
URBANIZATION AND MENTAL MORBIDITY IN CERTAIN TRIBAL COMMUNITIES IN WEST BENGAL

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The same team of workers surveyed a rural and an urban sample of the same tribe (Santal) by the same method. It was found that urbanization had little effect on the total mental morbidity. But stress-dependent disorders were commoner in the urban tribe.

The tribesmen in their natural habitat are far away from urban life in spirit and practice. A group of urbanized tribesmen is therefore, likely to show the effect of urbanization on their mental health very vividly, if compared with their rural brethren. Among the tribes in Ghana, Fortes and Mayer (1966) observed more psychoses in persons exposed to the condition of life in the alien or largely urban environment than among those who had remained in the traditional social culture. In a study on the psychiatric morbidity of certain rural tribes of West Bengal Nandi *et al.*, (1977) found that stress-dependent mental disorders like (Anxiety Neurosis and OCN) were absent in their sample. In order to assess the effect of urbanization on the mental health of a community we, therefore, decided to study the prevalence of mental morbidity in two groups of the same tribe viz. the Santals. One group was living in a rural area for generations and the other group had migrated to an urban area about 20 to 25 years ago.

The aim of the study was to assess the change, if any in the extent and pattern of mental morbidity in the urbanized group in comparison to the rural group of the same tribe.

MATERIAL AND METHODS

THE SAMPLE

The urbanized santal community migrated to the new settlement within the boundary of Kalyani Township (Nadia dist) about 20 to 25 years ago from their original habitat in the rural area of Orissa and Bihar. These families (205 families) were resettled with the active help co-operation of the Government of West Bengal and a philanthropic organisation. They are employed in the industries in and around the township or in the hospitals or universities located nearby. For their children they prefer a white collar job. They send their children to schools and even to colleges for higher studies at great personal hardship. The food habit and dress of children and adult have become similar to those of their non-tribal urban neighbours. Their urge to possess materials like, wrist-watch, transistor and bicycle is also noteworthy. The rural sample of Santals live in a cluster of villages along a narrow canal in the district of Midnapore. The rural tribals preserved their basic culture, family structure, value system and economy. The total population of the urbanized Santals was 771 (Male 389, Female 382) divided almost equally

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between the sexes. Children aged below 5 years constituted 18.9% of the population which was free from mental illness. The oldest age group comprised 2.2% of the population and showed the highest rate of mental morbidity.

The rural Santals numbered 653 (Male 335, Female 318) and divided almost equally between the sexes. The average number of members in a family was 4.4. The per capita income was Rs. 45. In the youngest age group the Santals had 11.5% of the population and in the oldest age group (60 years and above) 4.3% of the population.

COLLECTION OF DATA

A team of psychiatrists visited the area to be surveyed and familiarized themselves with the people before the beginning of the survey. The people were approached through the local leaders and other significant persons of the locality. The purpose of the study was explained to them and they were assured of anonymity and confidentiality of the facts divulged by them. The method adopted for the study was a door to door survey. The team interviewed each family as a unit and each individual member separately. The data were first collected from the head of the family and then from each adult member to make sure that all the facts were obtained. Whenever a probable case was detected, thorough physical and psychiatric examination was carried out independently by two senior psychiatrists and diagnosis was reached separately. In case they differed their diagnosis, reexamination was carried out and an agreed diagnosis was reached. The agreement of two psychiatrists was very high.

TOOLS

Four schedules were used to collect and tabulate the data. (i) Household schedule (ii) Socio-economic status schedule- the schedule developed by Kuppaswamy (1976) was used for the urbanized tribals and the schedule developed by Parikh and Trivedi (1966) was used for the rural tribals. (iii) Disease Identification Schedule - it contains questions which will lead to the identification of all kinds of mental illness. This was the schedule used by Nandi *et al.* (1975). (iv) Case record schedule - the schedules give all the relevant information regarding the case detected and records the finding of examination and the final diagnosis.

