from 0.2% to 1.4% of cases. This seems to be a universal finding for all who work on the statistics of psychiatric illness. Writing on the subject, Taylor and Chave (1964) have this to say about it: "Variations of this magnitude might cause the statistical purist to throw up his hands in despair and abandon the attempt to reach any conclusions on the basis of data of this kind. Such pessimism is not in fact warranted, for it can be shown that pooling of the findings of a number of practitioners can yield average rates of quite remarkable stability."

Fig. 2 shows the wide scatter of the percentage of cases found in the various practices. This, too, is very similar to the findings of Shepherd (1964) in his work on the incidence of psychiatric illness in general practice. The number of practices recording less than 0.6% were very few; on the other hand, about 20% of the workers recorded large numbers of patients. Many of the doctors with a high prevalence rate had a particular interest in psychiatry, and that in itself would raise the number of cases collected. Any doctor who develops a special interest in a disease will find more cases than the average physician. The figure of 0.6% to 0.8% is therefore considered to be on the low side, and it should probably be 1% or higher.



FIG. 2.—Interpractice variation. Standardized mental disablement rates by practice.

Kessel and Shepherd (1962), in a study of the incidence of predominantly psychiatric disorders in general practice, concluded that, in spite of the diversity of figures, about 10% of all persons in any year who attend the family doctor were psychiatrically ill. According to our survey, at least one-tenth of such patients are seriously disabled—that is, about 1% of all the patients seen during the survey year.

#### **Detailed Analysis of Selected Diagnoses**

So far the figures for the survey have been viewed as two parallel series, for England and Wales and for Scotland. In most of the diagnostic categories there was no marked disparity, with the exception of the figures for alcoholic addiction. In

TABLE	14.—Diagnostic	Groups	by	Sex	for	Great	Britain,	1961-2
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Diagnosis		Male	Female	Persons	% of Series
Manic-depressive psychoses	••	689	1,688	2,377	26.6
Anxiety states		604	1,359	1,963	22.0
Schizophrenic psychoses	•••	558	677	1.235	13.8
Mental retardation	• •	560	489	1,049	11.7
Senile dementia		184	384	568	6.3
Hysteria	••	110	382	492	5.5
Addictions		236	90	326	3.6
Psychopathy		161	74	235	2.7
Epileptic psychoses		127	111	238	2.7
Childhood behaviour problems	••	55	38	93	1.0
Pregnancy psychoses	••		56	56	0.6
Asthenia		25	41	66	0.7
Acute confusional states		. 35	49	84	0.9
Others	••	97	76	173	1.9
Total	••	3,441	5,514	8,955	100-0
		<u> </u>			

the next section the figures for the survey are considered as a whole, unless there is a good reason for dealing with them otherwise. Table 14 shows the diagnoses for the complete series. Some of the diagnostic groupings are considered in greater detail.

#### **Depressive States**

From Table 14 it can be seen that manic-depressive psychosis was the most common problem. Mania accounted for only about 3% of the cases. It is generally accepted that depression can be either endogenous or reactive, the latter being a depression associated with an anxiety state. In order to get the total figures for all depressive reactions, those for reactive depression were collected separately from other forms of anxiety.

From Table 15 it can be seen that depressive disorders accounted for almost one-third (32.2%) of the whole series. But that is by no means the whole picture. Many mild depressions would not qualify for inclusion in this survey, and a number of severe depressions which had responded well to antidepressive

TABLE 15.-Figures for Depressive States by Sex in Great Britain

Type of Depression		Male	Female	Persons	%	
Manic-depressive mania	••	28	47	75	0.8	
Manic-depressive depression Anxiety with depression		661 159	1,641 422	2,302 581	25·7 6·4	
Total cases of depression		820	2,063	2,883	32.2	
Total patients in survey		3,441	5,514	8,955	100.0	

drugs given by the general practitioner did not fit into any of the seven groups, and so were not included. Figures for this latter type of depression was as high as 2 per 1,000 persons at risk in some practices. A rise of just 1 per 1,000 of severe depressions treated at home would raise the figure for depressions to nearly 40% of the total.

Suicide is the most serious risk for the depressed patient. In our survey the incidence of successful suicide was below the national rate. There were in all 55 cases of suicide and 528 attempts; that is, 10% were successful. As one would expect, suicide was more common among men and attempts among the women. In order to find out why our suicide rate was so low, the doctors who had had a case during the survey year were asked if they could have had a patient die by this means and not know about it. Some 47 replied, and eight of them said that this was possible. Sometimes the victim leaves home to perform the deed in a remote area, and in a large urban practice it is possible that the doctor might not hear about it. In a rural practice it could never be a secret and most of the doctors were sure they had recorded every case.

