

## The "Functional" Medical Out-Patient

By INGA MACLAY

Every medical out-patient clinic contains a percentage of patients who are examined, investigated and eventually discharged, no structural lesion having been found to account for their symptoms. The term "functional" is used in this paper to describe such patients; i.e. those who have a disorder of the function but not of the structure of an organ, whether or not the disorder is regarded as primarily psychogenic. The purpose of this investigation is to examine carefully these out-patients and try to identify them more clearly by comparison with those in whom structural disease can be detected, with particular reference to the mental state.

Recent reports on the amount of structural illness "overlooked" are scarce, but Jacobs and Ritchie Russell (1961), in a one to six-year follow-up of neurological out-patients thought to have functional disorders, found that 5 cases out of 92 had developed disease probably related to the original referring symptom.

It is generally agreed that a considerable proportion of patients attending G.P. or hospital clinics are "psycho-neurotic". Culpan, Davies and Oppenheim (1960), and Shepherd, Davies and Culpan (1960), demonstrated this in their studies on hospital out-patients; and Priest (1962), in his analysis of 1,000 out-patients, found that nearly one-quarter had no structural illness, two-thirds of these being labelled psycho-neurotic. Pougher (1955) estimated that 36 per cent. of his patients in general practice suffered from neurosis and Hopkins (1956) puts the figure at over 40 per cent.

None of these studies, however, gives any indication of the relationship between psycho-neurosis and structural illness. Are sick people in general more neurotic than the average? On the other hand, as Priest's neurotic cases all fell into his non-organic group, are we to assume that none of his 762 patients with physical

disease are neurotic? This is statistically very unlikely. Marshall (1949) and Herridge (1960) have both shown how frequently physical and mental illness can occur concurrently.

Furthermore, what is meant by "psycho-neurotic"? Do these people suffer from well-defined psychiatric syndromes, or have they got social, family or personality problems? There is probably a tendency in medical and surgical clinics for doctors to look for neurosis after structural illness has been excluded rather than before, and from the practical point of view it is important to know how many of these psycho-neurotics require or are likely to benefit from psychiatric treatment. The controversial topic of who needs psychiatric help has recently been reviewed by Kessel (1963). Whether or not it is the fault of the psycho-neurotics, countless medical consultant-hours are spent on patients who are not physically ill, and the annual expenditure on negative investigations must be enormous.

### MATERIAL AND METHOD

The patients examined were all new referrals to a weekly medical out-patient clinic at St. George's Hospital. Every third patient was interviewed by the author at his or her first attendance, between 8.11.62 and 29.8.63; one week (and two patients) was missed during this period but the sequence of one in three was preserved. Between six and ten new patients are booked for each clinic, so two or three were interviewed per session. They were seen either before or after their consultation with the physician, and were told that the additional interview was for research purposes and was not compulsory. Every patient co-operated. There was no communication with the physicians during the clinic and the notes were not read at that time, so that assessment of the patient should be as unbiased as possible.

The interview aimed to cover the past and present medical and psychiatric history, family history and social background, and to assess the mental state. The following information was recorded in each case on an item sheet.

Sex, age, nationality, marital status and occupation.

The presenting symptom, its duration, the degree of incapacity, the number of visits to the G.P. prior to hospital referral, and any other hospitals involved.

The past medical history, past hospital referrals, frequency of visits to the G.P. and the patient's own estimate of his physical health.

The past psychiatric history, family history of mental illness and the patient's estimate of his mental state.

Current social, family or other problems.

Any precipitant of the present illness.

Examination of the mental state.

The mental state was assessed during the course of the interview, and patients were not told that they were being interviewed by a psychiatrist.

Patients were classed as mentally ill if they suffered from one of the psychoses, from a structural brain lesion or from a well-defined neurotic syndrome. Social and marital problems were recorded elsewhere on the item sheet, and personality disorders were omitted unless there was a superadded psychiatric illness, because of the difficulty in making this diagnosis without an objective history.

When 100 patients had been collected, their medical notes were studied for the first time, and the results of examination and investigation recorded on the item sheets, together with treatment given and disposal.

They could then be divided into two groups. Group A contained those in whom a structural lesion had been found to account for their symptoms, and Group B those whose findings were negative. Two cases, still being followed, who were suspected of having a structural lesion but whose investigations were negative, were classed as Group B. The groups were then compared statistically with respect to questions in the item sheet, the chi-square method being employed.

