

Effect of Consanguineous Marriages on Mortality Among Yadavas and Kammas of Andhra Pradesh

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ABSTRACT In the present paper 667 families of two occupationally different communities, Yadava and Kamma of Krishna and Guntur districts of Andhra Pradesh have been studied. Out of 667 families, 230 families are found to have genealogical relationship. For total population of Yadavas and Kammas high percentage of still births and miscarriages have been observed in consanguineous marriages for all the conceptions.

In some Indian societies consanguineous marriages are the preferential form of mating. Sanghvi (1966) was one of the first to report on this aspect in India. From Roychoudhury's (1976) comprehensive review, it was possible to have an account of frequent types of consanguineous marriages in India as well in Andhra Pradesh and other southern states. This paper reports the effect of consanguineous marriages on mortality patterns among the two occupationally different communities namely, Yadavas and Kammas of Andhra Pradesh.

MATERIAL AND METHODS

The present study was conducted in the Krishna and Guntur districts of Andhra Pradesh, where the concentration of Yadava and Kamma communities is maximum as compared to the rest of the districts.

The Yadavas and Kammas are endogamous communities and profess Hinduism. Both occupy a position next to that of 'Vaishyas' (traders) caste in the caste hierarchy. Both these communities are predominantly rural because of their main occupation.

Interview schedule was prepared at the household level which included information on general demographic and socio-economic variables. The information was collected from informants belonging to both rural and urban areas. Data

were collected from 667 families of both the communities (Yadavas - 352; Kammas - 315).

RESULTS AND DISCUSSION

Out of 667 couples interviewed, 230 couples are found to have genealogical relationship (Table 1). More consanguineous marriages are reported among Yadavas (141 cases) than Kammas (79 cases). Among both the communities, cross-cousin marriages are higher than other types (Table 1).

The mean coefficient of inbreeding (F) among Yadavas is higher (0.04709) as compared to Kammas (0.02119). In the urban-rural break up the urban group of both the communities shows higher F value.

Among all the states surveyed in India, the coefficient of inbreeding is highest in Andhra Pradesh which varies from 0.013 to 0.041 (Roychoudhury, 1976). Dronamraju & Meera Khan (1963) while discussing high rates of inbreeding in Andhra Pradesh outlined certain possible reasons. The most important ones seem to be (a) the desire to keep the cultivable land in larger pieces for growing food crops, (b) parental domination in arranging marriage, (c) the mutual familiarity of families, (d) the perception that relatives are better suited for economic and other reasons to fit into the Hindu joint family system etc.

Yadavas and Kammas show high frequency

Table 1: Consanguineous marriages (number and percentage) and mean coefficient of inbreeding (F) among Yadavas and Kammas of Andhra Pradesh

Group	Uncle Niece	Cross Cousin	Blood Related	Total Blood Related	Non-Blood Related	Total	F
Yadavas							
Pastoral	14(11.11)	27(21.43)	12(9.52)	53(42.06)	73(57.94)	126	0.02728
Pastoral and agricultural	27(17.20)	18(11.25)	14(8.92)	59(37.58)	98(62.42)	157	0.02867
Others	8(11.59)	18(25.71)	5(7.25)	29(48.03)	40(57.97)	69	0.02899
Total	49(13.92)	63(17.33)	31(8.81)	141(40.06)	211(59.94)	352	0.04709
Kammas							
Agricultural	9(13.43)	4(5.87)	2(2.99)	15(22.39)	52(77.61)	67	0.02052
Agricultural and Pastoral	11(6.51)	17(10.06)	13(7.69)	41(24.26)	128(76.74)	169	0.01442
Others	5(6.33)	9(11.39)	9(11.39)	23(29.11)	56(70.89)	79	0.01503
Total	25(7.94)	30(9.32)	24(7.62)	79(25.08)	236(74.92)	315	0.02119
Total (Yadavas and Kammas)	74(11.09)	93(13.64)	55(8.25)	220(82.98)	447(67.02)	667	0.02239
Yadavas							
Urban	14(16.09)	20(22.99)	7(8.04)	41(47.13)	46(52.87)	87	0.03448
Rural	35(13.21)	41(15.47)	24(9.06)	100(37.74)	165(62.26)	265	0.02618
Kammas							
Urban	3(6.97)	2(4.65)	5(11.63)	10(23.26)	33(76.74)	43	0.01163
Rural	22(8.09)	28(10.29)	19(6.99)	69(25.37)	203(74.53)	272	0.01654
Total (Yadavas and Kammas)							
Urban	17(13.08)	22(16.92)	12(9.23)	51(39.23)	79(60.77)	130	0.02692
Rural	57(10.61)	69(12.85)	43(8.01)	169(31.47)	368(68.53)	537	0.02129

of still births and miscarriages in consanguineous marriages.

The effect of inbreeding on the present population groups of Yadavas and Kammas is remarkable. Increased risk of homozygosity for deleterious recessive mutants that occur among the offspring of consanguineous marriage may result in an increased probability of abortions, miscarriages, still births, neo-natal deaths etc. This fact can be evaluated by a comparison of consanguineous and non-consanguineous marriages.

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Table 2 : Still births and miscarriages in blood related (consanguineous) and non-blood related married couples (number and percentage) among Yadavas and Kammas of Andhra Pradesh

Conceptions	I						II						III						IV						
	Blood Related			NBR			Blood Related			NBR			Blood Related			NBR			Blood Related			NBR			
	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	
Still birth	10	5	15	4	8	12	9	7	16	8	4	12	7	2	9	4	3	7	3	1	4	2	2	4	
	4.73	2.11	3.35	2.83	10.12	5.45	4.26	2.96	3.57	5.67	5.06	3.45	3.31	0.84	2.01	2.83	3.79	3.18	1.43	0.43	0.89	1.41	2.53	1.81	
Miscarriage	1	2	3	3	2	5	2	2	4	3	1	4	3	.	3	2	.	2	2	.	2	.	2	.	
	0.47	0.84	0.67	2.12	2.53	2.27	0.94	0.84	0.88	2.12	1.26	1.18	1.42	0.57	1.41	0.90	0.94	0.90	0.94	0.94	0.94	1.41	.	0.90	
Conceptions	V						VI						VII						VIII						
Conceptions	Blood Related			NBR			Blood Related			NBR			Blood Related			NBR			Blood Related			NBR			
	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	Y	K	T	
	Still Birth	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0.47	0.42	0.44	0.70	0.45	0.47	0.42	0.44	0.70	1.18	0.47	0.22	0.47	0.22	0.47	0.22	0.47	0.22	0.47	0.22	0.47	0.22	0.47	0.22	
Miscarriage

Y = Yadavas K = Kammas T = Total (Yadavas and Kammas) NBR - Non-Blood related