PSYCHIATRIC EVALUATION OF THE SPOUSES OF FEMALE NEUROTICS

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SUMMARY

Fifty married female neurotics from outpatient clinic of G. M. & Associated Hospitals, Lucknow and their husbands were evaluated to investigate psychological disturbances in these husbands and to find out its relationship with the nature, severity and duration of psychiatric illness in the wives. Personality characteristics and neurotic symptoms of the spouses were assessed on Eysenck Personality Inventory and Middlesex Hospital Questionnaire. 30 husbands were found to be sick but their illness does not seem to be related with the duration of marriage, severity and nature of wives' illness. Higher interspouse correlation on N-Scale of EPI was observed with increasing duration of illness in wives.

Neurotic disturbances occur more frequently in the spouses of neurotic individuals (Penrose, 1944; Slater and Woodside, 1951; Gregory, 1959; Ryle and Hamilton, 1962; Kreitman, 1962, 1964, 1968; Trivedi et al., 1978a) and the 'spouse effects' are more clearly seen when husband is the presenting partner (Kreitman, 1964). Probably this is the reason why studies done on the husbands of the neurotic women are not many; these too are only on the husbands of phobic women. Mainly two hypotheses, assortative mating and pathogenic interaction, are put forward to explain the higher occurrence of neurotic disorders in marital pairs. The hypothesis of assortative mating, that people of like characteristics tend to marry each other, may be the reason for such an observation and has been criticized by many workers (Pond et al., 1963; Kreitman, 1968; Ovenstone, 1973) but Hafner (1977) supports this by demonstrating complementary personality abnormality in the husbands of agoraphobic women. According to the other hypothesis, neurotic disorders are considered as rigid patterns of pathogenic interaction.

Neilsen (1964) opines that constitutional predisposition and conictual interactional patterns with the marital partner are of relevance to onset of illness while environmental and socioeconomic factors have prognostic significance. Alternative points of view have tried to associate neuroticism in the marital pairs with low affection and non-egalitarianism (Berman, 1975; Incichen, 1976) and lack of early parental nurturance (Goodstein, 1977). The effect of intrapsychic, interpersonal and sociocultural factors have been emphasized by Agarwal (1968) and no single model can describe transactions within the marriage (Green et al., 1976). However, some investigators have not found any significant difference between the husbands of phobic and control women (Agulnik, 1970; Buglass et al., 1977).

Marriages in India are usually arranged by the parents and influenced by a number of factors such as astrological compatibility, caste regulations, geographical proximity and expectation of dowry (Gupta, 1974, 1976, 1978; Kapadia, 1968) and all these preclude the possibility of assortive mating. In recent years the patterns have been changing and young Indian women now expect marriage to fulfill not only the basic needs for development of family but also
various psychological needs like companionship, love, sentiments, interests, values, understanding, intellectual and social pleasures and anything falling short is liable to create tension, discomfort and frustration (Kapur, 1974, 1978; Kurian, 1974; Barot, 1972). Keeping all this in view it was decided to evaluate the psychiatric status of the husbands of neurotically ill females.

MATERIAL AND METHOD

The cases for this study were selected from consecutive series of female married neurotics attending psychiatric Out-Patient Clinic of Gandhi Memorial and Associated Hospitals, Lucknow, during the period of eight months (from September 1, 1978 to April 30, 1979). All the patients diagnosed as cases of neurosis, belonging to Lucknow city and who were living with their spouses at the time of enquiry were included. Diagnosis of each case was made by the investigators on the pattern of ICD-9 (W. H. O., 1977). The patients whose diagnosis was changed or differed were excluded from the study. The cases of obsessive compulsive disorder were excluded on account of their number being small. The sample of this study consists of 50 couples who could be studied in detail.

Socio-demographic variables, history of illness, family structure and atmosphere, duration of marriage were recorded on a semi-structured proforma and the severity of illness was rated on a five-point scale (Kreitman et al., 1970). Eysenck Personality Inventory (Eysenck and Eysenck, 1968) and Hindi version of Middlesex Hospital Questionnaire (Srivastava and Bhat, 1974) were administered to the marital partners for assessing their personality characteristics and neurotic symptoms.

