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Ethnography of Psychiatric Illness - A Pilot Study

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Abstract

The Explanatory Model Interview Catalogue (EMIC) was adapted, standardized, and translated into Kannada for a cultural study of depression. The Structured Clnical Interview for DSM-III - R (SCID) and Combined Hamilton Rating Scale for Depression and Anxiety (HDARS) were also translated and used. The interrater reliability of all three was good. The clinical ethnographic database generated by the EMIC integrates quantitative and qualitative data with respect to patterns of distress, perceived causes, help seeking and general illness beliefs. The majority of patients studied emphasized somatic complaints and were concerned about personal and family stigma. "Nerves" were most frequently cited as most important perceived cause. Few patients were satisfied with the allopathic help most had received previously. Questions about madness, considered distinctly different from their own problems, elicited a pattern of responses resembling their own problems. Complementary use of the EMIC and instruments like SCID and HDARS provides a method for cross-cultural research that integrates personal experience and professional concepts of illness.

Key words -

EMIC,
Cross-cultural psychiatry,
Reliability,
Depression,
Somatization,
SCID

Emerging theory in the field of medical anthropology and cultural psychiatry has shifted from a focus on culture-bound syndromes and exotic psychiatric presentations in different cultures to an emphasis on the meaning and cultural context of all illness [1]. Methods to study such meanings have made extensive use of the emic/etic dichotomy, which has become an important conceptual framework for social analysis [2]. Drawing upon ideas derived from linguistic anthropology, an emic (from phonemic) analysis is based on concepts originating within the group studied; an etic (from phonetic) analysis is based on concepts originating outside the group studied.

The explanatory model theory of Kleinman [3]. which implicitly refers to this dichotomy, argues that differences in the conceptual frameworks of patients and healers affect the efficacy and acceptability of professional health services. Building on Kleinman's explanatory model theory, our study responded to a challenge to translate theoretical advances into practical approaches that health professionals can apply. Over the past several years at NIMHANS and at other centers an instrument for clinical ethnographic assessment, called the Explanatory Model Interview for Catalogue (EMIC) has been under development [4], [5], [6].

The EMIC makes operational a cultural model of illness having four components:
(1) patterns of distress,
(2) perceived causes,
(3) preferences for help seeking and treatment, and
(4) general illness beliefs.

It clarifies patients' ideas about illness primarily from an emic perspective. Data resulting from the research with the EMIC provides a descriptive account of cultural perceptions, beliefs, and practices. By generating an integrated quantifiable and qualitative dataset, the EMIC offers a systematic way to evaluate cultural models of illness among psychiatric and medical patients. It also facilitates an analysis of relationships between cultural context and outcomes of practical clinical significance.

Cultural variations in the clinical presentation of depressive disorders have long been a topic of research interest among Indian investigators [7]. Questions about the relationship between depressive, anxiety, and somatoform symptoms and disorders led us to focus on these issues to build a clinical ethnographic database. We expect this database to ultimately clarify the conceptual basis of these disorders with practical implications for clinical management.

Objectives

Aims and objectives of the study included the following issues:

1. Adapt, translate into Kannada, and standardize the Explanatory Model Interview Catalogue (EMIC) for assessing cultural models of psychiatric illness.
2. Assess axis I psychiatric diagnosis with a suitable criteria-based diagnostic instrument, the Structured Clinical Interview for DSM-III-R (SCID) and the magnitude of depression and anxiety, using the Combined Hamilton Rating Scale for Depression and Anxiety (HDARS). Translate both into Kannada and test their interrater reliability.
3. Demonstrate the interrater reliability of the EMIC.
4. Begin compiling an extensive clinical ethnographic data base to facilitate comparisons among other clinical and cultural groups.

Methods

Two members of the research team independently translated the EMIC, SCID, and HDARS. The full research team discussed this translation item by item to produce a draft in Kannada. A consultant who had not been involved in producing this draft translation, Dr. Malavika Kapur, Additional Professor of Clinical Psychology at NIMHANS, back-translated the instrument from Kannada to English.. The research team then met as a group, discussed the items in detail and suggested changes that were

included in a final version. The aim of this exercise was to produce a semi-structured interview schedule that emphasized the importance of conveying concepts accurately, rather than stressing linguistic equivalence.

