WORLD HEALTH ORGANIZATION
REGIONAL OFFICE
FOR THE EASTERN MEDITERRANEAN

ORGANISATION MONDIALE DE LA SANTE
BUREAU REGIONAL
POUR LA MEDITERRANEE ORIENTALE

SEMINAR ON THE ORGANIZATION OF MENTAL HEALTH SERVICES
Addis Ababa, 27 November to 4 December 1973

EM/SEM.ORG.MH.SERV./13
ENGLISH ONLY

AN ILLUSTRATIVE PRESENTATION OF A POPULATION SURVEY ON MENTAL DISORDERS

Cross Cultural Study of Mental Disorders in Indian Setting **

by

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This is an interim report on a cross cultural study of mental disorder amongst three South Indian caste[1] groups. The prevalence of mental disorder was investigated through a field survey. Field work was completed between March 1970 and December 1972, and the data are now being analysed. In this paper an attempt will be made to examine certain methodological issues pertinent to designing such an investigation and this will be followed by a brief description of specific aims, methods and some preliminary results of the study.

SOME METHODOLOGICAL ISSUES

1. Cross cultural comparisons : It is generally accepted that cross cultural comparisons of mental disorder can be useful in testing hypotheses giving aetiological significance to certain socio-cultural factors, in enriching the phenomenology of the well known psychiatric syndromes, in discovering new psychiatric syndromes and in providing data which would help in planning mental health services suitable to a particular cultural setting.

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(**) The study was carried out on a grant from the Foundations Fund for Research in Psychiatry.

Cultural differences are best highlighted when vastly different nations are compared and the tendency of the research workers in the field has been to carry out international comparisons, e.g. Cornell-Aro study (Leighton et al 1963). Kessel (1966) warning against this tendency, pointed out that international comparisons can be of doubtful validity because:

(a) Case finding methods in two nations may be vastly different.

(b) Language differences may make it impossible to standardize the instruments used in detecting mental disorder.

(c) It might be impossible to interpret the effects of socio-cultural variables being investigated since the influence they exert cannot be distinguished from that exerted by other larger differences between nations and which are unmeasurable by techniques at our disposal.

2. Field surveys: The biggest problem in the field survey is the definition of a case in a non-referred population. Field surveys based on clinical assessment are unreliable because of the lack of standard explicit criteria for defining a case. The reliability can be improved by using questionnaires and training the investigators to use them similarly. However, because of the rigidity of their structure, limited range of inquiry, lack of provision for cross-examination to clarify doubts and taking the judgement about the presence or absence of a symptom out of the hands of the investigator they probably lose in validity what they gain in reliability.

An improvement over the questionnaire technique is the use of a structured interview schedule. It has the following characteristics:

(a) There is a standard check list of symptoms.

(b) The investigation is carried out through standard questions and cross-examination but additional questions may be asked to clarify doubts.

(c) The decision about the presence or absence of a symptom is made by the investigator who is guided in his judgement by an instruction manual giving standard definitions for the various symptoms in the check list.

It is obvious that structured interview schedules retain the flexibility of a clinical approach and yet because of the standard questions and standard definitions are also reliable (Wing et al 1967. Spitzer et al 1964). However, the schedules developed to date have some shortcomings. None of them provides for an interview with a close relative or a friend, which is an integral part of a clinical approach and is especially useful for uncooperative psychotics. They are long and time-consuming and are unsuitable for a field survey. Goldberg et al (1970) have developed a two-stage procedure with a quick initial screening at the field level and a structured interview of the suspects in a realistic clinical setting. This approach is certainly more economical but those involved in field research are painfully aware that it is difficult to contact a respondent twice. Further it is difficult to persuade people (who, it must be remembered, never asked for an interview or any help) to come to be interviewed in a 'realistic clinical setting'.

Another difficulty in using already available and standardized schedules is that they have been developed in the west, and become less and less satisfactory as one moves away from the context in which they were developed. For example, none of them pays special attention to 'possession states', symptoms of sexual inadequacy and the variety of somatic symptoms so commonly encountered in the Indian setting.