OBSERVATIONS AND RESULTS

Majority of the couples belonged to 25-30 years age group and the husbands were usually older than their wives. There was no remarkable difference in their ages except one couple where the age difference was of fifteen years. Of all the marital pairs, two had chosen their own partners while in others it was arranged.

### Table 1—Comparison of sick and healthy husbands

|                     | Sick husbands | Healthy husbands |
|---------------------|---------------|------------------|
|                     | N  | %  | N  | %  |
| **Education**       |    |    |    |    |
| Up to V             | 6  | 40.0| 6  | 17.1|
| VI—X               | 5  | 33.3| 13 | 37.2|
| XI—XII             | 2  | 13.3| 6  | 17.1|
| Graduate & Postgraduate | 2  | 13.4| 10 | 28.6|
| **Significance**: $X^2=3.28$, d.f.=2, N.S. (Pooling : XI—XII + Graduate & Postgraduate). |
| **Income (In Rs/month)** |    |    |    |    |
| Poor (Up to Rs. 200) | 5  | 33.3| 6  | 17.1|
| Lower middle class (Rs. 201-500) | 7  | 46.7| 15 | 42.9|
| Middle class (Rs. 501-1000) | 3  | 20.0| 9  | 25.7|
| Upper middle class (Rs.1001—1500) |     |     |     |
| **Significance**: $X^2=2.52$, d.f.=2, N.S. (Pooling : Middle class + upper middle class). |
| **Number of children** |    |    |    |    |
| 0                  | 4  | 26.7| 10 | 28.6|
| 1-3                | 8  | 53.3| 16 | 45.7|
| 4 and above        | 3  | 20.0| 9  | 25.7|
| **Significance**: $X^2=0.28$, d.f.=2, N.S. |
| **Duration of marriage**: (in yrs.) |    |    |    |    |
| 0-5                | 7  | 45.7| 9  | 25.7|
| 6-10               | 2  | 13.3| 11 | 31.4|
| More than 10       | 6  | 40.0| 15 | 42.9|
| **Significance**: $X^2=2.76$, d.f.=2, N.S. |
| **Duration of wife's illness**: (in yrs.) |    |    |    |    |
| 0-2                | 7  | 45.7| 18 | 51.4|
| 3-6                | 5  | 33.3| 9  | 25.7|
| More than 6        | 3  | 20.0| 8  | 22.9|
| **Significance**: $X^2=0.3$, d.f.=2, N.S. |
| **Severity of wife's illness**: |    |    |    |    |
| Mild               |    |     |     |     |
| Moderate           | 3  | 20.0| 12 | 34.3|
| Severe             | 12 | 80.0| 23 | 65.7|
| **Significance**: $X^2=1.02$, d.f.=1, N.S. |
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Educational level, economic status, number of children, duration of marriage and severity and duration of wives' illness did not differentiate sick and healthy husbands (Table-1).

TABLE 2—Severity of psychiatric illness in the spouses

| Severity of Illness | Wives | Husbands |
|---------------------|-------|----------|
| Perfectly fit       | 0     | 30       |
| Some symptoms not affecting activities | 1     | 5        |
| Symptoms affecting leisure and activity but can do unprotected job | 2     | 15       |
| Leisure and work activity severely curtailed | 3     | 19       |
| Unable to work      | 4     | 16       |
| Total               | 50    | 100.0    |

Significance: $X^2=18.73$, d.f. = 1, p<0.001
(Posting : grade 3+4)

Clinical assessment revealed that 15 (30%) of the husbands were sick and there was no congruence between diagnoses of marital partners. Diagnostic break-up of the husbands showed that 4 (8%) suffered from anxiety state, 7 (14%) from neurotic depression, 3 (6%) from sexual disorder and one from schizophrenic psychosis. In six cases wives' illness antedated husbands' illness and of these five husbands had diagnosis of neurotic depression and one of anxiety state. It may be assumed that interaction might have played a role in producing neurotic disorders in these husbands. In eight cases husbands had a neurotic or sexual disorder which started before wives' illness and the husbands' potency disorder, two of which also had oligospermia, appears to have significantly affected the spouses. So, in these couples, it would be hard to assume that wives' illness was responsible for production of symptoms in the partner while the reverse can be true. All the index cases had severity ratings of 2 or more while 14 husbands were rated 2 and one 3. Rest were graded 0 or 1 which was taken as healthy group (Table-2).

