

Incidences of Consanguineous Marriages Among Telugu-speaking Populations of Kharagpur, West Bengal

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INTRODUCTION

A considerable variability in the trends of consanguineous marriages have been obtained for populations of different parts of India. A country-wide survey of different types of consanguineous marriages have been conducted in 500 villages as a part of the 1961 Census of India on the advice of Professor J.B.S. Haldane. The data, thus obtained, have been analysed by grouping the populations into Hindus, Muslims, Christians and Tribes available for different provincial states (Roychowdhury, 1976). The rates of different degrees of marital consanguinity in those sections of regional populations have also been plotted on the map of India (Mukherjee, 1992) which brings out the highest consanguinity rates in the southern states except for Kerala, particularly in Andhra Pradesh. The incidence of such marriages gradually decline in the neighboring states. It is greater in the western region than in the east and north eastern India.

Sanghvi (1966) has also collected data on marriage between maternal uncle: niece; and patrilineal and matrilineal cross cousins in 39 villages of 14 districts of Andhra Pradesh, as a part of a survey of smoking and chewing habits in relation to oral cancer. The main feature of these data is a high proportion of UN marriages, which even exceeds that of the matrilineal cross cousin marriages in the samples from East Godavari district, Andhra Pradesh. Only a small proportion of 2.3% of marriages are between a man and his father's sister's daughter, FSD (patrilineal cross cousin). He noted a marked variation in the pattern of marital consanguinity and inbreeding in different districts with the highest concentration in the coastal districts of Vishakhapatnam and East Godavari, in both of which there is a high proportion of UN marriages.

The rate of consanguineous marriage has been found to decline centrifugally from east coast of Andhra Pradesh, steeply declining towards the west from the Krishna district and again

increasing towards south near Madras (Mukherjee, 1992). In Tamilnadu, the decline is towards the south and west. The Dhangar population, moving northwards from the south of Karnataka State, have given up the practice of UN and patrilineal cross cousin marriages while strongly retaining the tradition of matrilineal cross cousin marriage. Similar geographical clines in the rates, degrees and types of parental consanguinity and inbreeding have also been reflected in the data collected from hospital patients in three different regions- (i) Vishakhapatnam in the north (Dronamraju and Meera Khan, 1960; Veerraju, 1973), (ii) Tirupati in the south (Mukherjee, 1972), and (iii) Hyderabad in the west (Murty and Jamil, 1972). Several populations which immigrated from what is now Pakistan from 1947, when India was politically divided, like the Sikhs from Baluchistan in Delhi, the Bhatia from West Punjab and others show considerable frequencies of marital consanguinity (Mukherjee, 1992).

But endogamous populations within each group have been found to vary in respect of these rates. For example, two of the three artisan populations of Tirupati - the Padmasale (weavers), Kummari (potters) show the greatest concentration of inbreeding in that area while the third population of other carpenters display a much lower degrees of inbreeding (Mukherjee et al., 1974). The value of F for Padmasale (0.046) population approach that of the Vishakhapatnam fisherman (0.047) which is one of the highest (Sanghvi, 1966) observed value for human populations.

The Kapu (farmers) in Vishakhapatnam district (Veerraju, 1973) have shown as high a rate of consanguinity (49%; $F = 0.038$) as in the Jalari fisherman of the locality (47%; $F = 0.038$). Again, a section of the same Jalari population who have migrated and settled at Puri coast of Orissa show slightly lower rates of consanguineous marriages (Reddy, 1981) suggesting that migration does not always enhance marital

consanguinity and inbreeding but may also reduce it. The present study tries to investigate the frequencies of different types of consanguineous marriages in migrant endogamous populations and compare the data with other relevant data from published reports .

MATERIALS AND METHODS

The present Telugu-speaking population of Kharagpur consists of at least 27 strictly endogamous populations, whose ancestors had immigrated to Kharagpur from three coastal districts of North-eastern Andhra Pradesh and the adjoining Ganjam district of Orissa. Those ancestors had initially come here as workers who laid the rail tracks of Bengal Nagpur Railways (now called South-Eastern Railways), in which most of the Telugu-speaking people of Kharagpur are yet employed. With the increase of job opportunities in the Railways, the earlier Telugu-speaking employees brought their relatives who have now settled in Kharagpur.