#### **Anxiety States**

The second largest diagnostic category was that of the anxiety state. The various types are given in Table 16. Anxiety states

TABLE 16.-Figures for Anxiety States by Sex in Great Britain

Тур	e of An	xiety S	tate	Male	Female	Persons	
Anxiety state Anxiety state Obsessional s	without with de tates	depres pressio	ssion on 		417 159 28	883 422 54	1,300 581 82
Total	••	••	••		604 (29·7%)	1,359 (70·3%)	1,963

accounted for just over one-fifth of the whole series. The figure for women was rather higher in Scotland than in the South. Obsessional states were rare, amounting to only about 1% of all the psychiatric cases.

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#### Schizophrenic Disorders

The schizophrenic diseases came third in order of frequency (Table 17). Except among the paranoid states, the sex distribution was nearer equal than among most of the other diagnoses, and there appear to be more schizophrenics domiciled in the community in England and Wales than in Scotland.

TABLE 17.—Figures for Schizophrenia by Sex in Great Britain

Type of Schizophrenia					Male	Female	Persons
Schizophreni Paranoid stat	a witho es	ut para	noid	traits 	477 81	540 137	10,17 218
Total	••				558 (45·2%)	677 (54·8%)	1,235

#### Mental Disorders Among the Aged

Fig. 3 shows that mental illness increases with each decade, to show a peak in old age. The types of mental illness found among the aged are shown in Table 18. While senile dementia heads the list, if cases of mania and depression are added together, then the manic-depressive psychosis is the commonest mental illness of senility. This is a salutary warning, as the two conditions can look very alike in their presentation, but the prognosis is often so different. There was a higher proportion of mania (6%) than in the younger age-groups. Schizophrenia was less of a problem, but paranoid states were more common than the other types of schizophrenic reaction. Paranoia seems to flourish in old age, especially among old women.



FIG. 3.—Age and sex distribution of mental disablement in a sample of the population of England and Wales.

 TABLE 18.—Cases of Mental Illness in Persons Over 65 by Sex in Great

 Britain. Types of Illness

Diagnosis	Males	Females	Persons
Senile dementia Manic-depressive depression Manic-depressive mania Schizophrenia without paranoid ideas Schizophrenia with paranoid features Anxiety states	152 137 10 9 13 32 24 67	351 345 21 29 41 122 32 147	503 482 31 513 38 54 154 56 214
Total	444	1,088	1,532

A few diagnoses were selected by a hand-sort (Table 19). They were rare, but it was of interest to know how they occurred in 1961–2. Syphilis of the central nervous system still occurs. In England and Wales it is more common among men. The average age was 55 for the men and rather less for the women. The Scottish series produced one case, presumably congenital, in a girl of 12. Huntington's chorea appeared to have the same prevalence in both countries. Only nine cases of autism or schizophrenia in persons under 15 were noted. This is gross underscoring. According to K. and Lorna Wing (personal communication), with our 1,000,000 persons at risk for the whole survey we should have collected some 76 cases.

TABLE 19.—Occurrence of Some Rare Diagnoses in Great Britain

Diagnosis	Male	Female	Persons	
Cerebrovascular syphilis	13 4	5 9	18 13	
phrenia	8	1	9	

#### Mongolism

This is an unmistakable clinical picture. Mongols were found to have a similar distribution in the two main areas (Table 20), with a predominance of males. A high prevalence of mongolism in the Shetlands made us suspect a geographic factor. Inquiry showed that the mongols in this region were all born late in their mothers' reproductive life, and this was more likely to be the cause. These figures suggest that in the community at large the proportion of mongols is about 0.2 per 1,000 of the population. This figure does not take into account those who are in mental-deficiency hospitals and other institutions. Fig. 4 shows that after 24 years of age there is a steep fall in the prevalence of these patients in the community—a fall which compares with a similar one three decades later in the general population.

 TABLE 20.—Numbers of Mongols in England and Wales and in Scotland

 by Sex



FIG. 4.—A: Numbers of mongols in the community, by age per million population, for Great Britain. B: Numbers of persons in the community by age per million population.

### **Drug Addiction**

This small but important group was investigated by means of a hand-sort. Drug addiction, in contradistinction to alcoholism, appears to be more common among women than among men (Table 21).