TABLE 3—Correlation between severity of illness and MHQ scores

| | Wives's severity of illness and MHQ total scores | $r=0.66$ |
|-------------------|-----------------------------------------------|---------|
| Husbands's severity of illness and MHQ total scores | $r=0.83$ |

*Marital pair of schizophrenic husband has not been included.

To examine the validity of clinical ratings, correlation between severity of illness and total M.H. Q. scores were calculated which showed positive correlation (Table-3).

TABLE 4-A—E.P.I. scores of the wives and their husbands ($I \leq 4$)

| | N. Score | E. Score |
|-------------------|----------|----------|
| (a) Sick wives     | 17.09    | 3.22     |
| (N=45)             | 11.89    | 3.24     |
| (b) Sick husbands  | 14.5     | 4.73     |
| (N=14)*            | 10.29    | 3.27     |
| (c) Healthy Husbands | 10.32   | 2.82     |
| (N=31)             | 12.0     | 2.37     |

| | t | d.f. | p |
|-------------------|---|------|---|
| b vs. c           | 6.86 | 43 | <0.001 |
| a vs. c           | 3.18 | 43 | <0.01 |
| a vs. b           | 16.36 | 74 | <0.001 |
| a vs. b           | 0.19 | 74 | N.S. |
| a vs. b           | 4.99 | 57 | <0.001 |
| a vs. b           | 2.85 | 57 | <0.01 |

*Husband suffering from schizophrenic psychosis has been excluded.
Sick wives, sick husbands and healthy husbands could be differentiated on all the subscales and total scores of MHQ except OBS-subscale, at the significant level of 0.01 to 0.001 (Table-5).

To test the hypothesis of assortative mating and pathogenic interaction, husband-wife correlations* on the scores of EPI-N-Scale and total MHQ were calculated. High interspouse correlation, especially in early years of marriage, would favour the hypothesis of assortative mating. No such trend was noted in this enquiry (Tables 6a, b, 7a, b). The investigators further

*Couple in which husband suffered from schizophrenic psychosis was excluded from correlation coefficient analysis, and duration of neurosis was equated with duration of marriage in the cases where illness occurred before marriage.

**Table 4-B—Scores of wives and their husbands (N=4)**

|                      | N Score | E Score |
|----------------------|---------|---------|
|                      | Mean s.d. | Mean s.d. |
| Sick wives (N=5)    | 18 3.16  | 9.0 4.05 |
| Healthy husband (N=4)| 9.0 2.55  | 10.0 5.85 |
|                      | 6.42***  | 0.68    |
| d.f.=7, ***p<0.001   |         |         |

The sick husbands scored higher on N-Scale of EPI (p<0.001) and lower on E-Scale of EPI (p<0.01) in comparison to healthy husbands. N-Scores of index cases were higher than sick and healthy husbands but E-scores were similar to healthy husbands (Table-4 a b).