We studied a sample of 80 psychiatric patients presenting for the first time to the psychiatry screening clinic of the National Institute of Mental Health & Neuro Sciences, Bangalore (NIMHANS). These patients screened positive for depressive neurosis, according to the ICD-9 description. In each interview with the EMIC one of the two research assistants served as interviewer and the other as rater, switching these roles with each alternate patient. Both the interviewer and rater judged the subjects' responses independently, blind to each other's ratings, and made coded entries on a data sheet, based on a predetermined coding system. In addition, the rater also wrote prose notes to elaborate coded data.

After the interview, they compared data codes, discussed any discrepancies, and made a consensus rating, based on agreement after discussion; if they could not reach an agreement, the rater's judgement was accorded precedence. Unlike their consensus rating, their initial ratings for analysis of interrater agreement were not altered. They maintained a detailed record indicating the reasons for all discrepancies, which included coding/recording errors, differences in interpreting subject's responses, and differences in relating these responses to the coding system.

Decisions based on screening questions in the SCID and the course of the interview that follows, make it difficult for two interviewers to remain blind to assessments of one another in a joint interview. Consequently, to make it possible to test interrater reliability, SCID and HDARS interviews were not conducted jointly. Each of the two research assistants individually interviewed the patient on the same day after the joint EMIC interview in a test-retest format. They discussed any discrepancies and arrived at a consensus rating, as they did for the EMIC. Raters also assessed axis V of DSM-III-R using the Global Assessment of Functioning Scale (GAFS) individually to examine agreement before arriving at a consensus rating.

Results and Discussion

Sociodemographic Profile of Sample

Our study sample of 80 patients presenting to the outpatient clinic at NIMHANS with a screening diagnosis of depression consisted of 54 (67.5%) women and 26 (32.5%) men. This sex distribution is consistent with previous findings and clinical impressions about the higher representation of women with depression. The mean (± s.d.) age was 34.3 (± 9.1) years. Most (71.2%) were urban from Bangalore with a median household income of Rs. 1,500 per month, compared with 20 rural patients (25.0%), whose median monthly household income was Rs. 925. Three (3.7%) patients who could not be classified as either rural or urban had median household income of Rs. 1,700. Most patients were Hindus (78.7%), and among the rest the most significant minority group were the Muslims (12.5%). All but 17.5% had at least some primary education, and 25% had graduated from secondary school. Almost half the sample (43.7%) were housewives, and very few of the others were unemployed (5.0%).

DSM-III-R Diagnoses based on SCID and HDARS Ratings

Table I summarizes findings from our assessment of patients with the SCID and Table II provides

DSM-III-R diagnoses. In the initial assessment dysthymia was the most frequent diagnosis (52.5%), followed by somatoform pain disorder (44.3%) and major depression (21.3%). We used the Global Assessment of Functioning Scale (axis V of DSM-III-R) to rate patients with respect to current status, worst point in the past month, highest level in the past year and their premorbid baseline (Table III). Examination in Axis IV ratings (Table IV) revealed that most patients (67.5%) had endured moderate to extreme stressors. On the HDARS majority of the patients had moderate to severe depression.

Table I - Frequency of Diagnosis of each SCID Module - (N=80)

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Table II - DSM-III-R-diagnoses - (N=80)

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Table III - Summary of Global Assessment of Functioning Scale scores - (N=80)

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Table IV - Axis IV ratings - (n=80)

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Interrater Reliability of the SCID, HDARS and GAFS

Results of interrater reliability studies of the SCID, Hamilton scales and GAFS were satisfactory or better; they are summarized in Tables V-VI. For the three most frequently diagnosed conditions kappa statistics were excellent or satisfactory; 0.72 for dysthymia, 0.70 for major depression and 0.67 for somatoform pain disorder. The weighted summary kappa for all items of the SCID with a weight of 10 or more was 0.68. The Pearson intraclass correlation coefficient indicated excellent agreement for the Hamilton depression scale and satisfactory agreement for the Hamilton anxiety scale. Point estimates for the GAFS were also excellent or satisfactory, although the lower 95% confidence interval for the ratings of current and worst period in the past month did not reach the satisfactory level. Similar experience of other researchers with the GAFS has led to serious questions about its suitability for inclusion in DSM-IV.