## RESULTS

Forty-five patients fell into Group A and 55 into Group B. Significant differences between the groups were found in several categories, and these results are shown in the Table.

### *Diagnoses of the Mentally Ill*

Fourteen patients were depressed; one of these had made a recent suicidal attempt by gassing, two were agitated, one retarded and three showed a bizarre hypochondriasis. Eight suffered from acute or chronic anxiety states; two of these were also phobic and one had marked hysterical features. The remaining 4 suffered respectively from paranoid schizophrenia, chronic alcoholism with paranoid delusions, dementia and obsessional neurosis with moderately disabling rituals.

It is interesting to note that the 5 Group A patients comprised the paranoid schizophrenic, the alcoholic, the dementia and two cases of depression; no patient with an anxiety state and only two out of fourteen suffering from depression had structural illness.

### *Negative Results*

The groups did not differ significantly with respect to sex, nationality, marital status, occupation, presenting symptom or its duration, past medical or mental history, past hospital and G.P. attendance, family history, chronic social or family problems, or acute stress appearing to precipitate the presenting symptom.

### *Investigations*

Eighty-three patients were investigated by serological, biochemical, radiological or other techniques.

### *Disposal*

Most patients were seen at the clinic from one to three times and then referred back to their general practitioner with suggestions for treatment where appropriate; 7 became in-patients and 16 were referred to other departments, 6 of these being sent to the psychiatric clinic. At the time of writing, 9 patients were being followed up in some or other department.

Table showing categories in which there was a significant difference between Group A and Group B

Category	Number of Group A Patients	Number of Group B Patients	Significance
Age: (Average age in Group A, 48.4 years; in Group B, 38.5 years)			
Patients under 30 years (total=25)	3	22	p<0.001
Degree of Incapacity			
Moderately or severely disabled, or more than one week off work (total=31)	22	9	p<0.001
Slightly disabled, doing normal work (total=50)	14	36	
Not incapacitated (total=19)	9	10	
Number of visits to G.P. before referral			
Referred to hospital at first visit (total=21)	5	16	p<0.001
Referred after 2-5 visits (total=54)	21	33	
Referred after 6 or more visits (total=25)	19	6	
Visits to other hospitals about referring complaint			
Those with previously diagnosed structural disease (total=6)	6	0	Figures too small for statistical treatment
Those whose previous investigations were negative (total=11)	1	10	
Patient's estimate of his mental state			
Patients regarding themselves as nervous (total=30)	7	23	p<0.01
Mental state			
Mentally ill (total=26)	5	21	p<0.01
Physical examination			
Abnormal physical signs (total=38)	34	4	p<0.001

## DISCUSSION

Fifty-five per cent. of the patients attending this clinic had no demonstrable physical illness. This high proportion is possibly due to the fact that doctors practising in this area have access to several hospitals and therefore refer more patients than those in rural districts. The size of the group, and the large number of investigations carried out on its members, show that the "functional" patient presents a considerable problem both from the clinical and the administrative points of view. Investigations were specifically asked for in the great majority of referring letters, and only 13 cases came with a request for specialized treatment. This is in marked contrast with Fry's (1952) analysis of why G.P.s referred patients to hospital; he

found 73 per cent. went for special treatment and only 9 per cent. for investigation.

The results of this study show Groups A and B to differ significantly in several respects. The incidence of structural disease in patients under 30 is very low; young people are, of course, generally healthier than older ones, but nevertheless, 25 of them had symptoms which had prompted their G.P.s to refer them to hospital, so it is perhaps surprising to find so little structural pathology amongst them. The incidence of mental illness and chronic stress was no higher in the under 30 age group, supporting Kessel and Shepherd's (1962) observation that neurosis is by no means confined to young adults.

Group 3 patients were less incapacitated and

tended to carry on at work although handicapped by their symptoms. Kemp's (1963) "thick-file" cases were not particularly disabled either, but in the present study only two patients appeared to suffer from the syndrome he describes.

The fewer the number of times a patient has visited his doctor prior to hospital referral, the less likely he is to have structural illness and vice versa. It is to be expected that patients who have received a considerable amount of treatment from their G.P., and who have been referred because treatment had failed, would be more likely to have structural illness. It is, on the other hand, surprising to find such a predominance of "functional" patients amongst those referred to hospital straight away, the implication being that if they had received some treatment at home, referral to hospital would not have been necessary.