TABLE 21.-Types of Drug Addiction by Sex in Great Britain

Тур	e of	Drug			Male	Female	Persons
Barbiturates Amphetamines Phenmetrazine (I Pethidine Morphine Drug not named	relu	din)	••• •• •• ••	· · · · · · · · · · · · · · · · · · ·	7 2 0 0 0 6	21 12 2 2 1 8	28 14 2 2 1 14
Total .		••			15	46	61

If the figures for alcoholic addiction are considered alongside those in Table 21, the general picture for addiction is as shown in Table 22. There are more alcoholic men than women, and more alcoholic Scots than their Southern brethren. Just over 10% of the Scottish males in the series were classed as alcoholic. Scottish women appear to be more liable to drug-addiction

 
 TABLE 22.—Figures for Addiction by Sex in England and Wales and in Scotland

	Engla	nd and	Wales	Scotland			
I ype of Addiction	м	F	<b>P</b> .	м	F	P	
Alcohol { No	86	26	112	135	18	153	
	4·1	0·7	2·0	10·2	0·9	4·6	
Drugs {No	9	15	24	6	31	37	
	0∙4	0·4	0·4	0·5	1·5	1·1	
Total {No	95	41	136	141	49	190	
	4∙5	1·1	2·4	10·7	2·4	5·7	

than any other group of persons, but this figure is almost certainly inflated by the fact that several Scottish doctors are particularly interested in drug habituation. If one considers the persons at risk in the survey, alcoholism occurs at a rate of 0.2 per 1,000 persons in England and Wales, and the figure is twice as high for Scotland. However, all these figures fall far below the usual estimates. Even for Scottish males of 25 and over the figure is only 0.5 per 1,000 persons. Parr (1957) suggested that it was in the region of 11 persons per 1,000 over the age of 20. It should be noted that our figures applied only to those who were mentally disabled by alcohol.

#### Prevalence of Mental Illness in the Community

The majority of the patients had started their illness before the survey year. Some 7,477 were in fact ill on 1 November 1961, when the survey began, and this gives a prevalence figure for that date. From the Ministry of Health it was possible to find out the population of the mental institutions for 31 December 1960. By comparing these figures we can get a rough idea of the total morbidity in the community of the mentally disabled.

It is appreciated that complete accuracy cannot be assumed by comparing figures which are about a year apart, but it is reasonable to make some deductions. So far as mental illness is concerned, it seems that there are rather more than two persons in the community to every patient in a mental hospital, a finding which is very close to that of Benady and Denham (1963). Looking at the figures for the mentally retarded, it

 
 TABLE 23.—Comparative Figures for Persons Mentally Disabled per 100,000 Home Population by Sex, in the Hospitals and the Home

				31 D Hospi	ecember tal Popu	r 1960 ulation	1 November 1961 Home Population			
				м	F	P	м	F	P	
Mentally ill Mentally retarded	::	••	::	262 146	330 115	296 130	486 97	817 82	651 89	
Total		••	••	408	445	426	583	889	740	

seems that for every two patients cared for in the community there are three in institutions.

#### Summary

This survey of mental illness was carried out in 261 practices in Great Britain, largely by members and associates of the College of General Practitioners, with a population at risk of about a million persons. Some 9,000 patients qualified for inclusion in the survey, and this means in round figures that almost 1% of the population was found to be mentally disabled. The practitioners who collected the cases were asked to assign their patients to one of seven groups. The group was considered to be more important than the actual diagnosis. The groups were as follows.

Group 1.-All patients who were referred to a psychiatrist during the survey year were included here. This was by far the largest category accounting for half the patients in the survey. Three-quarters of the patients were suffering from manic-depressive psychosis, schizophrenia, or an anxiety state.

Group 2 consisted of all persons who for some psychiatric reason were helpless but were cared for at home. It was a small group, amounting to only 8% of the series. Some 60%of the patients were severely mentally retarded, and 30% were aged dements.

Group 3 was made up of persons who for some psychiatric reason had been unable to work for a year or more. It made up 11% of the series. Some 40% of these patients were mentally retarded, presumably a higher grade of defective than in group 2.

Group 4 was for all patients who had been on a psychotropic drug for a year or more. It was the second largest in the series, accounting for 20.7% of the cases, and three-quarters of the patients were women. About 70% of the group were suffering from either depressive or anxiety states. They were able to keep at work at least part of the time, and were less of a social liability than the people in group 3.

These first four groups made up almost 90% of the case load.

Group 5 was for patients who had caused a serious social upset because of some psychiatric illness (4.6%).

Group 6 was for patients who while clearly psychotic were able to live and work in the community without the aid of doctors or drugs (4.1%).

Group 7.-This small group was made up of persons who had had an acute confusional state which had lasted for more than 24 hours, but which had been treated at home or in a nonpsychiatric hospital (1.6%).

As all who had seen a psychiatrist during the survey year were allocated to group 1, no person in the other six groups was seen by such a consultant during that time.