Table V - Interrater reliability of psychiatric diagnoses with SCID (N=80)

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Weigthed Summary Kappa: 0.68

Table VI - Interrater reliability of Hamilton scales and Global Assessment of Functioning Scale (N=80)

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Standardizing the EMIC and Testing for Interrater Reliability

Based on experience during the training and prepilot phases, we made revisions to adapt the EMIC, which had been used previously in a cultural study of leprosy and mental health. [4], for our study population and for our specific clinical interest in studying depression in a psychiatric clinic. Problems

with the interview at the outset identified queries and categories that were ambiguous, and required revision.

We carefully revised categories of perceived causes, complaints characterising the experience of illness and other variables. The section on stigma was enhanced, and queries about additional illness-related perceptions, beliefs and practices (e.g. AIDS and other illnesses with specific cultural meanings) were included. Questions about the relationship of mind and body as perceived by the patient with respect to his symptoms were also enhanced.

We selected key items from different sections of the EMIC and analyzed interrater agreement. Where these items referred to a single variable and single judgement, such as most troubling symptom, we calculated the value of the kappa statistic. For items referring to multiple judgements, we computed a kappa statistic for each, and a weighted kappa summarising overall agreement. For example, rating the somatic, psychological and social consequences required assessment of three variables, based on a query about effects on body, mind and social functioning. Only those subjects for whom either the interviewer or the rater considered these effects to have been mentioned or emphasized contributed to the weight of that component variable in calculating the summary kappa statistic.

Values of the Kappa statistic for these key items are listed in Table VII. Values of kappa above 0.7 are generally accepted as indicating good agreement, from 0.5 to 0.7 fair agreement, and below 0.5 poor agreement. Agreement for all of these key items of the EMIC was in the fair to excellent range, except for one. The low value of agreement for the environmental source of the problem is unreliable because of its infrequent occurrence, but the weighted kappa summarizing agreement for the sources of the problem is satisfactory. Like Williams and colleagues [8], we expected experience over the course of the study to improve agreement. Comparing kappa statistics from the first half to the second half of the study, however, for "most troubling symptom" showed no such trend.

Table VII - Interrater agreement

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Overall summary Kappa for all above items: 0.748

Examination of prose data may indicate reasons for disagreement. For example, the Kappa statistic for the patient's report of "most troubling aspect of problem" was 0.80, in the range of excellent agreement. Disagreements for the nine ratings, reflected a consistent difference between one rater and the other with regard to an emphasis of one on somatoform symptoms and the other on mood, anxiety and other symptoms. This may reflect the influence of professional background and orientation of the latter rater. The clinical background of one of the raters seems to have influenced her to detect anxiety and mood disturbance rather than somatoform symptoms more than the other rater, possibly indicating a disposition to recast patients' reports into clinical patterns.

It is interesting to note that it was possible to assess an abstract concept, such as the relationship between mind and body, with excellent reliability. The high level of overall agreement for items in the EMIC, a kappa of 0.75, lends credibility to the instrument as a means of identifying and assessing explanatory models for cross-cultural research.

Findings from EMIC Interviews

The EMIC systematically assesses explanatory models of illness according to four operational components; patterns of distress, perceived causes, preferences for help seeking and treatment, and

general illness beliefs. Each of these defines a group of variables, which were assessed with respect to categorical values supplemented by prose notes. We wrote specific programs to manage these quantifiable data. We also employed a free-from prose-oriented database (Textbase Alpha) to facilitate easy access to qualitative prose data, linked to quantitative information.

Patterns of Distress

Even though patients were selected based on a screening diagnosis of depression, most of them (85.0%) presented with spontaneous reports of somatic symptoms initially, not including vegetative symptoms of depression (Table VIII). Although less than a third reported depressive symptoms at the outset, after probing, more than 90% had acknowledged symptoms of depression. When asked to identify the most troubling aspect of their problem, the most frequent response (50.0%) was a somatic complaint; only half as many specified depressive symptoms, and still fewer referred to anxiety or other symptoms.