The operational definition of a 'case' mentioned in the W.H.O. Technical Report Series (1960) No. 185 was accepted with minor modification for use in the study. A glossary of diagnostic criteria has been used after Nandi *et al.* (1975).

RESULT

Data collected by this method were analysed and presented in the following tables.

Table III shows that the same tribe- whether living in an urban or in rural area - show no significant difference in their rate of morbidity.

Table IV shows that the rate of depression in the urbanized Santals community is much higher than in the rural Santal community. This steep rise falls marginally short of statistically significant level.

Table -I: Distribution of types of illness by sex (Rural Santals).

Illness	Male	Female	Total
Schizo	-	1(3.1)	1(1.5)
Depression	3(9.0)	12(37.7)	15(23.0)
Mania	1(3.0)	-	1(1.5)
M.R.	5(14.9)	1(3.1)	6(9.2)
Epilepsy	3(9.0)	1(3.1)	4(6.1)
Anxiety	-	-	-
Hysteria	-	-	-
Obsession	1(3.0)	-	1(1.5)
Phobia	-	-	-
Dep(N)	-	-	-
Total :	13(38.8)	15(47.2)	28(42.9)

Figures in parenthesis indicate rate per thousand.

Table -II: Distribution of types of illness by sex (Urban Santals).

Illness	Male	Female	Total
Depression	12(30.84)	18(47.12)	30(38.91)
Manic-Psychoses	3(7.71)	-	3(3.80)
Schizo-phenia	-	-	-
Hysteria	-	1(2.61)	1(1.29)
Anxiety	2(5.13)	-	2(2.59)
Obsession	-	-	-
Phobia	-	-	-
Epilepsy	2(5.13)	-	2(2.59)
Mental retardation	2(5.13)	-	2(2.59)
Total :	21(53.98)	19(49.74)	40(51.88)

Figures in parenthesis indicate rate per thousand.

Table - III: Total morbidity in the two Santals communities

	No. Affected	No. Not Affected	Total
Rural	28 (42.9)	625	653
Urban	40 (51.88)	731	771
Total	68	1356	1424

$$\chi^2 = 0.63, \text{d.f.} = 1, \text{NS}$$

Figures in parenthesis are rates/thousand.

Table - IV: Stressful effect of urbanization on the pattern of mental morbidity (Relative prevalence of depression) in the morbid stock.

	Depre-ssion	Other Morbidity	Total
Rural Santals	15 (23.0)	13	28
Urban Santals	30 (38.91)	10	40
Total :	45	23	68

$$\chi^2 = 3.38, \text{d.f.} = 1, \text{NS}$$

Figures in parenthesis are rates/thousand.

Table V shows that the rate per thousand of MR is significantly lower in the urban group.

Table VI shows that the urban tribe, like its rural counter part has a low rate of neurotic disorders. Obsession and Phobia are absent in the urban group. But the total rate of neurosis is higher in the urban group.

Table - V: Beneficial effect of urbanization (Relative prevalence of MR in the morbid stock)

	MR	Other Morbidity	Total
Rural Santals	6 (9.2)	22	28
Urban Santals	2 (2.59)	38	40
Total :	8	60	68

$$\chi^2 = 4.28, \text{d.f.} = 1. \text{NS}$$

Figures in parenthesis are rates/thousand.

Table - VI: Neurotic Disorders in the two communities (Rate/thousand)

Mental Disorders	Rural Santals	Urban Santals
Anxiety	-	2.6
Obsession	1.5	-
Hysteria	-	1.3
Phobia	-	-

