MENTAL DISORDER IN MARRIED COUPLES

By

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THE primary aim of family psychiatry is to demonstrate how the mental health of family members is interrelated. It is a study in which aspirations have outstripped techniques, possibly because research workers have attempted to apply the subtlety of clinical insights to details of family dynamics. Yet only confusion can follow such attempts while basic general data are still lacking; and as Post's (1962) survey illustrates so clearly, our present certain knowledge, despite great and continuing labour, remains exiguous.

The present investigation is directed firstly to determining the incidence and nature of mental illness in the spouses of psychiatric patients, and secondly to a consideration of how the illnesses of the married pair may be related. It may be pointed out that although it is perhaps valid in theory to study relationships rather than individuals, in practice the converse is certainly easier, and probably more informative at present. Similarly the simplest way to consider family members (other than the patient) is by classifying them as healthy or ill, illness here being taken as synonymous with having received psychiatric treatment. By concentrating on one family member, the spouse, rather than the whole family, a further simplification can be effected, especially as the spouse is the person most likely to be genetically unrelated to the patient, while also of comparable age.

There appear to have been only two previous comparisons of the observed and expected frequencies of psychiatric illness in married pairs. These were by Penrose (1944) and Gregory (1959); both were working from the Ontario Hospital, London, Canada, and each of them found that the incidence of married couples both mentally ill was in the order of eight or nine times the expected value. These authors based their assessments on in-patient admission figures, but it would seem that for present purposes such an index is not ideal. Firstly, in any psychiatric service, particularly where community care is emphasized, admitted cases are not typical of those referred. Secondly it seems probable that the admission of a second member of the marriage will tend to be avoided by the psychiatrist and resisted by the patient, in view of the special family problems that would arise, particularly if the first member is still in hospital. Conversely it may sometimes happen that admission of the first represents the withdrawal of a support, however fragile, from an already sick spouse, thus precipitating admission. For all these reasons, acceptance for treatment, provided a formal diagnosis was made, is here taken as the criterion of illness.

METHOD

The essential stages in this enquiry were:

(*a*) To determine the number of married pairs domiciled in the area covered by the Chichester and District Psychiatric Service.

(*b*) To determine the number of married men and married women referred as new cases for the years 1958, 1959 and 1960 and accepted for treatment.

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From these figures the annual averages were found, and hence the expected numbers of *pairs* who would be seen (*a*) in a typical year, and (*b*) for the total three-year period.

(*c*) To compare these expected values with those actually referred.

(*d*) To compare the diagnoses received by each spouse.

(*e*) To determine the relationship, if any, between the illnesses in each pair.

(*f*) To comment on the results.

Description and Results

1. The Chichester and District Psychiatric Service is the sole source of psychiatric care in an area of West Sussex, providing a comprehensive service with special emphasis on out-patient and domiciliary care, as well as acting in a consultant capacity to the local general hospitals. The area embraces the urban districts of Chichester and Bognor Regis, and the rural districts of Chichester, Midhurst, and part of Petworth. The population, which totals 116,000, is of a higher average age than the national level. The major occupations in the area are agriculture and forestry, some light industry, and the tourist trade along the coast.

From the details given in the 1951 Census Report, it was possible to calculate for each administrative unit within the area the proportions of married men and women in the population. On the assumption that the population structure had remained reasonably constant, these proportions were then applied to the Registrar-General's Estimates for mid-1959 (which refer to total populations only) for each administrative unit. It was found that in all there were 27,400 married men and 28,200 married women resident in the area of the Service: the number of resident married couples was finally estimated at 27,000.

2. The records of Graylingwell Hospital, from which the Chichester Service is administered, showed that for 1958, 1959 and 1960 the new referrals included an annual average of 179·0 married * men and 270·0 married women. It follows that in any one year the expected number of married *pairs* who would be referred is given by $\frac{179 \times 270}{27{,}000}$, or 1·79. In a three-year period, the chances of being referred are clearly three times as great for *each* spouse: the expected number of "paired" referrals in the total period is therefore $3 \times 3 \times 1{\cdot}79$, or 16·1.

Some clarification is necessary concerning the definition of a "new case". For administrative reasons this is taken to be a patient whose last attendance, if any, was at least six months previously. It is therefore possible for the same patient to be registered as a "new case" on more than one occasion. This introduces a minor complication, but provided the criterion is applied consistently in determining both the "expected" and "observed" values, no real difficulty arises.