It is being increasingly realized that symptoms however reliably scored do not make a person showing them a case if by case we mean someone who

needs help and treatment. Many other factors determine this need e.g. the distress experienced by the subject, those around him and the fall in the day to day social functioning of the individual.

Much interest has been shown by the epidemiologists in the measurement of social functioning. Both in the Midtown Manhattan Survey (Srole et al 1962), and the Stirling County Study (Leighton et al 1963) there was an attempt at measuring social impairment. Spitzer et al (1970) include in their structured interview schedule a section on measurement of social functioning. However, these attempts show a confusion of aims. The greatest drawback is the insufficient realization of the fact that norms of social functioning against which the functioning of the ill person is to be measured may vary from a socio-cultural group to another. In most empirical research, certainly in the Midtown Manhattan Study and the Stirling County Study, the yardstick for assessment of social functioning appears to be the investigators' own value orientation which may be irrelevant to the group under study!

It was against this background that the present study was designed.

THE GENERAL DESIGN AND THE SPECIFIC AIMS:

Taking into account the criticism of international comparison by Kessel, an international study was planned. South India, with its variety of caste groups who have coexisted for centuries without diluting their cultural distinctions, seemed an ideal laboratory and we planned to compare the 'patrilineal' and 'matrilineal' castes. In the former, the inheritance is through the male and in the latter through the female lineage. This has interesting socio-cultural implications which will be discussed later. To further reduce the number of variables on which the target castes could differ (and thus make the study more manageable) we decided to narrow down

the geographical context and carry out the study in one village. Such a village was chosen on the South-West coast. One patrilineal caste, the BRAHMINS and two matrilineal castes the MOGERS and the BANTS were chosen for comparison.

It was also decided to prepare a structured interview schedule suitable for the Indian context, and to study the dimension of social functioning along with the symptoms. The latter necessitated the preparation of a social functioning questionnaire and development of norms for the different caste age and sex groups.

The project was divided into two stages, the first stage devoted to a number of sub-studies aimed at collecting information and preparing instruments which would be used in the second stage, i.e. the field survey.

The various sub-studies in the first stage were as follows:

1. A socio anthropological investigation to find out the differences amongst the three target castes.
2. A study of attitudes towards modernization and attitudes towards mental health in the members of the three target castes.
3. A study of the methods and clientele of the local healers.
4. Preparation of what ultimately were called the Indian Psychiatric Interview Schedule (I.P.I.S. - for hospital investigation) and Indian Psychiatric Survey Schedule (I.P.S.S. for surveys), their standardization and establishment of interinvestigator reliability.
5. Preparation of the Social Functioning questionnaire.
6. Pilot studies with hospital data examining statistical methods of clustering symptoms with a view to determination of 'patterns' in the data collected through the field survey.

The specific aims of the field survey were as follows:

a. To compare the frequency and patterns of psychiatric symptoms (as measured by I.P.S.S.) in the three caste groups.

b. To study the interaction between 'psychiatric symptoms', 'social functioning' and consultations with local healers across the three castes.

c. To examine if the differences observed in (a) and (b) above could be explained in terms of the socio-cultural differences in the three caste groups.

It was to be an exploratory study and no directional hypotheses were constructed. The study was conducted in a village named KOTA and will be referred to in the following pages as the 'KOTA Project'.

A DESCRIPTION OF THE KOTA PROJECT:

We shall now proceed to give a brief description of the village and the three castes, the characteristics of the Indian Psychiatric Survey Schedule (I.P.S.S.) and an account of field survey. The sub-studies dealing with the measurement of attitudes and the development of the social functioning questionnaire will not be discussed here.

THE VILLAGE AND THE THREE CASTES:

Kota is situated on the western coast and is part of the district of South Kanara, Mysore State. At the beginning of the project a complete census was carried out and the socio-demographic data collected through a short questionnaire. At the end of this exercise a directory of the village was prepared, assigning a census number to each individual and describing him according to religion, caste, age, sex, income group, Family code[2] and address[3]. It was hoped that this directory would help in tracing the individuals quickly and collecting population samples for subsequent studies.