Twenty-six per cent. of all patients suffered from mental disorder, a significantly higher proportion occurring amongst those in Group B. Davies (1958) found that G.P.s sometimes sent their patients to medical clinics to exclude structural disease, while suspecting neurosis; in the present series psychiatric abnormality was mentioned in only six referring letters. The alcoholic and one case of depression were mentioned, and a further four were described as neurotic. Of the four, one had paranoid schizophrenia, one was depressed, one had obsessional neurosis and the fourth did not appear to have any specific psychiatric abnormality. In addition to those referred to the psychiatric department, the physicians in the clinic made a psychiatric diagnosis in several other cases which were referred back to their G.P. Not all of those suffering from mental disorder were seriously ill, and a number of them could probably have been treated successfully at home. There remained in Group B 34 patients who had no specific psychiatric disorder, but a significantly higher number in this group considered themselves to be nervous; probably some of these people suffered from personality problems, worried more about themselves and sought medical advice where others would not have bothered.

The non-significant findings indicate that

social and family background and past history do not help to distinguish between the two groups. Culpan *et al.* (1960) found their out-patient women to be more neurotic than the men, but this finding is not borne out in the present study. One might have expected an increase of family and social problems in Group B; there was in fact, a slight increase (7 in Group A and 16 in Group B) but it was not significant.

The proportion of "functional" patients in any clinic depends mainly on the referral habits of the G.P.s in that area. When the proportion is as high as 55 per cent. one suspects that their methods of selection for referral are not sufficiently critical. Obviously no doctor is going to allow a set of figures to take precedence over his clinical judgment, but the results of this study do suggest, in general terms, one or two ways of easing the problem. Patients, particularly in the younger age group, who are not seriously ill and who have no abnormal physical signs, should be treated at home before referring them for expensive and possibly unnecessary investigations. Patients who have been adequately investigated in one hospital should not be referred within a short time to another hospital for the same investigations; even if the symptoms have persisted or worsened it would seem more sensible to send them back to the original clinic. Finally, the incidence of mental disorder is high, and the possibility of psychiatric illness, particularly depression, should be constantly borne in mind.

#### SUMMARY

One hundred medical out-patients had psychiatric interviews at their first attendance. When investigations had been completed they were divided into two groups; 45 per cent. had a structural lesion to account for their symptoms, and 55 per cent. were functional, no such lesion having been demonstrated.

The two groups were compared statistically for various factors. The functional group of patients was younger; less incapacitated; had seen their G.P. fewer times prior to referral; and were more likely to have been investigated elsewhere for the same complaint.

Abnormal physical signs were found almost exclusively in the structural group.

The overall incidence of mental disorder, using a narrow definition, was 26 per cent.: it was significantly commoner in the functional group and more of these patients considered themselves to be nervous.

No significant differences were found in the social or family background or in the past medical or psychiatric history.

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#### REFERENCES

- CULPAN, R. M., DAVIES, B. M., and OPPENHEIM, A. N. (1960). *Brit. med. J.*, *i*, 855.
- DAVIES, B. M. (1958). "Survey of Psychiatric Illness at Three General Out-patient Clinics." M.D. Thesis, University of Wales.
- FRY, J. (1952). *Brit. med. J.*, *i*, 249.
- HERRIDGE, C. F. (1960). *Lancet*, *ii*, 949.
- HOPKINS, P. (1956). *Brit. med. J.*, *ii*, 873.
- JACOBS, M., and RITCHIE RUSSELL, W. (1961). *Ibid.*, *ii*, 346.
- KEMP, R. (1963). *Lancet*, *i*, 1223.
- KESSEL, W. I. N. (1963). *Ibid.*, *i*, 1092.
- and SHEPHERD, M. (1962). *J. Ment. Sci.*, *108*, 159.
- MARSHALL, M. E. S. (1949). *Brit. med. J.*, *ii*, 468.
- POUGHER, J. C. E. (1955). *Lancet*, *ii*, 1043.
- SHEPHERD, M., DAVIES, B. M., and CULPAN, R. H. (1960). *Act. Psychiat., Kbh.*, *35*, 518.

Inga Maclay, M.B., B.S., D.P.M., *Lecturer in Psychiatry, University of Birmingham; Late Registrar, Department of Psychiatry, St. George's Hospital, London*