3. Finally, the hospital registers of new cases were searched for all married pairs both members of which were seen between 1958 and 1960. Some cases may have been missed, but a total of 21 couples was found, excluding marriage

* "Married" includes separated, but not widowed, divorced, or co-habiting individuals, i.e., the definition used by the Registrar-General.

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guidance problems without overt abnormality of both partners: in four instances one member of the pair was registered twice as a new referral as explained above. These must be taken to represent a further four "paired referrals".* The total is thus 25 in all. Table I lists these cases, and gives some additional details from the records and from discussions with the doctors concerned.

TABLE I

Husbands and Wives treated in the Chichester Psychiatric Service, 1958-60

	No.	Approx. date of onset	Date of referral	Age on referral	Diagnosis, etc.	Relationship
1.	M	1942	Jan. 1958	44	Asthma, with chronic personality disorder. Respiratory symptoms cleared after divorce.	R.
	F	Jan. 1958	Feb. 1958	34	Recurrent depression over many years. Current attack two weeks.	
2.	M	"Many years"	Feb. 1958	35	Fetishism.	I.
	F	June 1957	Dec. 1958	26	Anxiety state, with homosexuality and low I.Q.	
3.	M	1938	Feb. 1958	51	Chronic alcoholism.	I.
	F	1956	Jan. 1958	51	Reactive depression.	
4.	M	1953	Feb. 19th 1958	41	Alcoholism and paranoid personality.	I.
	F	"Lifelong"	Feb. 3rd 1958	39	Hysterical personality disorder.	
5.	M	Dec. 1957	April 2nd 1958	69	Delusions and congestive cardiac failure; arteriosclerotic dementia diagnosed April, 1958.	R.
	F	Jan. 1958	April 15th 1958	70	Reactive depression.	
6.	M	May 1956	March 1958	63	Senile confusion 2 years⟶ improvement⟶ final diagnosis of dementia, January 1959.	R.
	F	April 1958 Jan. 1959	May 1958 Jan. 1959	63	Recurrent depression. Recurrent depression.	
7.	M	Dec. 1954	June 1958	36	Anxiety-obsessional neurosis.	I.
	F	1954	Dec. 1958	27	Obsessional neurosis.	
8.	M	1952	Jan. 15th 1958 Feb. 1959	45	Chronic paranoid schizophrenia. Chronic paranoid schizophrenia.	R.
	F	1955	Jan. 15th 1958	43	Anxiety hysteria.	
9.	M	1953	July 1958	38	Alcoholism 5 years. Treated as I.P. till August, 1958, as O.P. till December, 1958. Improved but relapsed, February, 1959.	R.
	F	April 1959	April 1959	32	Reactive depression with suicidal attempt.	

* The number of times one couple can represent a "paired new referral" is the product of such referrals of each. For these four couples it is $2 \times 1 = 2$ in each case.

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10.	M	Aug. 1957	July 1958	69	Arteriosclerotic dementia.	N.D.
	F	March 1959	June 1959	63	Recurrent endogenous depression.	
11.	M	Aug. 1958	Oct. 1958	45	Chronic obsessional neurosis: exacerbation for 2 months.	R.
	F	March 1957	March 1959	41	Anxiety neurosis.	
12.	M	March 1959	April 23rd 1959	58	Anxiety state.	R.
	F	Dec. 1958	Apr. 3rd 1959	58	Recurrent agitated depression in an "eccentric" personality.	
13.	M	Dec. 1958	April 1959	59	Reactive depression in an obsessional personality.	J.S.
	F	Oct. 1957	March 1958	50	Reactive depression.	
14.	M	Dec. 1958	Mar. 12th 1959	39	Anxiety neurosis in an inadequate psychopathic personality.	I.
	F	March 1956	Mar. 12th 1959 Oct. 1959	34	Reactive depression: failed to continue treatment. Reactive depression.	
15.	M	? 1957	Dec. 1959	91	Senile dementia.	N.D.
	F	1945	May 1959	68	Chronic anxiety neurosis.	
16.	M	? 1951	March 1960	60	Chronic schizophrenia.	N.D.
	F	1953	July 1959	53	Emotional lability 6 years: disseminated sclerosis 14 years.	
17.	M	March 1960	April 1960	79	Arteriosclerotic dementia. Deteriorated after admission.	R.
	F	March 1958 Sept. 1960	Sept. 1958 Nov. 1960	63	Endogenous depression. "Reactive depression with endogenous features".	
18.	M	May 1960	June 1960	75	Endogenous depression.	N.D.
	F	? Aug. 1958	Feb. 1959	70	Arteriosclerotic dementia: died April, 1959.	
19.	M	May 1960	June 1960	28	Reactive depression.	R.
	F	Feb. 1958	Feb. 1960	28	Reactive depression.	
20.	M	April 1960	Sept. 1960	73	Depression, with depersonalization.	N.D.
	F	April 1958 Jan. 1960	May 1958 Feb. 1960	66	Recurrent depression. Recurrent depression.	
21.	M	June 1960	Dec. 1960	64	Senile depression. History of psychoneurosis 1942, 1945.	N.D.
	F	Nov. 1958	Nov. 1959	42	Endogenous depression.	