DISCUSSION

Field-surveys of different communities made by the same team with the same criteria of caseness and diagnosis should reflect the difference, if any, in their rates of mental morbidity. Tables I and II give the rates of morbidity of the rural and urban sample of the same tribe (Santals). It is to be noted that the urban sample had slightly higher rate than the rural sample (Table III) but the difference is not statistically significant (51.8 and 42.9 per thousand respectively). These data suggest that urbanization exerted little adverse effect on the mental health

of a tribal community. As Cox (1977) pointed out, urbanization involved migration which might have an association with increased risk of mental morbidity. Leff (1988) reviewed the literature on the effect of migration on the mental health of Norwegians in the USA and West Indians in the UK and came to the conclusion that "evidence suggests that whatever stresses are implicit in setting in a foreign land, or whatever selection factors operate in migration, they are not responsible for a general increase in psychiatric morbidity". Murphy (1977) states that if one controls for factors such as age, social class, occupation status and ethnic group, it becomes doubtful whether there is a significant association between migration and rates of mental illness. On the other hand, the highest rates of mental disorders have been reported in refugees whose migration was enforced (Eitinger, 1960). Our sample of urbanized tribals settled in a new area under the patronage of a philanthropic organisation and Government of West Bengal. They were, therefore, free from the detrimental effects of migration under duress in to a foreign country. The cohesiveness of the group was not impaired as the settlement was meant exclusively for the people of the same ethnicity. The major causes of stress fostered by migration viz, economic uncertainty, coping with unfamiliar and often hostile culture, disruption of family structure do not operate in this sample. Moreover, migration of this group occurred about 20 to 25 years ago. Leff (1988) notes that length of residence before the onset of symptoms was over 2 years in 65% of an immigrant sample living in Camberwell. He concludes that the difference in the rate of morbidity between the immigrants and the na-

live-born can not be ascribed to the immediate stress of the process of immigration.

It is, therefore, reasonable to presume that migration might have had negligible effect on the mental health of the community we have surveyed.

Let us explore the effect of urbanization on the pattern of morbidity in the community.

The complex life pattern in an urban set up produces stress in interpersonal relationship, occupational changes and vertical mobility. The most remarkable aspect of the possible effect of stress is the high rate of depression in this urban tribe (Table IV). The rural Santals group shows a rate of 23 per thousand while the urban Santals has as high a rate as 38.9 per thousand. Though depression has been reported to be the commonest mental illness amongst the rural tribes (Field, 1960; Nandi *et al.*, 1977), the high rate among the urban Santals cannot be explained except by an increased dose of stress in urban life. The rural tribes have no occupational specialization, no overt concern for their tomorrow and their child rearing practices give ample opportunity for free play of instincts. These factors keep them relatively free from stress. Stress-dependent disorders (e.g. Neuroses) are hence less common in the rural tribes (Nandi *et al.*, 1977; 1980). The high rate of neuroses in the urban Santals may be associated with the stressful urban life steeped in higher level of aspiration. Economic prosperity coexists with insecurity which is unknown in the rural tribes. Anxiety Neuroses could not be found in several samples of rural tribes in West Bengal (Nandi *et al.*, 1977).

In the present sample of urban Santals the rate of Anxiety Neuroses was 2.6 per thousand (Table IV). Nandi *et al.* (1978) reported a higher rate of stress dependent mental disorders (depression, anxiety neuroses) in a rural sample of uprooted non-tribal community who had a very high level of aspiration compared to a matched native-born community.

While urbanization brings in stress and its deleterious effects, it is not an unmitigated evil. We find that the rate of MR is much lower in the urban Santals (Table V). This might be related to the benefits of urban life in the form of better antenatal care, better nutrition to the expectant and better medical aid to the new born. Though it may be apparently sound rather simplistic to ascribe lower rates of MR to these factors, it is worth mentioning that majority of MR are of mild and moderate degree and more often they are related to non-genetic factors.

In conclusion it may be noted that urbanization as such may not have any deleterious effect on the total mental morbidity of a tribal community. But the altered life style inherent in urban life may change the pattern of morbidity. Stress factors may affect the rate of stress dependent mental disorders and the improved quality of life in an urban setting may lower the incidence of some of the preventable mental disorders.

These two propositions may be tested more effectively in bigger samples of tribes who have been urbanized for a longer period of time (say two or three generations).

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