Over 70 percent of the Telugu-speaking families in Kharagpur trace their origin from the drought-prone areas of Srikakulam district of Andhra Pradesh. The bulk of the remaining families had come from Vishakhapatnam district, and only a few families from the East Godavari district of Andhra Pradesh. Most of the members of two of the three largest local endogamous populations - the Telaga (T) and Sristikarnam (SK) had come from Srikakulam district, Andhra Pradesh and the border areas of Ganjam district, Orissa, while about equal proportions of the third population, the Segidi (S), trace their origin from Srikakulam and Vishakhapatnam districts of Andhra Pradesh. Another two samples i.e. Kapu (K), and Gavara (G) which represent more than 70 marriages each are studied separately. The small samples of marriages available from 22 other populations are pooled together as a mixed (M) sample for the purpose of comparison. There is narrow range of variation in respect of socio economic and educational status among the people. Over 90 percent of the male members and widows are employed as low – grade skilled workers in the workshop or open lines of the South Eastern Railway , the rest being engaged in shop keeping. Most adult males have received technical training

after middle level schooling and adult female have generally attended upper primary schools.

Types of Consanguineous marriages (traced from the husband side following the convention) are classified according to kinship relationship between spouses in the categories of maternal uncle-niece (UN), first Cousin (IC), first Cousin once removed (ICI), second Cousin (2C) marriages. It has been possible to collect reliable data for consanguineous relationship up to 2C only but not beyond that, because precise information of marriages beyond four generations have not been possible to obtain from the subjects who lack knowledge about their distant ancestors partly because of their immigrant nature. Parental consanguinity of non-consanguineous couples has not been considered for the classification of such marriages because the former does not contribute to the biological effect of consanguineous marriages. It may be assumed that some of the apparently non-consanguineous marriages in the data might, in fact, represent marriages between very remote consanguineous individuals. The trends of each type of marriages have been compared among study populations and other selected relevant population from published reports for comparison

RESULTS AND DISCUSSION

The frequency of consanguineous marriages of different types (i.e. marriages between spouse with different degrees of relationship) in the total sample of Telugu-speaking population of Kharagpur is about 36% (Table 1). The frequency of over 35% is observed in three of the population - the T, SK and K population. Among these marriages, the highest incidence is that between maternal uncle and niece (14.7%) which is followed by first cousin marriages (14.2%). The frequency of marriages between first cousin once removed (4.5%) is slightly greater than that between second cousin (2.1%). In other words, the frequency of consanguineous marriages gradually increases with the degree of consanguineous relationship between spouses.

The frequency of consanguineous marriages vary from about 38% in Telaga (T) to over 28% in the Segidi (S) population. Two populations, Telaga (T) and Segidi (S) which are represented

by the largest samples in this investigation show the overall trend of increasing frequency of consanguineous marriages with closer relationship between spouses.

On the other hand, a trend of higher frequency of first cousin marriages than that of uncle: niece marriages is observed in the rest of the population samples like Gavara (G), Sristi Karnam (SK), Kapu (K), as well as the mixed sample (of 22 endogamous populations). It is noteworthy that the proportion of uncle-niece and first cousin marriages are about equally high in the first three populations (T, S and SK) in the table, even though, uncle-niece marriages occur less often than first cousin marriages in the SK population.

However, the T population sample from East Godavari district of Andhra Pradesh and also the farmers of the Andhra Pradesh in general, do not show highest incidence of uncle-niece marriages. The highest incidence of uncle-niece marriages among all consanguineous marriages is also not found in the Telugu-speaking populations of

Andhra Pradesh in general except with being in the case of the Golla and Mala population of Tirupati in the southern Andhra Pradesh and the Kamma of East Godavari district of Andhra Pradesh. It has been suggested that when the incidence of consanguineous marriages tends to decline in a population (Srinivasan and Mukherjee, 1976) and in migrated population practicing consanguineous marriage (Mukherjee, 1992), consanguineous marriages between closer consanguineous relative tend to increase. Such a phenomenon may have been operating in the first three populations (Table 1) represented by relatively larger samples in the present study.

