FAMILY HISTORY OF MENTAL ILLNESS AS A FACTOR IN RELAPSE AND NON RELAPSE OF DISCHARGED FUNCTIONAL PSYCHOTICS

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SUMMARY

842 patients suffering from the functional psychoses were followed up for 4-6 years after their discharge from Mental Hospital, Agra during January 1969 to December 1970 in order to study the recurrence of the disease in them. This was done by reviewing the case history sheets of out patient and inpatient departments of mental hospital, Agra and also by the personal correspondence wherever necessary. Out of these 842 patients, 336 were found to have relapsed. This study reveals the effect of family environment on the prognosis of functional psychoses. The relapse of functional psychoses was not found to be related to the genetic loading.

Any attempt to critically assess the role of genetic and/or environmental factors in the causation, progression and prognosis of psychiatric disorders is fraught with many methodological problems. The subject has been extensively put to test. The observations suggest definitely that the genetic and environmental factors do have a role in the onset, progression and termination of psychiatric disorders. The precise nature of their roles, however, continue to be enigmatic in most psychiatric disorders.

Most follow-up studies on functional psychiatric disorders have been concerned with presenting conclusions about the pattern of course and outcome after specified number of years, studying the relationship between particular clinical, historical or social factors and prognosis, comparing the outcomes between different types of disorders, and making cultural comparisons. Among the studies considering the relationship between particular clinical, life history, social, or treatment variables and prognosis many investigators (Langfeldt, 1956; Valianu, 1965; Stephens et al., 1966; Schofield et al., 1954; Simmon and Wirt, 1961; Brown et al., 1972; Leff and Wing, 1971; Bhaskaran et al., 1972) have attempted to determine whether specific premorbid factors, past history, socio-demographic factors, treatment, initial episode or clinical factors are related to specific type of outcome. A comprehensive review of studies presenting the conclusions about the outcome of schizophrenic disorders is given in Schizophrenia—an international follow-up study (W.H.O. 1979). There is hardly any study in literature to investigate the role of family history of mental illness in relapse or non relapse of functional psychotic disorders.

An endless list of confounding factors believed to be contributory in determining the short term or ultimate outcome could be drawn. The present study makes an attempt to relate the family history of mental illness with relapses in the functional psychoses.

METHODOLOGY

The Sample: The material for the study was collected from patients discharged from the mental hospital during the period
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from 1st January 1969 to 31st December 1970, and qualifying the following criteria:

(a) Admitted to the hospital with the diagnosis of functional psychoses (I.C.D. Categories 295, 296 and 297) which was confirmed in the clinical case conferences or by the senior psychiatrist of the hospital: (a) with the psychiatric illness being the initial episode; (b) without any earlier history of treatment for psychiatric illness;

(b) Discharged from the hospital recovered or improved sufficiently to the extent to be regarded as recovered, as mentioned in their case record files.

A total of 1306 patients were discharged from the hospital during the relevant period with I.C.D. diagnosis of 295, 296 and 297. Among these patients 154 already had an earlier episode, for 20 patients details about the family history of mental illness was not known since they were admitted through police, and 216 patients were discharged unrecoved. Thus a sample of 916 patients, fulfilled the above criteria and constituted the study sample. Information on all the included patients about their diagnosis and family history of mental illness was available in definite terms.

Case record files of all the patients contacting 'out' and 'in patient' departments of Mental hospital Agra from January, 1969 to December 1975 were scanned to see if any of the patients included in the study cohort ever visited the hospital as a relapsed case during this period. This enabled the investigators to conduct a 4-6 year follow up of functional psychotics discharged as 'sufficiently improved' or recovered since the date of their discharge from this hospital.

The relatives of those patients who were not found to have made any contact with this facility were contacted by postal correspondence to enquire as to how the patient has remained since discharge and whether there was any recurrence of psychiatric condition similar or dissimilar to the one which required hospitalization before, or showed definite evidence of the presence of any or more of the following symptoms or behaviour patterns since then:

(a) Hallucinations or pseudohallucinations (any modality)
(b) Delusions
(c) marked thought and speech disorder
(d) marked inappropriate, bizarre or idiocyncratic behaviour.
(e) marked qualitative and/or quantitative psychomotor disorder
(f) severe loss of interest, initiative or drive causing serious deterioration in day to day activities
(g) active social withdrawal
(h) overwhelming fear
(i) gross and persistent self neglect.

