

Psychiatric Evaluation of North Thai—Lua' People: How this Evaluation is Influenced  
by the Experience and the Culture of the Observers.

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OBJECTIVES:

1. To psychiatrically study in further detail a segment of a predominantly Lua' and North—Thai lowland urban community in Amphur Mae Sariang, Changwat Mae Hongson, where a previous survey had identified individuals with severe psychiatric illness;
2. To study transcultural influences on the psychiatric evaluation of this segment of the population;
3. To study the effects of training and experience in psychiatric field research on a group of third and fourth year Chiang Mai University medical students;
4. To study the influence on diagnoses offered by medical student observers of the affectual reactions they experienced during interviews;
5. To provide medical students experience in doing psychiatric field research and to introduce them to a standardized mental status interview schedule;
6. To acquaint SEATO Medical Research Laboratory investigators with problems and techniques in psychiatric field research in rural Northern Thailand;
7. To assess the effects of doing extensive psychiatric interviewing on the community.

BACKGROUND: A previous cooperative research project surveying disease morbidity and culture in the Mae Sariang area (see previous and present Annual Reports) was accomplished under the coordination of LTC Harry C. Holloway, M.C. At that time a survey accomplished by Dr. Pricha Singharaj found a number of members of the community identified as having psychiatric illness by the heads of their households. No details were obtained regarding the psychiatric illness, but responses indicated a prevalence of 2.8% in the segment of the population surveyed.

Mae Sariang District has a population of 50,000, 30,000 of whom are hill tribes; 80% of the hill tribes are Karen and 8% are Lua'. Mae Sariang town has a high percentage of Lua' emigres. The town is located west of Chiang Mai and can be reached by plane or via road through the mountains from Chiang Mai. Located in Mae Sariang town is a local health facility run by the Thai government, a Christian Mission Medical Unit, a Buddhist monk who acts as a lay healer, a Catholic missionary who acts as a medical liaison to his mission hospital in Chiang Mai, and an Australian missionary nurse.

DESCRIPTION: Two Thai psychiatrists, two American psychiatrists, and ten medical students from Chiang Mai University Medical School interviewed the subjects who were identified as being psychiatrically ill by the previous SEATO Lab study. Control subjects were also interviewed; one selected from the same household and two from adjacent households. Selection of the control subject in the same household was decided first on sex, second on age, third on place in sibship. Control subjects from the adjacent households were selected on the basis of the same criteria, plus the necessity that they be from the same ethnic background.

Prior to the data collection phase, the medical students were trained in giving a standardized Spitzer Mental Status Schedule Interview at Suan Prung Hospital, Chiang Mai. The Spitzer Mental Status Schedule was translated into North-Thai language in preparation for the data-collection interviews.

Before training, the medical students were given a questionnaire to test their knowledge and attitudes in the areas of psychiatry, research, and knowledge of the Mae Sariang region. They were again given this questionnaire after data collection in order to assess any changes resulting from their experiences during the project. Anonymity of the participating medical students in answering these questionnaires was maintained throughout the project.

PROGRESS: A. Phase I: Training of medical students (18 November-24 November)

Prior to going to the target area the medical students participated in training sessions for a total of 28 hours at the Suan Prung Hospital, Chiang Mai, under the supervision of Dr. Chira Sitasuwan, Director of Suan Prung Hospital, and Major Marvin H. Firestone, MC, Chief, Department of Neuropsychiatry, SEATO Medical Research Laboratory. It was accomplished using modelling techniques, observing interviews through a one-way viewing mirror, and discussions of the mechanics of the Spitzer Mental Status Schedule instrument. Students received further training in the use of a Multiple Affect Adjective Inventory, in order to sensitize them to feelings stimulated in them by interviewees. During training sessions they were given literature and lectures on psychiatric field research, anthropology, and an orientation to the Mae Sariang area and its population.

B. Phase II: Selection of subjects and controls (25 November-29 November)

Dr. Pricha Singharaj, Public Health physician, with the assistance of a public health nurse and North Thai interpreter, selected subjects and controls based upon previous personal knowledge of the area and data collected by the previous SEATO study. Five subjects were selected based on data from the previous survey and five additional subjects were identified by a reliable informant. Throughout the project, Dr. Pricha maintained secrecy of the population data and insured that experimental safeguards were observed. Three Lua' interpreters assisted in this phase, as well as in the data-collection phase.