Further information about the village was obtained through participant observation; one member of the investigating team lived in the village all the time. A detailed description of the village and the three castes will be given elsewhere. A brief description follows:

Kota had 9,113 permanent[4] inhabitants according to the census carried out in late 1970. Like the rest of the country, the village boasts of a number of religious and caste groups[5]. Among the three target castes, BRAHMINS are ritually the highest, BANTS the next and MOGERS the lowest. Amongst themselves the three groups form nearly half of the total population of the village (BRAHMINS 16%, BANTS 9%, MOGERS 24%). Traditionally, BRAHMINS were the priests, BANTS the soldiers and MOGERS the fishermen. The chief occupation of BRAHMINS and BANTS these days is agriculture, BRAHMINS in the main being owner-cultivators and the BANTS, sharecroppers. Fishing still remains the major occupation of the MOGERS.

On an income status scale constructed specially for the project, BRAHMINS were the richest, MOGERS the next and BANTS the poorest (5% of BRAHMINS, 36% of BANTS and 25% of MOGERS live below the subsistence level). Till recently BANTS were richer than MOGERS but because of Government help the fishing industry is being modernized and the income of the Fishermen has shot up. This has resulted in a difficult situation where BANTS are ritually higher but economically lower than MOGERS. Tension between the two communities is perceptible and brawls are common.

Educationally, South Kanara is one of the most advanced districts in India. In Kota, BRAHMINS are the most educated, BANTS next and MOGERS the least.

BRAHMINS worship Gods while BANTS and MOGERS worship Demons [6]. BRAHMINS are strict vegetarians, while BANTS and MOGERS eat meat and fish but not beef. BRAHMINS do not drink alcohol while BANTS and MOGERS drink heavily; MOGERS more than BANTS.

BRAHMINS do not permit widow-remarriage and divorce by women, while this is permitted in BANTS and MOGERS. All the three castes are male-dominated but MOGER women have more freedom than BRAHMIN women who in turn have more freedom than BANT women.

The major difference amongst the three castes is in the system of inheritance and its socio-cultural implications.

INHERITANCE IN THE THREE CASTES : BRAHMINS are patrilineal, i.e. the property descends from the father to son. BANTS and MOGERS practise ALIYA-SANTANA, a special form of matrilineal inheritance, the property being vested in the female lineage but in practice passing from the maternal uncles(s) to the nephew(s). Traditionally the husband continues after marriage to live in his own family house. The wife spends 6 months with the husband and six months in her own house. Children move with the mother but visit their father less and less as they grow older.

The law of the land has declared ALIYA-SANTANA illegal and the system is in a stage of transition. Appendix I outlines the variations in the ALIYA-SANTANA. It is apparent that this social change is causing stress to the family, especially to women and children.

THE INDIAN PSYCHIATRIC SURVEY SCHEDULE

The development of the Indian Psychiatric Interview Schedule (IPIS), from it the development of the Indian Psychiatric Survey Schedule (IPSS),

and a demonstration of interinvestigator reliability, both in the hospital setting as well as in the field setting, has been described elsewhere (in press). A brief description of the IPSS follows :

IPSS is designed to inquire about the presence of 124 psychiatric symptoms and 10 items of historical information. The symptoms are those commonly observed in Indian setting, the check list having been prepared through pilot studies at Bangalore mental hospital. The questions and cross-examination are standardized, as are the criteria for recording the presence of symptoms. The inquiry is carried out through a multi-stage procedure. Appendix II gives the outline of the various stages but very briefly, as the first stage, a preliminary interview schedule is given by a non-psychiatrist to all members of the population. Besides questions about the respondent, this preliminary schedule also carries a section asking the respondent if he knows any one in the family or the village who suffers from a given check list of (serious) psychiatric symptoms. Detailed inquiries with the subject and/or with a close relative are carried out by a psychiatrist in special (standardized) conditions. The psychiatrist also records his 'observations during interview' when carrying out a Detailed Inquiry.