Non responders were sent up to three reminders. Such patients who were specified by responders as having had a relapse of psychiatric illness or those who were reported to have manifested any of the symptoms or at least two of the behaviour patterns (marked @) were considered to have had a relapse. Thus it was possible to obtain information about the relapse or non-relapse of 842 (about 92%) patients of the original cohort during the intervening period ranging between 4-6 years.

The data thus gathered on 842 subjects were analysed using chi-squares and Yules 'Q' statistics to study the association of (1) family history of mental illness with relapse or non-relapse among functional

*The inpatient record sheet is a structured interview schedule in which there is an item for obtaining family history of mental illness.

**These symptoms were explained to the respondents in laymen language.
psychotics, and (2) whether physical proximity of the family member who ever had or was suffering from mental illness with the study subjects, made any difference with relapse or non-relapse. The record about family history of mental illness was available in the inpatient case record file of discharged patients.

RESULTS

TABLE No. 1—Breakup of the Frequencies by History of Mental Illness Among Family Members of 842 patients

| History of mental illness among family members and other blood relatives | Relapse | Non-relapse | Total |
|---|---|---|---|
| YES | 39 | 81 | 120 |
| NO | 297 | 425 | 722 |
| Total | 336 | 506 | 842 |

X² = 3.21 (non-significant).
Q = .18

TABLE 2—Breakup of Patients Having History of Mental Illness by their "Living" or "Not Living" status with Family

| Psychiatically ill relatives living or not living with patient | Relapse | Non-relapse | Total |
|---|---|---|---|
| Living | 10 | 37 | 47 |
| Not living | 29 | 44 | 73 |
| Total | 39 | 81 | 120 |

X² = 4.48; d.f. = 1; p < .05.
Q = -.42

TABLE 3—Diagnosis-wise distribution of the patient with family history of mental illness by relapse and non-relapse

| Diagnosis | Relapse | Non-relapse |
|---|---|---|
| | FH of MI | FH of MI |
| | Yes | No | Yes | No | Total |
| Schizophrenia (ICD-295) | 16 | 230 | 58 | 332 | 636 |
| Affective Psychoses | 20 | 62 | 12 | 74 | 168 |
| Mania | 12 | 48 | 5 | 53 | 118 |
| Depression | 8 | 14 | 7 | 21 | 50 |
| Other non-organic psychoses | 3 | 5 | 11 | 19 | 38 |
| Total | 39 | 297 | 81 | 425 | 842 |

All disorders taken together:
X² = 49.70; d.f. = 6; p < .001
Schizophrenia only:
X² = 10.26; d.f. = 1; p < .01; Q = -0.43
Affective psychoses taken together:
X² = 2.96; d.f. = 1; N.S. Q = -0.22
Mania only:
X² = 3.18; d.f. = 1; N.S. Q = -0.45
Depression only:
X² = 0.76; d.f. = 1; N.S. Q = -0.26
Other non-organic psychoses:
X² = 0.14; d.f. = 1; N.S. Q = -0.02

DISCUSSION

The observations of Table 1 to 3, clearly show the significant role of the family environment and non-significant role of family history of mental illness in determining relapse rates. The fact that the relapse rate was less in patients who had been living with mentally ill relatives and vice versa in the case of mentally ill relatives not living with them (Table 2) might be on account of the increased awareness of mental illness the index patients may have received comparatively more preventive measures, more tolerance and adjustment by family members. This better prognosis with the family history of mental illness (signifying the effect of family environment) has been reported by several other workers (Vaillant, 1964; Henderson and Gillespie, 1969; Winokur and Tsuang, 1975). The significant negative association of schizophrenia with the family history of mental illness in the case of relapse (P < 0.01; Q = -0.43) again emphasizes that genetic loading has got lesser role in the relapse. In this study most of the mentally ill relatives of schizophrenics were living with them and this fact again supports the effect of family environment on the
In the case of Mania, significant positive association of family history with the relapse may be explained by the fact that in this study most of the mentally ill relatives of these patients were not residing with them, i.e. in the environment which could prevent the relapse. Moreover, non-significant positive association of affective disorders (Mania and depression) and "other non organic psychoses" reconfirms the role of environment on the relapse and also indicates that genetic loading has no significant role in determining the relapse.

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