

epilepsy, or change to focal epilepsy. Several features contribute to intractability, including etiology, topography of brain lesions, and time lag from onset of epilepsy to appropriate antiepileptic drug (AED) treatment, the latter probably involving modifications of synaptic organization.

In diffuse malformations (i.e., lissencephaly, Aicardi syndrome), lack of cortical maturation prevents development of inhibition mechanisms. Multifocal epileptogenic brain lesions (i.e., tuberous sclerosis) produce delayed secondary bisynchrony involving both frontal lobes and begin when the latter comprise potential epileptogenic lesions and when they become mature. Monofocal epileptogenic lesions produce different types of persisting epilepsy according to their topography: temporoparietooccipital lesions produce focal epilepsy, whereas frontal and temporolimbic lesions are more likely to produce protracted generalized epilepsy. Although the effect of time lag to appropriate AED treatment is clearly established, the mechanism by which it contributes to intractability remains obscure and can only be hypothesized. There are two theoretical possibilities: either axonal sprouting as shown in adult temporal lobe epilepsy, or stabilization, owing to paroxysmal activity of redundant excitatory fibers that should normally disappear after infancy.

Monday, July 5, 1993

Workshop: Towards an International Classification System of Psychosocial Problems: Problems and Prospects

3:00 p.m.–5:00 p.m.

Classification of Psychosocial Issues in Epilepsy. Fritz E. Dreifuss (University of Virginia Health Sciences Center, Charlottesville, VA, U.S.A.).

The basis for any classification must be identification of areas of commonality within a particular classification group which distinguishes that group from all other groups for purposes of description and communication of concepts between investigators. Such groupings in the psychosocial sphere of the epilepsies must first distinguish problems inherent in the disorder under study. In the case of the epilepsies, this includes classification into idiopathic and symptomatic epilepsies or into self-limited and progressive epilepsies, under which are classified such factors as age at onset, side and site of disturbance, and number of seizures and their severity in response to medications. Second, factors inherent in the milieu must be distinguished, including such factors as attitudes of the family and attitudes of others in school and employment situations, as well as objections to employment of persons with epilepsy as voiced by employers, factors influencing the employability of persons with epilepsy, interaction between the epileptic child and the school, and the challenges of higher education and rehabilitation. Third, factors inherent in patients' relations with their disorder and the milieu must be identified, including analysis of personality traits in children and adults with epilepsy. Finally, factors inherent in treatment methods for the disorder, including drug- or surgery-induced factors, must be identified.

Application of Classification Systems to Psychosocial Problems in Epilepsy. P. B. C. Fenwick (Maudsley Hospital, London, England).

Classification of psychosocial disability should be multiaxial. In the formulation of such classification, the following major axes must be incorporated: Axis 1, epilepsy, contains data concerning seizure type, seizure frequency, and underlying brain

damage or neurologic degenerative disease. Axis 2, developmental, defines the developmental history of the patient before epilepsy onset as well as the change following development of seizures. Axis 3, personal relationships, includes neurocognitive factors that relate to the patient's ability to understand nonverbal cues. Axis 4, sexual relationships, includes sexual arousal and physiologic profile. Axis 5 is family relationships. Axis 6, work relationships, includes patients' views of their own skills and ability as well as an objective assessment of performance in the workplace. Axis 7, self-image, includes the dimensions of locus of control and positivity and negativity of image.

Methods of Assessing Psychosocial Problems in Epilepsy: Contribution of Statistically Based Procedures. José Pais Ribeiro and *Maria Do Céu Taveira (Serviço Neurofisiologia, Hospital Santo Antonio, Porto, Faculdade de Psicologia e Ciências da Educação, Universidade do Porto, Porto; and *Instituto de Educação, Universidade do Minho, Braga, Portugal).

The contribution of exploratory factor analysis to assessment of psychosocial problems is our starting point to introduce the statistical methods used to test psychosocial dysfunction in epileptic persons. We report some of the basics of these procedures, taking as an example the Portuguese adaptation of the Washington Psychosocial Seizure Inventory (WPSI). Factor analysis is a technique to achieve parsimony by using the smallest number of explanatory concepts to explain the maximum amount of common variance in a correlation matrix. We compared factor analysis with other multivariate statistical techniques (cluster analysis, multiple linear regression; discriminant analysis; log-linear analysis), as well as different methods of factor extraction, and the principle guides to appropriate use of factor analysis (sample size; distribution and range of scores; magnitude of results). We describe the advantages and disadvantages of statistically based procedures in comparison with other methods and the integration of various methods in different steps of the process of assessing psychosocial problems.

Methods of Assessing Psychosocial Problems in Epilepsy: Empirically Based Procedures. Carl B. Dodrill (University of Washington School of Medicine, Seattle, WA, U.S.A.).

We studied the use of methods of psychosocial assessment that are empirically based and rely on external criteria. External criteria can include indications of actual performance in everyday life academically, vocationally, and interpersonally, and with respect to all aspects of epilepsy, including adjusting to seizures and to their treatment. Such criteria include ratings of performance by knowledgeable professionals and possibly ratings by lay persons who know the patient well. These procedures can be used as the basis for developing objective inventories and rating scales of psychosocial function in epilepsy.

We illustrate the empirically based approach by means of the Washington Psychosocial Seizure Inventory (WPSI). More than 40 published studies on this inventory have described the advantages and the disadvantages of the method with respect to investigation of various psychosocial problems in epilepsy. This method might be of assistance in constructing an international classification of psychosocial problems in epilepsy.

Tuesday, July 6, 1993

Poster Session: Epilepsy in Developing Countries
8:00 a.m.–6:00 p.m.

Applicability of the Syndromic Classification of Epilepsy in a Developing Country in South Asia. Nimal Senanayake (Department of Medicine, University of Peradeniya, Peradeniya, Sri Lanka).