**Table 5—MHQ Scores of the wives and their spouses**

|                      | Anx.     | Obs.  | Pho. | Som.  | Dep. | Hys. | Total  |
|----------------------|----------|-------|------|-------|------|------|--------|
| (A) Sick Wives       |          |       |      |       |      |      |        |
| (N=50)               |          |       |      |       |      |      |        |
|                      | Æ        | 11.62 | 6.94 | 8.12  | 11.3 | 9.06 | 9.44   | 56.48  |
|                      | SD       | 2.55  | 3.08 | 2.59  | 3.0  | 2.97 | 3.11   | 11.11  |
| (B) Sick Husbands    |          |       |      |       |      |      |        |
| (N=14)               |          |       |      |       |      |      |        |
|                      | Æ        | 8.57  | 6.78 | 4.78  | 9.36 | 7.5  | 4.86   | 40.86  |
|                      | SD       | 3.09  | 3.49 | 2.69  | 4.13 | 3.22 | 2.47   | 11.36  |
| (C) Healthy Husbands |          |       |      |       |      |      |        |
| (N=35)               |          |       |      |       |      |      |        |
|                      | Æ        | 4.31  | 5.71 | 2.4   | 4.23 | 4.34 | 3.46   | 24.46  |
|                      | SD       | 3.03  | 3.08 | 2.1   | 2.82 | 2.01 | 2.01   | 8.36   |

*Husband suffering from schizophrenic psychosis has been excluded.

**t Values**

|                      | b Vs. c | a Vs. c | a Vs. b |
|----------------------|---------|---------|---------|
| Anx.                 | 7.55*** | 19.70   | 6.05*** |
| Obs.                 | 1.85    | 3.14**  | 0.22    |
| Pho.                 | 4.89*** | 15.59***| 6.72*** |
| Som.                 | 8.80*** | 18.41***| 6.03*** |
| Dep.                 | 6.26*** | 13.06***| 2.92*** |
| Hys.                 | 2.96**  | 16.44***| 8.65*** |
|                      | 14.38   | 45.45   | 15.21***|
| d.f.                 | 47      | 62      |         |

** p<0.01

*** p<0.001
TABLE 6—Husband-Wife correlations (MHQ Total scores)

|                       | A. MHQ Total Scores (N=49) | B. Duration of marriage (in yrs.) | C. Duration of wife’s illness (in yrs.) |
|-----------------------|-----------------------------|-----------------------------------|---------------------------------------|
|                       | 0.15                        | 0.36 (N=15)*                      | 0.24 (N=25)                           |
|                       |                             | 0.16 (N=13)                       | 0.08 (N=13)                           |
|                       |                             | 0.25 (N=21)                       | 0.16 (N=11)                           |
|                       |                             | 0-5                               | 2-6                                   |
|                       |                             | 6-10                              | 7 and above                           |

*Marital pair of schizophrenic husband not included.

TABLE 7—Husband-Wife correlations (EPI-N-scores)

|                       | A. E.P.I.—N-Scores (N=49) | B. Duration of Marriage (In yrs.) | C. Duration of wife’s illness (In yrs.) |
|-----------------------|-----------------------------|-----------------------------------|---------------------------------------|
|                       | 0.23                        | 0.34 (N=15)*                      | 0.24 (N=25)                           |
|                       |                             | 0.11 (N=13)                       | 0.08 (N=13)                           |
|                       |                             | 0.24 (N=21)                       | 0.16 (N=11)                           |
|                       |                             | 0-5                               | 2-6                                   |
|                       |                             | 6-10                              | 7 and above                           |

*Marital pair of schizophrenic husband not included.

tried to confirm the following two assumptions based on interaction hypothesis:

(A) "That in early years of marriage husband-wife correlation would be lower and would show a rise as the duration of marriage increased." Tables 6, 7 show that there was no significant correlation in short duration marriage group (up to 5 yrs.) and instead of an increase, it decreased in medium (6-10 yrs.) and long duration (more than 10 yrs.). Thus this hypothesis is not supported.

(B) "That with increasing duration of illness interspouse correlation would increase." An increase in husband-wife correlation was evidenced on N-Scale of EPI (more in 2-6 yrs.), with increasing duration of illness but no such trend was found on MHQ scores. (Tables 6 and 7). This observation may partly favour pathogenic interaction hypothesis.