C. Phase III: Interviews (29 November-4 December)

On 29 November, the medical students, staff of the Department of Neuropsychiatry, Dr. Phon and Dr. Chira began orientation in the Mae Sariang area. On 30 November, interviewing of subjects and controls was begun. An average of two interviews per medical student and psychiatrist were accomplished each day for 5 days; during the same period, a neuropsychiatric technician administered Porteus Maze and Digit Span tests to those subjects and controls not given these tests in the previous study. Immediately after interviews, the medical students and psychiatrists completed a Multiple Affect Adjective Inventory.

Because the local rice harvest was taking place during the period of Phases II and III, several difficulties arose which were solved by altering our interview procedures to include several interviews at subjects' homes in the early morning and late evening. Except for this complication, the planned tasks were accomplished by the research team quite efficiently and with good cooperation from the community.

**D. Phase IV: Scoring and Partial Analysis (6 December—15 February)**

After data collection, Spitzer Mental Status Schedules, Porteus Maze results, and Digit Span tests were scored. The medical students, Dr. Chira, and Dr. Firestone met to discuss the findings at Suan Prung Hospital on 6 and 7 December, on 10 and 11 January, and on 14 and 15 February. At these meetings the mental status examinations and other data collected were ordered and partially analyzed.

**E. Phase V: Follow-up (12 February — 13 February)**

On 12 and 13 February a follow-up visit to the Mae Sariang area was accomplished, at which time the local health authorities, subjects, and controls were interviewed in order to ascertain effects of the research procedures.

**F. Phase VI: Final Data Analysis (15 February—present)**

All data have been classified, scored, and partially analyzed. The data presently are undergoing more refined analysis at the Department of Neuropsychiatry. Further analysis of data collected is underway, and publication to include discussion is anticipated.

**RESULTS:** Thirty-nine subjects and controls were interviewed by the research team, of whom thirty-three were interviewed by a medical student, a Thai psychiatrist, and an American psychiatrist. Six were interviewed only by a medical student. Spitzer Mental Status examination was done by medical students on all thirty-nine subjects and controls.

**A. Subjects and Controls**

In the original survey done by Dr. Pricha, five subjects were identified by the heads of their households as having severe psychiatric illness. All five of these subjects were determined to have severe psychiatric illness when interviewed in our single-blind design. In Dr. Pricha's second survey five additional subjects were identified by gathering information from a key informant living in the village; our interviews found only three of these five to have severe psychiatric illness.

**B. Diagnostic Correlation**

An accurate diagnosis can be considered: (1) if a diagnosis made by one of the three examiners is confirmed by the results of the Mental Status Schedule scores and psychological tests; or (2) if there is agreement between the two psychiatrists examining the subject independently.

If these criteria for diagnosis are used, of the thirty-three subjects and controls interviewed by all three examiners: twenty subjects and controls were normal or manifested only mild personality disorders; six were neurotic; five were psychotic; and two showed signs of mental retardation. In the group of normal subjects and controls there was agreement between Thai and American psychiatrists in eleven out of the twenty, or 55%. In the group of neuroses, there was agreement between Thai and American psychiatrists in four out of the six, or 66 2/3%. In the group of psychoses, there was agreement between Thai and American psychiatrists in two out of the five, or 40%. In the group of mental retardation, there was agreement between the Thai and American psychiatrists in two out of two, or 100%.

For the thirty-nine subjects interviewed, although there were differences in various diagnostic subentities, there was very good agreement within the major categories of psychiatric diagnosis: retardation, psychosis, neurosis, and normal. In fourteen of the subjects and controls there was agreement in the diagnoses of the medical student, the Thai psychiatrist and the American psychiatrist. In this category there were ten normals, one retard, one psychotic, and two neurotics. In five more subjects and controls there was concurrence in the diagnoses of the Thai and American psychiatrists, but not that of the medical student.