THE FIELD SURVEY : This was carried out by a team of one psychiatrist (male) and three non-psychiatrists (two Sociologists, one male and one female, and one female Psychiatric Social Worker.)

1. SAMPLING : We planned to examine the psychiatric symptoms in 50% of the adult population in three castes, an adult being defined as anyone 14 or above in the 1970 census. One way would have been to take 50% at random.

However, we wanted to examine if :

(a) there was a greater concentration of symptoms in some families as compared to others, and

(b) if geographical nearness was related to a clustering of certain patterns of symptoms. To make it possible, it was decided to :

i. Take a 50% sample of families instead of individuals (hoping that such a sample would give roughly 50% of individuals) and

ii. Collect the 50% of families from a few selected geographical 'units' - and once a 'unit' was selected to take all the families (of the three castes) from that unit.

An analysis was carried out to compare the characteristics of the sample with the total population. It was found that the 'sample' had roughly 50% of the total adults of the three castes and resembled, more or less,the total adults of three castes in age and sex distribution.

2. INSTRUMENTS : IPSS was given to all the members in the sample. Social functioning questionnaires were given to every one with psychiatric symptoms, and to provide a control group of 'normals', to every second normal male and every third normal female in each age (4 categories) sex and caste group.

3. TRAINING AND ESTABLISHMENT OF RELIABILITY : Sixty people from both sexes were interviewed from the geographical units not included in the sample. This was followed by an interinvestigator's reliability study with forty persons in the field, the results of which are discussed in the paper on IPSS (in press). The training session, which lasted a month, had the following uses :

(a) The investigators learnt the correct technique of asking questions and gained confidence.

(b) The definitions of various symptoms in the check list were memorized during this period.

(c) We learnt that in the field setting an interview would take 15 minutes per person on an average and that the team could see about 20 individuals a day.

(d) The villagers (even in the sample area) came to hear about our survey and were ready for us when we went to them. They also learnt that the questioning was not prolonged and that we gave medicines when required.

(e) We got a chance to reconstruct some questions in the local idiom.

4. THE FIELD WORK : The preliminary interview was carried out by the non-psychiatrists. The male investigator asked questions from the male and female investigators from the female.[7] Inquiry about others was limited to the males only. The psychiatrist had to give a physical examination to 30% of the individuals and detailed interviews to less than 5% of the respondents and/or their close relatives. Whenever required, the detailed investigation was completed on the spot immediately after the preliminary interview. We usually tried for privacy but this was not always possible.

After each completing a geographical unit we would go over it once again, searching for those who had been missed out during the first visit. The first round of the whole sample area took about 2 1/2 months. 200 were still left - more males than females - more young than old. A second round of the village was carried out, and it took about 20 days.

1237 individuals were interviewed and seven refused,, out of a posssible 1244. This meant a response rate of over 99%.

ANALYSIS AND SOME PRELIMINARY RESULTS

For analysis the population can be categorized in a variety of ways, depending on how the fact of having a symptom or not is manipulated :

1. The population may be grouped into those (a) having no symptoms and (b) having one or more symptoms.

2. The population may be grouped into 4 categories (a) having no symptoms (b) having somatic symptoms only (c) having both somatic and psychological symptoms and (d) having psychological symptoms only. (see Appendix III).

3. The population may be categorized into groups having a different number of symptoms.

4. The symptoms may be clustered by statistical techniques and the population may be categorized according to presence or absence of different clusters.

5. The population may be categorized according to the presence or absence of each individual symptom.

All these methods of categorization are being used in analyzing the data. The analysis has not been completed. A presentation of some of the more interesting results obtained to date follows :

REPORTING PSYCHIATRIC SYMPTOMS IN OTHERS : As mentioned earlier, all males were asked if they knew anyone in the family or village who had one or more of the given check list of symptoms. An analysis was carried out to examine reported behaviour and the characteristics of the reporters. 152 people in all in the whole village were reported to have one or more symptoms and 170 people reported one or more person in the village to be having one or more symptoms. These 170 will be referred to as 'reporters'.