J.S.=Joint Stress. R.=Reaction. I.=Interaction. N.D.=None discovered.

4. It will be seen that there were eight couples (Nos. 1 to 8) in which *both* partners were seen during 1958, and four (No. 12, 14 twice, 15) and three (Nos. 17, 19, 20) similar couples for 1959 and 1960. On the average, then, there were five pairs seen in each year. It will be recalled that the expected number was

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1·79, giving an "observed" to "expected" ratio of about 2·8. For the three-year period, the corresponding ratio is 25 to 16·1, or about 1·5, which would occur by chance alone less commonly than once in 20 such samples.

5. Before attempting to account for this, the diagnostic *concordance* between spouses may be considered. The data have been recast to illustrate this in Table II, using a seven-fold classification which, from other studies at this hospital, can be taken to have a minimum reliability of 65 per cent. (Kreitman, Sainsbury, Morrissey *et al.*, 1961).

TABLE II

Diagnostic Concordance between Husbands and Wives

Wife's Diagnosis			*Husband's Diagnosis*							
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
Organic Disorders:	Senile	(1)				1				1
	Other	(2)			1					1
Functional Psychoses:	Schizophrenia	(3)								0
	Manic-depressive	(4)	3			1	1	1	1	7
Neuroses:	Reactive depression	(5)	1				*2*	1	2	6
	Other neruroses	(6)	1					*2*	1	4
Other Disorders		(7)			1				*1*	2
Total			5	0	2	2	3	4	5	21

The leading diagonal of the table shows that in six couples both partners received the same diagnosis. This was reactive depression in two pairs (Nos. 13, 19), "other neuroses" in two pairs (Nos. 7, 11), psychopathy (No. 4) and affective disorder (No. 21) each in one couple. Concordance to this extent would occur by chance alone less than six times in a hundred similar examples * (Stevens, 1938). If reactive depression be included with affective disorders, then one further pair (No. 20) can be added. Alternatively, if all neuroses are taken together, four more pairs (Nos. 2, 3, 9, 14) accrue, making ten couples in all.

DISCUSSION

The main finding of the authors previously quoted, namely that the incidence of mental illness among the spouses of psychiatric patients is greater than among the general population, is supported by the present enquiry. The magnitude of this discrepancy, however, has been found to be much less than in the Canadian studies However, it must be recalled that the referral rates in the Toronto investigation were much lower, and the two sexes more nearly balanced, than in the present enquiry, and these considerations might affect the relative O/E ratios. Other possible explanations include the different availability of psychiatric care, and will be touched on again.

Gregory (1959) also found that the age difference within each pair was always less than 12, and that husbands tended to be admitted before their wives. Neither of these features emerged here.

To account for his findings, the same author suggests, but does not attempt to test, five possible hypotheses, which are equally relevant in the present context.

* O-E = 3; S.D. = 1·54; CR = 1·95; and p (one-tail) = ·026.

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1. *That both partners are subject to the same environmental stresses.*

Table I shows that in only one instance (No. 13) could the illness of both marital partners be related to the same discrete environmental stress, which in this couple was a move to a new area with resulting problems of both an occupational and a domestic nature. This hypothesis, therefore, receives no support. Incidentally, it was quite evident from the case histories that concurrent onset was no index of a joint environmental causation or precipitation of illness.

2. *That the illness of one partner represents a reaction to the breakdown of the other.*

This hypothesis postulates a "primary and secondary" relationship between the illnesses of the spouses. It may be illustrated by the situation in which the illness of the "primary" partner terminates in death, with a "grief reaction" in the survivor, or by certain varieties of *folie à deux*. There were no examples of the latter, and no complete forms of the former in the present series, but minor forms of grief reaction could be discerned in three couples, where the wife developed a depressive illness following the onset of dementia in the husband, or a sudden worsening of a slow deterioration (Nos. 5, 6, 17). In four further instances, patients developed an anxiety or depressive reaction apparently related to deterioration or relapse in their spouses suffering from alcoholism (No. 9), chronic schizophrenia (No. 8), obsessional neurosis (No. 11), and agitated depression with socially embarrassing symptoms (No. 12). In another example (No. 19) the husband developed a depressive reaction with fugue, allegedly in response to the continuous complaining of his chronically depressed wife but not in association with deterioration of her condition. Lastly there was one couple (No. 1) in which the recurrent manic-depressive illnesses of the wife were associated with asthmatic and depressive episodes in the husband; after their eventual divorce the husband's illness ceased, though the wife's continued.