DISCUSSION

The findings of this study are in agreement with the observation that neurotic disturbances occur more often in marital pairs than in general population (cf. Pond et al., 1963; Kreitman, 1962, 1964; Kreitman et al., 1970; Nielsen, 1964; Hafner, 1977; Trivedi et al., 1978). In controlled studies of the spouses of phobic patients, Agulnik (1970) and Buglass et al. (1977) did not find such results. However, phobic individuals cannot be taken as the representative of neurotic population. Another interesting observation in this regard is that many authors have described neurotic tendencies in one third of the population (Agarwal, 1973; Carstairs and Kapur, 1976; Eyseck, 1977). Thus, it may be postulated that the husbands who had neurotic predisposition were more likely to adopt neurotic patterns of behaviour when confronted with stressful situations.

The sick husbands scored higher on N-Scale of EPI and lower on E-Scale of EPI in comparison to healthy husbands which conforms to the finding that neurotics have higher neuroticism and are less extraverted (Verghese, 1969; Verghese and Abraham, 1972). No appreciable difference between neurotic and healthy subjects was observed by other authors (Abraham et al., 1977). The index cases had E-scores similar to healthy husbands. This similarly might have been evidenced because...
27 (54%) wives suffered from hysteria who are supposed to be extraverted neurotics (Eysenck and Eysenck, 1964, 1968; Paykel et al., 1976) and their scores must have influenced the results. On MHQ healthy husbands scored within normal range while sick subjects in pathological range but the figures were on lower side of the range given by the test authors (Srivastava and Bhat, 1974).

No significant relationship in regard to the nature and severity of illness, and duration of marriage in the marital pairs could be established which would have favoured the hypothesis of assortative mating or pathogenic interaction. The erratic correlation seen with increasing duration of marriage appears to be due to uneven distribution of the couples, where both the partners were sick, in different subgroups. An attempt was made to stratify the patients for severity of illness and duration of marriage but this could not be done because of the number being small. Some workers have found similarities between the symptoms of the spouses (Penrose, 1944; Gregory, 1959; Nielsen, 1964; Kreitman, 1968; Ovenstone, 1973) but this was not observed by others. Hafer (1977) and Ovenstone (1973) did not find any relationship between severity of illness and sickness in the partner. In the study of marital pairs of phobic individuals, Agulnik (1970) and Hafer (1977) demonstrated initial high degree of inter-spouse correlation in early years of marriage which declined with increasing duration of marriage. This observation favours the hypothesis of assortative mating but Agulnik (1970) argues that the dependency needs of the phobic patient add to the neurotic personality problems of the spouse in early years of marriage and the spouse gets adjusted with the marital partner in due course. This explanation is based on interaction model producing results opposite to that it would predict. Husband-wife correlations were seen to increase with increasing duration of marriage (Ovenstone, 1973; Mehta, 1977) which declined slightly in longest duration group (Kreitman et al., 1970; Trivedi et al., 1978b) and it supported the interaction hypothesis.

Though healthy and sick husbands did not differ with respect to duration of wives' illness but interspouse correlation on N-scores of EPQ showed a rise in 2-6 years group which decreased in more than 6 years group. Had these correlations been influenced by the pattern of distribution of couples, similar trend should have been observed on MHQ-scores as well. This finding partly favours pathogenic interaction hypothesis and can be explained on the basis that EPQ measures neuroticism while MHQ quantifies present neurotic symptoms. Ovenstone (1973) correlated duration of illness with the neurotic disturbance in the marital partner but this was not found by other researchers (Trivedi et al., 1978b; Hafer, 1977).

Of 14 marital pairs, in which both partners were neurotically ill, in eight husbands' illness antedated wives' illness while reverse was the situation in the rest. From this figure, one cannot conclude that husbands' illness was because of neurotic disorder in wives. On the other hand, several workers have reported that wives of male neurotics have higher psychiatric morbidity. Thus, it stands to reason that while studying a group of female married neurotics, one may come across a large number of wives whose illness is secondary to their husbands'. These observations may suggest that illness in the spouse is influenced by the other and it is more so when husband is the patient.

CONCLUSIONS

The results of this study did not substantiate the hypothesis of assortative mating or pathogenic interaction, unambiguously. More plausible is that illness in the spouse is a stressful event and it might affect the other, if neurotically predisposed.
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