It was found that :

1. Brahmins have more reporters than Mogers who in turn have more reporters than Bants. 51% of Brahmins, 29% of Bants and 35% of Mogers were 'reporters'.

2. The young have more reporters than the old. Percentage of reporters was 51% for those below 20, 41% for those between 21-40, 35% for those between 41-60, and 32% for those 61 or above.

3. Rich have more reporters than the poor. 36% of those living at subsistence level or below were reporters as compared to 58% of those living above subsistence.

4. The well educated have more reporters than the poorly educated. 21% of those having primary education or below, 51% of those having school certificate and 67% of those having higher education were reporters.

5. Those having symptoms themselves have more reporters than those not having symptoms (Percentage of reporters : 51% and 35% respectively). The differences were more interesting when those having symptoms were divided further into three categories : percentage of reporters amongst those having somatic symptoms only, both somatic and psychological symptoms and psychological symptoms only was respectively, 41%, 43% and 59% - that is to say those having psychological symptoms have more reporters than any other group.

Using a chi-square technique, all these differences are statistically significant with $p < .01$ or less.

DISTRIBUTION OF SYMPTOMS IN THE THREE CASTES :

'Case' rate for the three castes was : Brahmins (29%), Bants (39%) and Mogers (33%) in the case of males, and Brahmins (33%), Bants (43%) and Mogers (42%) in the case of females. A case here is defined as one who had one or

more symptoms. The Matrilineal castes (Bants and Mogers) have a higher case rate than the Patrilineal Brahmins both for males and females. In all castes females have a higher case rate than males.

Tables I and II give the symptom distribution for males and females respectively when those with symptoms are further divided into three categories.

TABLE I

SYMPTOM DISTRIBUTION IN THE THREE CASTES (MALES)

SYMPTOM GROUP	BRAHMINS (154)	BANTS (55)	MOGERS (217)	TOTAL (426)
No symptoms	71%	62%	68%	68%
Somatic only	6%	13%	6%	7%
Somatic & Psychological	10%	13%	9%	10%
Psychological only	13%	13%	17%	15%
Case rate	29%	39%	33%	32%

TABLE II

SYMPTOM DISTRIBUTION IN THE THREE CASTES (FEMALES)

SYMPTOM GROUP	BRAHMINS (299)	BANTS (143)	MOGERS (365)	TOTAL (807)
No symptoms	67%	56%	58%	60%
Somatic only	10%	13%	12%	12%
Somatic & Psychological	13%	22%	20%	18%
Psychological only	10%	8%	10%	10%
Case rate	33%	43%	42%	40%

NOTE : The results described in this page and elsewhere in the paper have all been subjected to statistical tests and the differences observed are statistically significant with $p < .05$ or less. The details of these tests have been left out for the sake of simplicity of presentation.

SOCIAL CHANGE AND SYMPTOMS

The married members of the matrilineal castes were compared according to whether they were following the traditional residence pattern or whether they had changed over to a "patrilineal pattern" in which the husband and wife have started living together. From Table III it can be seen that the change-over has hardly affected the males, while amongst the females who have changed over there is a higher case rate than that amongst those who still follow the traditional pattern.

TABLE III

SYMPTOMS AND SOCIAL CHANGE

	MALES		FEMALES	
	Traditional (111)	Changed (94)	Traditional (222)	Changed (116)
Case rate	32%	38%	37%	54%

SYMPTOMS AND CERTAIN SOCIO-CULTURAL FACTORS

It was found that :

a. 'Case' rate rises with age but amongst the older age group when those between 41-60 are compared with those 61 or above there is hardly any difference in case rates. Table IV shows the distribution.

