TRAIT ANXIETY PROFILE OF KORO PATIENTS.

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SUMMARY

Koro is regarded as a psychogenic acute anxiety reaction since last forty years. Inspite of quite a few research publications on koro during last twenty years, no report on psychometric assessment of anxiety level in koro is available to substantiate this diagnostic status. The present study in this context is the first attempt of psychometric measurement of anxiety proneness or trait anxiety level in Koro patients. Trait anxiety measurement of 186 male Koro patients showed the presence of higher level of trait anxiety in Koro than the normal subjects.

The nosological debate over Koro's psychiatric status remains a perplexing enigma since long. Strong (1945) first suggested Koro as a form of 'anxiety neurosis'. Subsequently many researchers used the anxiety-dynamics to explain the genesis and diagnosis of Koro psychopathology by using different terminologies, e.g., sexual neurosis (Manson-Bhar, 1960); mass hysterical delusion with panic reaction (Gwee, 1968); culture bound psychogenic reaction (Ngui, 1969; Harrington, 1982); dissemination of castration anxiety (Bourgeois, 1968); acute panic reaction with fears of social stability (Suwanlert and Coates, 1978) or social tensions (Hes and Nassi, 1977); hypochondrical stress response (Rosenthal and Rosenthal, 1982) or simply acute anxiety reaction (Ilabumuyi and Rwegellera, 1979; Chakraborty, 1982; Berri and Morley, 1984). The authors who viewed Koro as a psychotic breakdown state, they also ascertained the presence of high anxiety in Koro patients (Yap, 1965; Ang and Weller, 1984). Though the source of this anxiety is discussed and elaborated by different psychoanalytical assumptions, yet there is not a single study reported so far that assessed psychometrically the anxiety proneness of the Koro patients.

Manifestations of clinical anxiety is suggestive for the presence of an anxiety-proneness disposition of a person, which in trait psychology is called "Trait Anxiety" (TA) and this TA is regarded as a stable personality dimension of a person (Spielberger et al., 1970). If the anxiety dynamics has to play the central role in Koro psychopathology, then the Koro patients should have a high TA level than the normal persons. The present study was thus designed for the psychometric measurement of TA of Koro patients in relation to normal persons and anxiety neurotics.

Material and Methods

Study Population: A total of 186 male Koro patients were taken from the North Bengal Koro Epidemic (West Bengal State) cases (Chowdhury et al., 1988) and were divided according to residence (rural 82 and urban 104) and marital status (single rural 54, urban 72 and married rural 25 and urban 32). A four-point inclusion criteria (age above 15 years, minimum education of 4th grade schooling, history of only one Koro attack and no history of Koro illness in the family) was observed in case selection.

Two control groups, each of similar size (186), matched for age, marital status and
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residence were taken for comparisons. The first group was of 'Normal' subjects, who had no history of overt mental illness and neither they nor any of their family members suffered from Koro. The second group was a patient control, 'Anxiety Neurosis' group (ICD 9 Code: 300.0) taken on a random basis without replacement from a matched sample frame, derived from the patient pool of an ongoing anxiety research project in the Department of Psychiatry, North Bengal Medical College and Hospital, Darjeeling. The age range of the study groups is shown in Table-1.

Instrument: Bengali adaptation (Chowdhury, 1989) of the State-Trait Anxiety Inventory Form X (Spielberger et al., 1970) was used.

Table-1. Distribution of the mean age of the groups.

|                  | Rural          | Urban          | Grand          |
|------------------|----------------|----------------|----------------|
|                  | Single         | Married        | Total          | Single         | Married        | Total          | Total          |
|                  | Mean           | s.d.           | Mean           | s.d.           | Mean           | s.d.           | Mean           | s.d.           |
| KORO             |                |                |                |                |                |                |                |                |
| n                | 57             | 25             | 82             | 72             | 32             | 104            | 186            |
| Mean             | 24.43          | 6.72           | 25.45          | 4.93           | 5.01           | 5.59           | 6.11           |
| s.d.             | 25.93          | 6.22           | 25.88          | 28.52          | 28.53          | 24.70          | 25.93          |
| NORMAL           |                |                |                |                |                |                |                |
| Mean             | 25.03          | 6.87           | 25.88          | 4.98           | 5.03           | 5.60           | 6.15           |
| s.d.             | 27.83          | 6.12           | 28.52          | 9.63           | 9.03           | 9.47           | 6.15           |
| ANXIETY NEUROSIS|                |                |                |                |                |                |                |
| Mean             | 25.08          | 6.82           | 25.88          | 4.92           | 4.99           | 5.57           | 6.27           |
| s.d.             | 27.71          | 7.29           | 28.63          | 9.92           | 9.99           | 9.99           | 6.27           |

TABLE-2. Time Interval (in hours) between Koro attack and TA assessment.

|                  | Rural          | Urban          | Grand          |
|------------------|----------------|----------------|----------------|
|                  | Single         | Married        | Total          | Single         | Married        | Total          | Total          |
| Mean             | 27.23          | 28.64          | 27.66          | 31.76          | 29.19          | 28.52          |
| s.d.             | 23.37          | 23.04          | 22.44          | 19.99          | 20.43          | 20.38          | 21.27          |
TABLE3. Distribution of TA score of the groups by residence and marital status

| Group    | Rural | Urban | Total |
|----------|-------|-------|-------|
|          | Single| Married|       |
| KORO     | 36.21 | 47.16  | 45.56 |
| s.d.     | 6.81  | 6.02   | 4.98  |
| NORMAL   | 33.72 | 34.84  | 34.45 |
| s.d.     | 5.47  | 5.70   | 5.19  |
| ANXIETY  | 50.82 | 52.96  | 51.70 |
| NEUROSION| 6.96  | 5.37   | 5.52  |

**TABLE-4. Analysis of variance of TA scores.**

| Sources of variation | df | SSq  | MSq  | F   |
|----------------------|----|------|------|-----|
| Residence            | 1  | 5.5  | 5.5  | 0.20 NS |
| Marital              | 1  | 95.0 | 95.0 | 3.49 **p < .05** |
| Interaction          | 1  | 24.0 | 24.0 | 0.88 NS |
| Strata               | 3  | 124.5|      |      |
| Patient group        | 2  | 284.30.6 | 14215.3 | 523 **p < .001** |
| Interaction          | 6  | 258.4 | 44.7 | 1.64 NS |
| Cells                | 11 | 28823.5 |      |      |
| Within               | 546| 14848.8 | 27.2 |      |
| Total                | 557| 42672.3 |      |      |

Discussion

Trait anxiety level is indicative of a person's anxiety proneness personality disposition. Koro cases, both rural and urban, showed a significantly higher TA level than the normal persons. This difference in trait anxiety level of Koro patients is an important finding, which may be helpful in the explanation of their Koro vulnerability and also justifies the presence of high anxiety during the attack. Marital status by virtue of its sexual concern may have some differential effect on the Koro vulnerability.

Though the Koro patients differed in trait anxiety level from the anxiety neurotics, but the position of Koro on the linear continuum of trait anxiety (from normal towards anxiety neurosis) is sufficiently closer to anxiety neurosis than to normals. The difference in the trait anxiety level between Koro and anxiety neurotics should be interpreted in the light of the facts that this level is the post-Koro trait anxiety score of the patients. The nature of their pre-Koro trait anxiety level is unknown. So it can be concluded that the Koro patients has higher...
level of trait anxiety than that of the normal persons and Koro may be viewed closer to anxiety neurosis group so far the trait anxiety is concerned.

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