There were thus 9 pairs in which the illness of the second partner could reasonably be viewed as a response or sequel to that of the first: in 6 of them, the "secondary" partner was the wife. Within this group, however, a number of unsolved problems remain. For example, in 4 pairs, the "primary" member, as designated by the illness occurring in the period under study, had been mentally ill on earlier occasions within the marriage, yet in only one of these was the spouse also ill at that time; for the remaining three, then, additional factors were presumably operative in the present illness. In another 2 pairs, it was the "secondary" partner who had been previously ill though the spouses had not, the inference being that these patients could also become ill in response to non-conjugal stress. All that can be concluded from this small series is that a variety of factors, some no doubt of high specificity, appear to contribute to the "primary-secondary" mechanism, notwithstanding its apparent simplicity. One must also bear in mind that morbidity *per se* in the "primary" member irrespective of the psychological nature of the illness, may perhaps contribute to the breakdown of the spouse.

3. *That with the passage of time, the spouses mutually exert a cumulative and detrimental effect on each other, leading to mental breakdown.*

This mechanism, which may be considered a variant of that previously discussed but with the emphasis on interaction rather than reaction, could be discerned in 5 pairs (Nos. 2, 3, 4, 7, 14). In 3 of these, the partners had been referred, not always simultaneously, for marital dysharmony. All ten patients were diagnosed as having some form of chronic neurosis or psychopathy.

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The diagnoses and possible psychodynamics are of interest. In one couple the husband was a fetishist, the wife a Lesbian of hysterical personality. In another the husband, a drifting unstable psychopath, developed anxiety symptoms when his chronically neurotic wife threatened to leave him as she had left her former husband. In the third pair, a chronically tense, worrying husband had remained "well", as had his rigid obsessional wife, until a severe quarrel broke out concerning another family member; thereafter both parties developed a frank phobic-obsessional neurosis. In the two remaining couples the husbands were alcoholics. One of these had a pathologically jealous and paranoid personality and was married to a hysterical psychopath much given to dramatic scenes; the other had a wife whose frequent periods of depression usually coincided with his episodes of sobriety.

This group is of particular interest from the viewpoints of group psychotherapy and psychodynamics, of Dicks' studies in marital "collusion" (1953, 1959) and of the theory of assortative mating. It must be remembered, however, that the "interaction mechanism" was obvious only in 5 of the 21 pairs, though probably, had more detailed data been available, it would have been found to have been important in many other couples.

In the remaining 6 pairs, the connection between the spouses' illnesses was either too complex to allot to the broad categories employed, or none could be discerned.

4. *That psychiatric treatment is facilitated for the second spouse when the first to fall ill is already in contact with psychiatric services.*

This formulation may be taken to embrace such possibilities as that contact with the psychiatric agency helps to overcome social barriers or cultural prejudices in the second spouse, that symptoms may be noted by the psychiatrist concerned at any earlier stage than might otherwise occur, and that the machinery of referral is already in action. To these may be added that where any marital dysharmony exists, a psychiatrist is often viewed as an ally in the conflict, as well as one who bestows the tactical advantage of being officially "ill", so that the second spouse seeks treatment to maintain the balance of power.

If this selective referral hypothesis is true, it follows that "paired referrals" should be commoner in areas where relatively fewer people receive psychiatric aid. It has already been mentioned that the discrepancy between the "observed to expected" ratios in the Toronto and Chichester areas is in the same direction, though unfortunately the two series are too dissimilar to permit close comparison. A second inference would be that the onset-referral interval for the second spouse to be treated should be less than for the first. It was found that if the two couples seen on the same days are excluded, and if only the first referral of the four patients seen twice within the period of the study is counted, then the onset-referral interval for the first spouse was longer than for the second in 14 couples, was about equal in 1 couple, and was shorter in 4 couples ($p = \cdot 03$). The distribution of duration of illness is illustrated in Fig. 1. Similarly the average onset-referral interval for the first * spouse was 3·2 years, and for the second 2·2 years.