Table VIII - Problems reported spontaneously, after probes and later in the course of the first research interview

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When asked to name their illness, about a quarter of the sample identified their problem as a "mental" illness (manasika kayile), but few (7.5%) specified depression (bezar kayile). Fifty per cent identified their problem as "pain" (novu or dardh), a bodily disorder (sharira kayile) or a "nerve" problem (nara).

The interview probed questions of self esteem and stigma in depth (Table IX). Nearly everyone in the sample did not want to disclose their illness (95.0%) or even their symptoms (82.5%), and a majority (73.8%) reported a lowering of self esteem. They perceived stigma mainly as it would adversely affect their ability to marry (57.5%), but few felt their problems made them dangerous to others (27.5%) and fewer still acknowledged concerns that their illness might stigmatize families (7.5%).

Table IX - Summary of indicators of self esteem and disclosure - (N=80)

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Perceived Causes

A detailed inquiry about perceived causes of their problems distinguished between ideas patients reported in response to an open-ended question from ideas they reported in response to specific probes. Subsequently we asked them to identify the first perceived cause they considered after the illness began, changes in their ideas, and the perceived cause they currently considered mot important. We coded their responses based on a list of 54 perceived cause categories generated from experience in pilot interviews and previous studies with the EMIC.

Among the spontaneously reported perceived causes, social stressors and psychological factors were

most common. The most frequently reported perceived cause considered as most important was "nerves" (nara) (21.2%), though fewer (13.8%) identified this cause spontaneously, before probing. Only one patient identified it as the cause they thought of first. Social stressors and psychological factors were next most frequently reported as the most important perceived cause. Magico-religious, humoral and sexual factors were identified relatively infrequently as spontaneous, first or most important causes.

Help Seeking

Most patients had sought outside help for their current problem before coming to NIMHANS. Most had consulted Government allopaths (63.8%) and private doctors (52.5%). Fewer had made use of faith healers (13.8%), Ayurveda (11.3%), healing temples (15.0%) or puja (17.5%), and fewer still had consulted local health workers, homeopaths or local herbalists. The help they sought first was almost exclusively from allopaths (80.1%), but the majority who had consulted allopaths at any time in the past had seen them only once or twice. Very few patients had been satisfied with their first help-seeking experience (17.2%).

Nearly a quarter of the sample (23.8%) acknowledged sufficient help from their family, friends or relatives for their illness, and an additional 48.7% said they received some help from them. More than half (65.7%) felt they required no additional help from these sources. Use of home remedies was relatively infrequent.

General Illness Beliefs

Among ideas of patients with respect to various illnesses, we examined responses to questions about madness in particular. Queries about causes of madness elicited a pattern of responses, emphasizing psychosocial determinants and "nerves", similar to ideas about their presenting problem. Respondents also emphasized stigma associated with madness, both for the individual (66.2%) and the family (60.0%). Nearly everyone recommended allopath for treating madness (95.8%), most specifying NIMHANS (77.5%).

Conclusion

This study aimed to develop an instrument for cultural research, comparing local experience of illness and professional concepts of disorder. Our findings demonstrate the reliability and usefulness of the Explanatory Model Interview Catalogue (EMIC). With growing recognition of the need for cultural research, this instrument provides a method for acquiring empirical data needed to enhance the cultural sensitivity of diagnostic systems and psychiatric practice. In the course of this research we have also developed computer assisted techniques for combining qualitative and quantitative data, responding to a long-felt need to integrate epidemiological and anthropological perspectives in cross-cultural psychiatry. The empirical database we have begun to amass in this study has potential to answer major

questions, such as the significance of the cultural understanding of the relationship between body, mind and social relations. It also indicates the importance of assessing cultural influences on patients' perceptions, beliefs and illness behavior in psychiatric practice and research.

This study demonstrated the interrater reliability of the SCID for the first time in India and contributes further to previous research validating the Hamilton scales. Our experience with the GAFS identifies possible difficulties that may limit its usefulness. Having translated the EMIC into the local language, Kannada, and established its reliability, we expect it will prove useful for further cross-cultural research.

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