Looking at the figures as a whole, the most common diagnosis was the manic-depressive psychosis, which accounted for a quarter of the cases. If reactive depressions were added the figure became a third of the case load. Even this total does not include the short severe depression treated by their own doctors at home, as there was no place for such cases in the survey. Over the year 55 cases of suicide were recorded, and 528 attempts. Mental illness increases in prevalence with each decade, to reach a peak in senility. Manic-depressive psychosis was as common as senile dementia in old age. Mania was more common among the aged, as were paranoid states, especially among old women. Alcoholic addiction as estimated in general practice was twice as common in Scotland as south of the border.

Some 7,477 persons were mentally ill on 1 November 1961, when the survey began. If this prevalence figure is compared with figures from the Ministry of Health for mental hospital beds occupied on 31 December 1960, the nearest date for which figures were available, then it seems that at the time of the survey there were just over twice as many mentally disabled persons in the community as in the mental hospitals. There were, however, three mentally retarded persons in mentaldefective institutions for every two such persons in the community. Of the new cases which occurred in the survey year, some 75% were referred to a psychiatrist. Of the more chronic cases which had occurred before the survey started, some 45%were referred during this particular year. Taking the figures as a whole, about a half saw a psychiatrist during the survey year, and a half were cared for by the family doctor alone.

We would like to express our gratitude to the many people who have helped us in this work. The survey was first suggested by Dr. F. M. Martin and Mr. John Madge, of Political and Economic Planning, who were organizing a much larger research project to study the impact of the 1959 Mental Health Act on the community. Our survey is a small part of this wider scheme. We are particularly grateful to Dr. Martin, the director of the whole project, for his help and guidance, and to P.E.P. for financing our work. The practical details of the survey were drafted by a working party which included Dr. R. J. F. H. Pinsent, Dr. D. L. Crombie, and Dr. K. W. Cross. The Research Committee of the College of General Practitioners gave us every possible help and encouragement. Mrs. B. L. Gretton spent many hours dispatching cards and in dealing with the typing and correspondence. The data were coded and transferred to punch cards by the staff of the Records and Statistics Unit of the College of General Practitioners, and Mrs. P. Jones of the unit produced the many tables on which this work is based. A large survey of this nature could not have been done without the full support of such a statistical unit, whose help was always prompt and unstinting. Dr. B. M. Watts read the MS. Last and by no means least, we would like to thank the large team of general practitioners who completed the cards and worked on the project for a complete calendar year. Without their careful records this work would not have been possible. A list of the doctors taking part is given below. We are grateful to the many partners and assistants of these doctors, who also helped in the survey.

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## Minor Mental Illness in London: Some Aspects of a **General Practice Survey**\*

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During the past six years a small research team working at the Institute of Psychiatry§ has been engaged in studies of psychiatric morbidity as it is encountered in the field of general practice. This work has been based on two major premises: first, that the prevalence and incidence of minor psychiatric disorders in the community is on a scale altogether beyond that indicated by hospital statistics; secondly, that the G.P. is, or ought to be, a key-figure in the nation's mental health services. It has therefore seemed logical to pay attention both to the quantitative aspects of the problem-that is, to the extent and distribution of psychiatric illness in general-practice populations-and to the question of the G.P.'s function in relation to such disorder. In this field of inquiry epidemiological and "operational" studies are closely inter-related. Earlier reports (Shepherd et al., 1959; Kessel, 1960; Cooper et al., 1962) have gone some way to confirming the magnitude of the problem and the practicability of the methods of inquiry adopted. The present paper describes some of the findings of a large-scale survey which has recently been completed.

The distribution of major psychiatric disorders in general practice is relatively easy to determine. Prevalence is low, and the task of head-counting correspondingly easy; moreover, patients suffering from these disorders can usually be identified by the practitioner without much difficulty, either because of the distinctive clinical picture or because of their collision with one or other of the social services. By contrast, the minor neurotic reactions are common; many are closely related to physical diseases or symptoms, so that estimates of their frequency must take account of other forms of morbidity; their classification is controversial, and some, at least, of the wide variation in their reported prevalence is undoubtedly explicable in terms of the preconceptions of individual physicians. These difficulties were all prominent in the present survey, which was carried out with the co-operation of 80 G.P.s from 46 practices in Greater London. This report concentrates on four aspects of the survey, selected for their wider significance as well as for their place in the context of the investigation. They comprise (1) the selection of doctors, (2) the recording and classification of psychiatric disorders, (3) the estimated prevalence and distribution of psychiatric morbidity, and (4) the problem of interpractice variation in reported morbidity rates.

#### Selection of Doctors

The reported morbidity experience of a single practice, however careful the recording, is subject to the limitations imposed not only by the size and nature of the practice population but also by the pronounced variation between doctors, which precludes simple multiplication of the number participating without regard to the nature of their recruitment. The published literature suggests that there is a relatively small group of G.P.s

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