MATERIALS AND METHODS
Chapter-IV

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SAMPLE

The study was conducted at Dayanand Medical College and Hospital, Ludhiana. The study was carried out between 5th April 1997 and 11th March 1998 in which one hundred consecutive cases of epilepsy who presented in Psychiatry and Neurology OPD of the hospital and fulfilled the inclusion criteria and did not suffer from conditions as outlined in Exclusion Criteria, were taken up for the study.

Inclusion Criteria

(1) Diagnosis of Epilepsy based on clinical findings and EEG.
(2) Two or more seizures.
(3) Adult population in the age group of 15-50 years.

Exclusion Criteria

(1) Mental retardation
(2) Epilepsy following head injury
(3) Epilepsy following neurosurgery
(4) Epilepsy in a patient of O.B.S.
(5) Patient on Psychotropic drugs.
Tools

- BPRS
- PGI Health Questionnaire N₂ (Wig and Verma, 1978).
- Beck Depression Inventory (Beck et al., 1961).
- Biegel’s Manic State Rating Scale (Biegel et al., 1971).
- Schedule for standardized assessment for Depressive Disorders (SADD) [WHO, 1977].

Features of the Questionnaire

1. Brief Psychiatric Rating Scale (BPRS)

   The scale consists of 18 items. The interviewer should judge the patients condition at the time of the interview when assessing the presence and degree of the individual items.

   Following six items should, however, be evaluated on the basis of the condition during the last three days. 2 (Psychic anxiety), 10 (hostility), 11 (suspiciousness), 12 (hallucinatory behaviour), 15 (unusual thought content), and 16 blunted or inappropriate affect. When in doubt, the interviewer should solicit information from ward personnel or relatives.

   The duration of the interview should be no more than 30 minutes. In principle the interview technique is not different from clinical tradition. Pressure should not be exerted on the patient, who as far as possible should be allowed to explain the situation in his own words. The interviewer should remain unaffected by spontaneous intermissions as these represent an integral part of the observation.
Although the BPRS also includes depression symptoms (item 1, 2, 5, 6, 9 and 13), the scale is essentially constructed for schizophrenic states. The total scale score should, therefore, be considered as a schizo-affective scale, and the cut off scores are:

A total scale score of 0 to 9 = No schizo-affective case.

A total scale score of 10 to 20 = Possible schizo-affective case.

A total score of 21 or more = Definite schizo-affective case.

2. PGI Health Questionnaire N2 (Wig and Verma, 1978)

A self administered questionnaire having 60 questions, first 50 for neurotic (N) and last ten for lie scores (L).

3. Beck Depression Inventory (BDI) (Beck et al., 1961):

Subjects are asked to rate 21 items 0-3 according to how they feel at that time. In contrast to Hamilton Depression Scale it focusses on cognitive symptoms of depression.


The evaluation of presence and intensity of various items should be based on the interviewers assessment of the patients condition at the same time of the interview.

Only few of the 14 items are clinical signs to be directly observed during the interview. The majority of the items are symptoms (= Patient Complaints) and here the assessment must be based on the condition during the last days (minimum periods three days).
The interview should not last more than 30 minutes. The interview technique is basically not different from the traditional clinical approach. The patient should not feel under pressure, and as far as possible the patient should be encouraged to describe his situation in his own words. Spontaneous intermissions should be accepted as they constitute an important part of the observation of the patient.

The scale is semi-quantitative. It was constructed solely to assess severity of the clinical condition and not to serve as a diagnostic tool. When the scale is applied repeatedly on the same patient, e.g. with weekly intervals, the individual assessment should be independent of the foregoing assessments at his disposal. As far as possible, it should be avoided to ask for changes from the last interview instead of the patient should be asked to tell about the condition during the week that passed. It is a general rule for all items that every scale level includes the lower level e.g. level 3 always includes level 2 and 1. If an item is not present, the score is 0.

It is not possible to use the original HAS in patients with panic attacks because there are no instructions for distinguishing between attacks of anxiety and generalized or persistent anxiety. So, therefore, it is recommended that if there have been panic attacks during the last three days the interviewer must try to ask for anxiety symptoms between attacks.

The HAS criteria for generalized anxiety are:
A total scale score from 0 to 5 = No anxiety
A total scale score from 6 to 14 = Minor anxiety
A total scale score of 15 or more = Severe anxiety
5. Hamilton Rating Scale for Depression (Hamilton, 1960)

Hamilton rating scale of depression (HRSD) is widely used and accepted depression scale for measuring the severity of depression.

This scale has 21 items, each of which is rated from 0 to 4 and 0-2. These ratings are derived from clinical interview with the patient. Specific instructions are given in the manual for the rating of the items.

It has a high validity against the global judgement and high reliability both showing correlation's above 0.90.

The HDS criteria for depression are:

- A total score of 0-7
- A total scale score of 8-15
- A total scale score of 16 or more

  - No depression
  - Minor depression
  - Major depression

6. Beigel's Manic State Rating Scale (Biegel et al., 1971)

This is a 25 items scale. Each item is scored on a five point scale for frequency and intensity based on the observation of patients behaviour during the previous eight hours.

7. Schedule for Standardized Assessment for Depression Disorders (SADD) [WHO, 1977]

This schedule has been developed by W.H.O. in March 1977 for standardized assessment for depressive disorders. Validity results have shown it to have sensitivity (85.8%) and specificity (90.4%). Inter centre reliability was found to be 0.91 to 0.98 on different parts of the instrument. This schedule is composed of four parts.
**Part-I:** covers the basic data necessary for the identification and sociodemographic characteristic of the patients.

**Part-II:** consists of scale for the assessment of the clinical condition of the patient and items to cover the psychiatric history.

**Part-III:** Covers the treatment received by the patient.

**Part-IV:** The part deals with the diagnosis and classification of the mood disorder.

**Procedure:**

The study was conducted in Psychiatry and Neurology OPD of Dayanand Medical College & Hospital, Ludhiana. For this permission and cooperation of all the consultants of the two departments at the start of the study was sought. Residents of the department were also informed of the study and encouraged to report all possible cases for screening.

100 consecutive cases of epilepsy were selected from screening of the patients from 5th April 1997 to 11th March 1998. All these patients fulfilled the inclusion criteria and did not suffer from conditions as outlined in the exclusion criteria.

All these cases were personally interviewed and after collecting the personal demographic data as outlined by SADD Part-I and the details of epilepsy as outlined by Epilepsy information sheet. BPRS was administered to all the subjects. Based on the clinical interview and score on BPRS all the applicable questionnaires were administered one by one to all the subjects.

After administration scoring was done on the basis of guidelines given for all the questionnaires.
Diagnosis of mood disorder was classified on the basis of diagnostic criteria of ICD-10 (International Classification of Disorder 10th ed.).

Analysis

The data were analyzed with the help of statistical tools. The difference between the two groups was tested by using Chi-square, "t"-test was used to compare the mean and Z test wherever applicable.