In this category were two neurotics, one retard, one psychotic, and one normal. Eight subjects and controls were diagnosed similarly by the Thai psychiatrist and the Thai medical student, but not by the American psychiatrist. In this group were seven normals and one neurotic. Three were diagnosed similarly by the North Thai medical student and the American psychiatrist. In this group were two normals and one neurotic. In three subjects and controls interviewed there was no agreement between any of the interviewers. The results of the Spitzer Mental Status examinations suggest that two of these three subjects were psychotic and one was normal. Six subjects were interviewed only by a medical student; it seems likely that three of these had psychiatric illness, two normal, and one for whom the Spitzer results were not suggestive of any specific diagnostic category.

#### C. Diagnosis of Controls

Among the twenty-nine controls twenty-one were diagnosed normal (72%), five neurotic (17%), one psychotic (3%), and two mentally retarded (7%).

#### D. Affect and Diagnosis

Adjectives reflecting anxiety, hostility and depression were tabulated by psychiatrists and medical students at the termination of each interview, and each interviewer's scores on these affects were totaled. It was found that in totalling the three scores, that the American and the Thai psychiatrists averaged the same amount of affect; this average was one point higher than the affect score of the medical students. Taking the mean for the total affect for both groups and comparing this mean score with diagnosis, the following results were obtained (the medical students interviewed thirty-nine subjects and controls; the psychiatrists interviewed thirty-three): Higher than average affect was associated with a diagnosis of psychopathology made by the medical students in two; of the interviewees, lower affect than average was associated with a designation of normal in sixteen of the interviewees. For Thai psychiatrists, higher than average affect was associated with a positive diagnosis in nine; lower than average affect with a normal designation in eleven. For American psychiatrists, higher than average affect was associated with a diagnosis in ten; lower than average with fourteen normal.

#### E. Spitzer Scores and Diagnosis

The mean of the total scores of macro scales I, II and III was calculated. Scores above the mean were expected to be correlated with a positive diagnosis of psychopathology; those below the mean were expected to be found in normal subjects. For the medical students' diagnoses there was a correlation for twenty-six out of thirty-nine, or 67%. For Thai psychiatrists, twenty-five out of thirty-three, or 76%. For American psychiatrists, twenty out of thirty-three, or 61%.

#### F. Diagnosis of Mental Retardation and Test Results

There was 100% agreement in those cases diagnosed as having mental retardation between the Porteus Maze and the Digit Spans tests. The Porteus Maze and the Digit Span tests agreed overall in twenty-seven out of thirty-eight subjects and controls who were administered both tests.

#### G. Treatment Recommendations

In all thirty-three cases the Thai and the American psychiatrists made similar recommendations about the use of medication and/or psychotherapy. In the cases for which the medical students recommended treatment, however, there were unrealistic recommendations for psychotherapy. Medical students recommended psychotherapy for eighteen out of the thirty-nine people interviewed. The Thai and the American psychiatrists both recommended only four for psychotherapy.

#### H. Effect on Target Population

On 12 and 13 February Mae Sariang town was visited by the responsible investigator, at which time the health facility doctors, the lay healers, and the Australian Missionary nurse were questioned about the effects of the project on the people involved in the study. Health records of the studied segment of the population were reviewed. No effects of any kind were apparent. All of the people involved in the study were asked for their opinion of the study by a member of their village; with only one exception, all of them felt positively about the team's efforts and appreciated participation in the study. The Nai Amphoe

of the Mae Sariang district was interviewed. He, also, expressed appreciation of our interest in the people of his district and reflected the good will towards our team that he had gleaned from some of the participants.

I. Medical Students' Reaction

Without exception, the medical students considered their experience worthwhile and educational, as reported both orally and in several essay-type questions (answered anonymously) about their experience and knowledge related to the project. Multiple-choice questionnaires administered both before and after the training and field experience showed less definite results. There was, however, greater variation in answers given before their experience than four months after their experience.

SUMMARY: Thirty-nine subjects and controls living in a North-Thai Lua' community were psychiatrically evaluated independently by Thai and American psychiatrists and Chiang Mai University medical students. Psychological tests and standardized mental status examinations were also done. The results of the evaluations and testing were compared. The educational experience and interview-associated affects of the medical students participating in the project were studied, and the effects on the community of the study were appraised.