In view of the fact that the relative sizes of the population samples in the present investigation reflect the relative sizes of the local population they represent, it can be suggested that the three populations (T, S, SK) are large enough in Kharagpur to select marriage partners from the local section of the same populations. As immigration of these populations to Kharagpur

Table 1: Incidences and types of consanguineous marriages among Telugu speaking population of Kharagpur, West Bengal, India and some comparable populations of Andhra Pradesh, India

Population	Region	Number of marriages	Consanguineous marriages					Source
			UN %	IC %	ICI %	2C %	Total %	
1. Telaga	Kharagpur, West Bengal	807	16.5	13.1	6.1	2.2	37.9	Present Study
2. Segidi	Kharagpur, West Bengal	134	15.7	16.4	0.7	3.0	35.9	Present Study
3. SristiKamam	Kharagpur, West Bengal	146	13.7	12.3	1.4	0.7	28.1	Present Study
4. Gavara	Kharagpur, West Bengal	77	9.1	19.5	1.3	2.6	32.5	Present Study
5. Kapu	Kharagpur, West Bengal	72	11.1	13.9	8.3	2.8	36.1	Present Study
6. Mixed Sample	Kharagpur, West Bengal	182	11.0	16.5	2.2	1.6	31.2	Present Study
Total	Kharagpur, W. B.	1418	14.7	14.2	4.5	2.1	35.5	Present Study
7. Telaga	Village Vella, A.P.	246	7.7	16.7	0.0	7.3	31.7	Chakravarti et al., 1971
	Village Kapavaram, A.P.	86	3.5	13.9	1.2	7.0	25.6	Chakravarti et al., 1971
8. Telaga	E. Godavari, A. P.	616	5.5	15.4	-	6.5	27.4	Reid, 1973
9. Golla	Tirupati town, A. P.	20	20.0	5.0	5.0	0.0	30.0	Mukherjee, 1972
10. Shepherd	Andhra Pradesh	482	8.7	43.2	0.0	0.0	51.1	Sanghvi, 1966
11. Kapu(Naidu)	Visakhapatnam, A. P.	230	10.6	36.5	0.0	0.0	49.1	Chakravarti et al., 1971
12. Kapu	E. Godavari, A. P.	740	8.4	22.1	0.4	3.2	34.1	Veeraju, 1973
13. Kapu (Baliji)	E. Godavari, A. P.	178	6.2	14.6	1.1	0.0	21.9	Chakravarti et al., 1971
14. Farmers	Andhra Pradesh	2490	10.6	31.4	0.0	0.0	42.0	Sanghvi, 1966
15. Kamma	E. Godavari, A. P.	60	28.3	8.3	5.0	1.7	43.3	Veeraju, 1973
16. G. Kamma	Chittoor District, A.P.	409	4.9	6.8	2.0	0.5	14.2	Mukherjee, et al., 1974
17. Pattusali	Chittoor District, A.P.	265	0.8	44.9	0.0	2.6	48.7*	Rao & Mukherjee, 1975
18. Padmasali	Chittoor District, A.P.	68	7.4	57.2	2.9	2.9	70.4	Mukherjee, et al., 1974
19. Sali	E. Godavari, A. P.	82	4.9	21.9	0.0	0.0	26.8	Veeraju, 1973
20. Mala	Tirupati town, A. P.	49	12.3	48.1	0.0	2.1	18.5	Mukherjee, 1972
21. Mala	Chittoor District, A.P.	885	2.4	33.7	0.2	0.0	36.3	Reddy, 1983

* One marriage between grandfather & granddaughter (0.4%) is included

is mostly kin-based, this situation would lead to marriages between closer consanguineous relatives in these populations in view of their preference for consanguineous marriages.

There is, however, no apparent relationship between the incidence of the total number of consanguineous marriages or that between distant cousin marriages (beyond first cousin) and that of uncle - niece marriages in the data. In fact, the T, SK, K populations show highest frequency of all types of consanguineous marriages including those between relatives remoter than first cousins.

It is, again, observed that the frequency of consanguineous marriages except that between first cousin marriages have considerably increased in the T population of Kharagpur from that observed earlier among the same population in the East Godavari district of Andhra Pradesh. But such a phenomenon is not clearly apparent in the Gavara (a traditional shepherd population) when the incidence of consanguineous marriages in the relevant Golla or shepherd population studied in Andhra Pradesh is examined. The Kapu population sample from Kharagpur, although still showing a high frequency of consanguineous marriages suggest a slight decline in the frequency of such marriages from that in the Kapu (Naidu) of Vishakhapatnam, Andhra Pradesh. This is mainly due to the report of an unusually high incidence of first cousin marriages in Kapu (Naidu) of Vishakhapatnam. Similarly, a very high incidence of first cousin marriages has been reported from shepherd population of Andhra Pradesh with no incidence of consanguineous marriages between remoter relatives. However, the G population of Kharagpur also shows a considerable high proportion of first cousin marriages among all consanguineous marriages. As all these data from Andhra Pradesh are not collected through pedigrees, it is difficult to explain the differences in the frequencies of different types of consanguineous marriages observed in studied populations. The estimated frequencies of consanguineous marriages in the present study populations occupy a position near the middle of the range of frequencies so far reported from all Telugu-speaking populations. However, the frequency of consanguineous marriages in the local Telaga (T) population,