There is evidence, then, that contact with a psychiatric agency can lead to the spouse receiving treatment more quickly than would otherwise have been the case, but it is impossible to decide if they would never have been seen at all

* *Excluding* two patients (Nos. 2, 4) who had been ill for periods which were indefinite, but certainly longer than ten years in each case.

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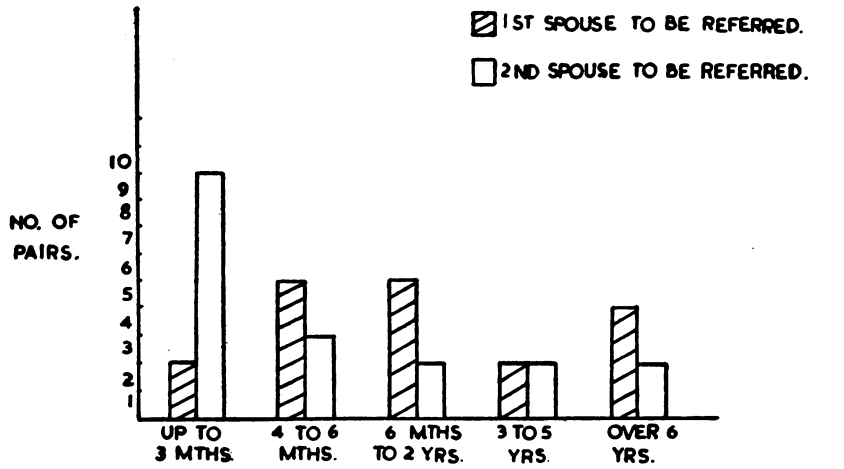


FIG. 1.—Onset-Referral Interval for First and Second Spouse Referrals.

but for this. In other words, "accelerated referral" is apparently operative, but there is no direct proof that it can account for the increased number of sick spouses.

5. *That there is a tendency for people of like constitution to marry each other.*

Assortative mating (homogamy) is well established for normal populations, and probably holds true for mental patients also, though direct evidence is scanty. The best known study is by Slater and Woodside (1951) who compared the marriages of a hundred neurotic soldiers with those of a similar number of general hospital patients. They found many differences in the wives and marriage patterns of the two groups over a wide range of indices; in particular there was substantially more neurosis among the wives of the neurotics than of the controls. It is also of interest that in the two studies by Gregory and Penrose, the former reports diagnostic concordance in eight of eleven pairs, the second in eight of twenty-two pairs. The pooled data, classified as for Table II but excluding those pairs where insufficient detail is available, are summarized in Table III. Diagnostic concordance occurred in fourteen of the thirty pairs (47 per cent) of the combined series.

TABLE III

Diagnostic Concordance between Spouses: Penrose and Gregory, Combined Data

Wife's Diagnosis			*Husband's Diagnosis* (1)	(2)	(3)	(4)	(5)	(6)	(7)	Total
Organic Disorders:	Senile	(1)	*4*			1				5
	Other	(2)		*0*						0
Functional Psychoses:	Schizophrenia	(3)		1	*5*	1			1	8
	Manic-depressive	(4)	4			*3*	2	1	1	11
Neuroses:	Reactive depression	(5)			1	1	*0*			2
	Other neuroses	(6)	1		1			*0*		2
Other Disorders		(7)							*2*	2
Total			9	1	7	6	2	1	4	30

O-E=7·94; S.E.=2·11; p (one-tail) < ·0001

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In the present study, as mentioned, in only six of the twenty-one pairs did both partners have the same illness (29 per cent).

It is not possible at the present time to give any general estimate, for the mentally disturbed, of how many marry each other, still less to assess the degree of homogamy for different diagnostic groups. There is clearly a need for further studies, preferably of an epidemiological nature. The implications of assortative mating are widespread, and in the author's opinion deserve more attention than has hitherto been given.

Summary

The records of the Chichester Psychiatric Service showed that 25 married couples were newly accepted for treatment between 1958 and 1960. This number is significantly higher than would be expected from individual referral rates ($p < \cdot 05$).

An attempt was made to categorize the relationship between the illnesses in 21 pairs. In nine instances this appeared to be of a reactive pattern, in five of mutual interaction, and in one of response to a common environmental stress: nothing could be said with confidence of the remaining 6 couples.

The role of selective referral was reviewed. It was shown that the onset-referral interval was less for the second spouse to fall ill than for the first, but there was no direct evidence that this accounted for the high incidence of ill pairs.

Assortative mating on the basis of diagnosis occurred to a statistically significant degree, but the numbers are too small to do more than underline the need for more evidence.

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