TABLE IV

SYMPTOMS AND AGE

Case rate	-20	21-40	41-60	61+
Males	13%	28%	42%	45%
Females	20%	36%	56%	56%

b. The well educated have lower case rates than the poorly educated.

c. Those widowed or divorced have higher case rates than those married , who have a higher case rate than those unmarried.

d. Those who had lost their parents before they were 15 have a lower case rate than those who lost them afterwards. Tables V and VI show the results.

TABLE V

SYMPTOMS AND FATHER'S DEATH

Case rate	Father still alive	Early death	Late death
Males	22%	28%	42%
Females	25%	43%	51%

TABLE VI

SYMPTOMS AND MOTHER'S DEATH

Case rate	Mother still alive	Early death	Late death
Males	26%	30%	45%
Females	30%	50%	56%

e. Type of family (extended or unitary), size of the family, consanguinity in the parents, occupation and income had no relation to the case rate.

SYMPTOMS AND CONSULTATION

1. 58% of those having one or more symptoms consulted one or more agencies of help.

2. When those having different types of symptom were compared, 71% of those having somatic symptoms only, 71% of those having both somatic and psychological symptoms and only 33% of those having psychological symptoms only consulted one or other agency.

3. Table VII compares the different castes on consultation rate amongst those having symptoms. Bants consult more than Brahmins who consult more than Mogers. In all castes men consult more than the females.

TABLE VII

CONSULTATION RATE IN PEOPLE WITH SYMPTOMS IN THE THREE CASTES

CONSULTATION RATE	BRAHMINS		BANTS		MOGERS	
	Males	Females	Males	Females	Males	Females
Somatic only	78%	73%	86%	68%	62%	68%
Somatic and Psychological	86%	65%	86%	58%	70%	69%
Psychological only	35%	27%	71%	33%	38%	24%

4. Amongst those having one or more symptoms, 52% consulted a practitioner of western medicine, 21% a practitioner of Indian medicine, 11% consulted an astrologer, 10% consulted a temple priest and 5 % consulted an exorcist.

5. Amongst those with psychological symptoms only 19% consulted a practitioner of western medicine, 10% each consulted a practitioner of Indian medicine, an astrologer and a temple priest respectively and 7% consulted an exorcist.

6. An analysis was carried out to examine the number of agencies consulted amongst those who consulted for somatic symptoms only, both somatic and psychological symptoms and psychological symptoms only.

Amongst those who consulted for somatic symptoms only or for both somatic and psychological symptoms 17% consulted three or more agencies. Amongst those who consulted for psychological symptoms only, 37% consulted 3 or more agencies.

DISCUSSION

The reasons why (a)an intranational survey was carried out (b) it was decided to construct a new interview schedule instead of translating one developed in the west and (c) an attempt was made to measure social functioning, have already been discussed. The special advantages of IPSS are discussed elsewhere (Kapur, Kapur and Carstairs - in press).

REPORTING PSYCHIATRIC SYMPTOMS IN OTHERS

It has been an enlightening exercise to investigate the factors which determine reporting of symptoms in others and to find that the young, the educated and the rich report more than the old, uneducated and the poor. Most interesting is the finding that those who have symptoms themselves, especially 'psychological', report more than others. These findings should have important implications in connection with studies using 'key informants' as the source of information. It shows that key informants may be biased in reporting because of their own characteristics.

CASTE DIFFERENCES IN DISTRIBUTION OF SYMPTOMS

It is interesting to note that the matrilineal castes have a higher 'case' rate than the Brahmins. However, the differences may be due to the fact that the three castes differ on socio-cultural variables which correlate with 'case' rates. A multiple standardization procedure needs to be carried out to 'weight' the case rates in the three castes before carrying out a comparison. This has yet to be done.It is most interesting to observe that amongst the matrilineal castes the males are hardly influenced by social change (change in residence patterns) but the women are. The fact that :
(a) the decision to change is made by men and not by women and
(b) women have something to lose by the change in terms of their status in the family makes it unlikely that the social change is the result of neurosis in women who change the residence pattern. It seems logical to conclude that social change has been a cause of increased symptomatology in women. The stresses which women have to undergo in the changing society have been referred to in Appendix I and make the hypothesis more acceptable.