whose ancestors have emigrated mostly from Srikakulam district, appears to be greater than that reported in the Telega (T) samples from Vishakhapatnam and East Godavari district of Andhra Pradesh.

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KEY WORDS Consanguineous Marriages. Immigration. Endogamous Populations.

ABSTRACT High frequency of consanguineous marriages occur in each of the five major endogamous populations directly studied and a similar phenomenon can be inferred for the other 22 populations studied through the mixed sample, who are migrated largely from Srikakulam and Vishakhapatnam district Andhra Pradesh to Kharagpur town of West Bengal. The estimated frequencies of consanguineous marriages in the present study populations occupy a position near the middle of the range of frequencies so far reported from all Telugu-speaking populations. However, the frequency of consanguineous marriages in the local Telaga (T) population, whose ancestors have emigrated mostly from Srikakulam district, appears to be greater than that reported in the Telega (T) samples from Vishakhapatnam and East Godavari district of Andhra Pradesh.

REFERENCES

- Chakravarti et.al. Cited by D. P. Mukherjee, S. Bhaskar, and L. Lakshmanudu, 1977 (1971).
- Dronamraju K.R. and Meera Khan.P.: Inbreeding in Andhra Pradesh. *J. Heredity*, **51**: 239-242 (1960).
- Mukherjee, D.P.: Genetic studies in relation to fertility. *Mimeo Report. ICMR Project* (1972).
- Mukherjee D.P., Bhaskar, S. and Lakshmanudu L.: Studies on inbreeding and its effect on some endogamous populations of Chittoor district, Andhra Pradesh. *Proc. of the 1st Ann. Conf. of the Ind. Society of human genetics*, **27**, P-17 (1974).
- Mukherjee D.P.: Consanguineous and their genetical consequences in some Indian populations. pp. 63-74 In: *Isolation, Migration and Health*. D. F. Roberts, N. Fuzuki and K. Torizuka (Eds.). Cambridge University Press. Cambridge, (1992).
- Murty, J.S. and Jamil, T.: Inbreeding load in the new born of Hyderabad. *Acta. Genet. Med. Gemellol.*, **21**:327-331, (1972).
- Rao, A.P. and Mukherjee, D.P.: Consanguinity and

- inbreeding effect on fertility, mortality and morbidity in a small population of Tirupati. *Proceedings of the 2nd Annual Conference of the Indian Society of Human Genetics*, Calcutta (1975).
- Reddy, B.M.: *Population Biology of the Fisherman of Puri Coast*. Ph.D. thesis, University of Calcutta, Calcutta (1981).
- Reddy, P.C.: Consanguinity and inbreeding effects on fertility, mortality and morbidity in the Malas of Chittoor district. *Zeitschrift für Morphologie Anthropologie*, **74**: 45-51 (1983).
- Reid, R.M. : Social structure and inbreeding in a South Indian Caste. In: *Genetic structure of populations*. N.E.Morton (Ed.). Population Genetic Monographs III: 92-99. University of Hawaii Press, Honolulu (1973).
- Roychowdhury, A.K.: Inbreeding in Indian Populations. *Trans. Bose Inst.*, **39**:65-76. (1976).
- Sanghvi, L.D.: Inbreeding in India. *Eugen. Quart.*, **13**: 291-301 (1966).
- Srinivasan, S. and Mukherjee, D.P.: Inbreeding among some Brahman populations of Tamil Nadu. *Human Heredity*, **26**:131-136 (1976).
- Veerraju, P.: Inbreeding in Coastal Andhra Pradesh.. *Proc. Int Symp. Of Hum. Genet.* at Waltair, India. Andhra University Press, Waltair, India, pp. 309-318. (1973).

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