CONSULTATION

It is evident that it is much more acceptable to consult if one exhibits 'somatic' symptoms as compared to psychological symptoms. Further if one has psychological symptoms the tendency is to consult a greater variety of help-giving agencies. Perhaps one is forced to seek different agencies because none of them offers a satisfactory consultation for these kinds of symptom.

It is interesting to see that Bants not only have the highest case rate but amongst those who have symptoms Bants 'consult' more than others. The implications of this result have yet to be fully understood. It is also interesting to observe that though women have higher case rates than men amongst those with symptoms men consult more than the women.

The analysis is still incomplete and much more needs to be done before all the aims of the study are fully realized.

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EXPLANATORY NOTES

1. CASTE:

Hindus of India are divided into an amazing number of caste and sub-caste groups, the division being based on the concept of pollution. According to this any contact between a member of a higher caste and a member of a lower caste results in a ritual pollution of the former. The contact can be through touch, inter-dining or sex. Depending on the 'distance' between the two castes is the complexity of the purificatory rite the higher caste person has to undergo to get rid of the pollution. The caste rules are much relaxed these days but are by no means extinct. In our own attitude survey intermarriage was almost totally unacceptable and inter-dining was acceptable to very few.

2. FAMILY CODE:

All members of one family were given a common 4-digit census code and each individual was given a 2-digit census code which followed the Family code. This made it possible to categorize the population with the family as a unit or the individual as a unit as desired.

3. ADDRESS:

It is not easy to codify the address in an Indian village. However in a survey of this kind it is essential that the subjects are easily traceable. To make it possible the village was divided into its constituant sub-villages, each sub-village was divided into a number of Blocks and each Block was divided into a number of Units. Well known landmarks were chosen to define the Blocks and Units, each family being assigned an address code based on the geographical unit it resided in.

4. PERMANENT RESIDENTS:

Those who lived in the village for at least 9 months in the year preceding the census.

5. DEMON WORSHIP:

While the gods are worshipped to grant favours the demons are worshipped to prevent them from causing harm to the family. There are a number of popular demons in the village, each with its own shrine and the ritual of appeasement. Some are more powerful than others.

6. CASTE GROUPS:

Kota has Hindus, Muslims and Christians (both protestant and catholic). There are 12 caste groups amongst the Kota Hindus.

7. THE INTERVIEW.

In a previous pilot study (not described here) we had discovered that the villagers did not like their women folk to be examined by men. One investigator was chased away by a woman respondent's father-in-law. The same pilot study showed that women were scared of giving information about others without consulting their men. It was therefore decided that the section on inquiry about others will be omitted when interviewing the women in the main survey.

APPENDIX I

VARIATIONS IN THE INHERITENCE AND RESIDENCE PATTERN OF MATRILINEAL CASTES

1. Complete change over to Patrilineal inheritence and residence pattern.

2. Husband and wife have started living together though the inheritence is still matrilineal.

3. Inheritence changed to Patrilineal but the husband and wife still live separately.

4. Husband's family has changed over to Patrilineal inheritence. His wife and children have started living with him. The family of his sister's husband is still matrilineal and hence the sister and her children also live with him. This results into tension between the wife and sister.

5. Wife is not welcome to her brother's house because he has adopted the Patrilineal residence pattern. Also she is not welcome to her husband's house as his family still follows the matrilineal residence pattern. This results into stress on the wife and children. In some cases she has to live with her children in a separate hut away from her brother or her husband.

6. Escape into a Unitary family system.

APPENDIX II

A BRIEF OUTLINE OF THE INDIAN PSYCHIATRIC SURVEY SCHEDULE AND THE STAGES OF INQUIRY

Indian Psychiatric Survey Schedule as it stands at present is designed to inquire about the presence or absence of 124 psychiatric symptoms and ten items of historical information. The inquiry is carried out through a multi-stage procedure:

(a) All members of the population are given a Preliminary Interview Schedule, having two sections. This schedule is designed to be used by non-psychiatrists who have had a short period of training. The first section has 26 standard questions followed by a standard cross-examination. There are a number of cut-off points and the inquiry can be made more detailed when necessary. It is possible to elicit the presence or absence of 26 'somatic' and 36 'psychological' symptoms the decision being made by the investigator guided by an instruction manual giving standard definitions for the various symptoms. The ten items of historical information are elicited from anyone having one or more symptoms.

To encourage cooperation, questions are first asked about more acceptable somatic items, then about sleep, appetite and other items of subjective distress and only at the end about delusions and hallucinations. Section II has fifteen questions of distress or nuisance value to others and the respondent is asked if he has observed these in any member of his family or village.

(b) Anyone having somatic symptoms is given a general physical examination by the expert to exclude obvious physical pathology.

(c) If fits, attempted suicide, delusions or hallucinations are suspected in the preliminary inquiry the respondent is given a detailed interview by a trained psychiatrist.

(d) A close relative who has seen the respondent for at least one hour a day during the preceding week is given a detailed standardized interview if:

(1) anyone while completing the section II of the preliminary interview schedule has reported that the subject suffers from one or more items in that section, or

(2) on detailed inquiry with the subject himself, the presence of fits, possession, delusions or hallucinations is confirmed.

(e) for every respondent who needed a detailed inquiry or whose close relative was interviewed the psychiatrist makes and records his 'observations'.

(f) For items identified from more than one source (i.e. from the subject, his close relative or from the expert's observations) the symptom is recorded as present when its presence has been ascertained from at least one source,

APPENDIX III

SYMPTOM CHECK LIST IN THE INDIAN PSYCHIATRIC SURVEY SCHEDULE (I.P.S.S.)

A symptom is defined as an item of behaviour, speech, mood, thinking, attitude and sensorium which (a) represents a change from the usual pattern for the individual and (b) is distressful to the individual or those around him or both. Unless otherwise specified the symptom is recorded only if it is present at the time of interview and/or during the preceding week. It is possible with I.P.S.S. to inquire about the following symptoms:

SOMATIC SYMPTOMS

Pain		Head
Burning		Chest
Itching	IN	Ano-genital region
Numbness		Rest/
Other odd sensations		Whole Body

Dizziness, Nausea, Indigestion, Weakness, Wind in abdomen, Epileptic fits, Hysterical fits, Hysterical paralysis/Parasthesia/ataxia/blindness/deafness/ aphonia/other conversion features.

PSYCHOLOGICAL SYMPTOMS

Oversleeping, Sleep delay, Early waking, Generalized sleeplessness, Nightmares.

Increased appetite, Decreased appetite.

Worried, Feelings of inferiority.

Situational anxiety, Free floating anxiety, Panic, Phobias, Suspiciousness.

Muscular tension, Restlessness, Fugitive impulse, Running away, Wandering.

Subjective forgetfulness, Poor concentration, Pressure of ideas, Poverty of thought, Flight of ideas, Ideas of reference, Loss of memory, Disorientation.

Obsessive ideas, Compulsions.

Irritability, Abusiveness, Violence.

Depression, Dullness, Loss of interest, Feelings of incompetence, Suicidal feelings, Suicidal attempt, Guilt feelings, Self blame, Elation, Grandiose ideas.

Sexual preoccupation, Masturbation worries, Night emission worries, Loss of sexual desire, Impotence, Premature ejaculation, Painful menstruation, Other sexual problems.

Bizzare behaviour, Excitement, Slowness, Stupor, Preoccupation, Distractability, Catatonic features, Blunted affect, Incongruos affect, Hostile irritability, Hypomanic mood, Histrionic behavior , Too much speech, Too little speech, Mutism, Incoherent speech, Irrelevant speech.

Delusions of persecution (human/supernatural) Grandiose delusions, Guilt delusions, Other delusions, systemisation of delusions.

Auditery/visual/olfactory/gustatory/other hallucinations.

Possession voluntary/involuntary.

Excessive alcohol, Other antisocial habits.