

LEPROSY IN KARACHI

Pages with reference to book, From 160 To 161

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Sixty one percent of 30,000 registered cases of leprosy reside in Karachi. Most of these are former Indian refugees who have brought the disease to Pakistan at the time of partition. Later, the two refugee movements of Biharis and Afghans have introduced new cases into the population. This paper analyses the pattern of leprosy seen in this city.

PATIENTS, METHODS AND RESULTS

Data on 8,779 leprosy patients registered at various centres (Manghopir, Liaquatabad, Landhi, Baldia, Lyari, New Karachi, Orangi and Malir) was collected from the statistics department of Marie Adelaide Leprosy Centre (MALC). It was analysed for rate of registration of adults and children, origin, types of leprosy in different ethnic groups and distribution of patients in different areas and contact cases. Indian migrants were further subdivided into Biharis and non-Biharis. As majority of Biharis who migrated from Bangladesh were of Indian origin, they were therefore grouped with Indian migrants. Eight thousand seven hundred and seventy nine (5,408 males, 3,371 females) leprosy cases were registered in Karachi between 1981- 85. The overall registration rate was highest in 1981 and lowest in 1982 and 1985. Age and sex distribution in relation to origin was available in 7,748 (4,631 males and 3,117 females). Most of the Indian migrants and Balochis were seen in the second and Afghans, Pathans, Punjabis and Sindh is in third decade of life (Table I).

TABLE I. Age (years) and origin of leprosy patients.

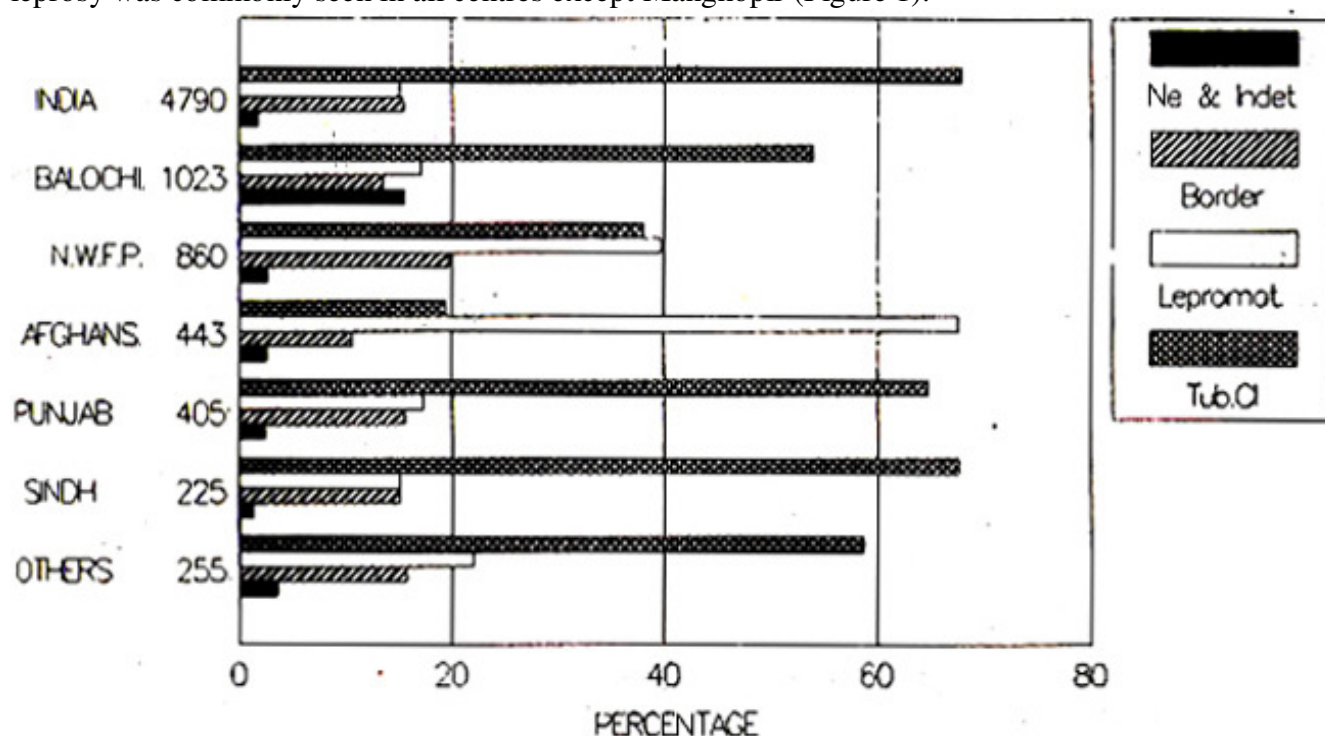
Place of origin		< 10	10-19	20-29	30-39	40-49	50-59	60-69	> /70	Total
India	No.	270	1154	876	646	666	533	339	178	4,662
	%	5.8	24.8	18.8	13.8	14.3	11.4	7.3	3.8	
Balochistan	No	105	272	140	113	80	85	72	16	883
	%	11.8	30.8	15.9	12.8	9.1	9.6	8.2	1.8	
N.W.F.P.	No	19	83	245	171	170	92	55	16	851
	%	2.2	9.8	28.9	20.1	19.9	10.8	6.5	1.8	
Punjab	No.	13	84	90	70	63	50	29	14	413
	%	3.1	20.3	21.8	17	15.3	12.1	7	3.4	
Sindh	No.	12	49	54	34	34	16	18	4	221
	%	5.4	22.2	24.4	15.4	15.4	7.2	8.2	1.8	
Afghanistan	No	0	43	161	130	70	52	8	6	470
	%	0	9.1	34.3	27.7	14.9	11	1.7	1.3	
Others	No.	23	55	56	36	36	26	12	4	248
	%	9.3	22.2	22.6	14.5	14.5	10.5	4.8	1.6	
Total	No.	442	1,740	1,622	1,200	1,199	854	533	238	7,748
	%	5.7	22.5	20.9	15.5	14.4	11.0	6.9	3.1	

Male to female ratio was 1.6:1. Fifty eight percent males were of Indian origin. Predominance of females was significant in non- Biharis, Sindhis and Balochis and males in Afghans (Table II).

TABLE II. Sex distribution in different ethnic groups.

Ethnic group	Male		Female		P. value
	No.	%	No.	%	
India	2,644	57.1	2,018	64.7	<0.001
Punjab	264	5.7	149	4.8	N.S.
Balochistan	419	9.0	464	14.9	<0.001
N.W.F.P.	675	14.6	176	5.6	<0.001
Sindh	96	2.1	125	4.0	<0.001
Afghanistan	405	8.7	65	2.1	<0.001
Others	128	2.8	120	3.9	<0.001
Total	4,631		3,117		

Place of residence was known in 7,929 cases. Majority of lepers reside in Landhi, Orangi, Malir and Lyari. Migrants from Bangladesh have settled in Orangi and Afghans in Manghopir. Tuberculoid leprosy was commonly seen in all centres except Manghopir (Figure 1).

**Figure 1: Types of leprosy in different places of origin.**

It affected migrants from India, Punjabis, Sindhis and Balochis. Lepromatous leprosy was more common in Afghans. In Pathans from NWFP there was slightly higher frequency of lepromatous than tuberculoid leprosy (Figure 2).

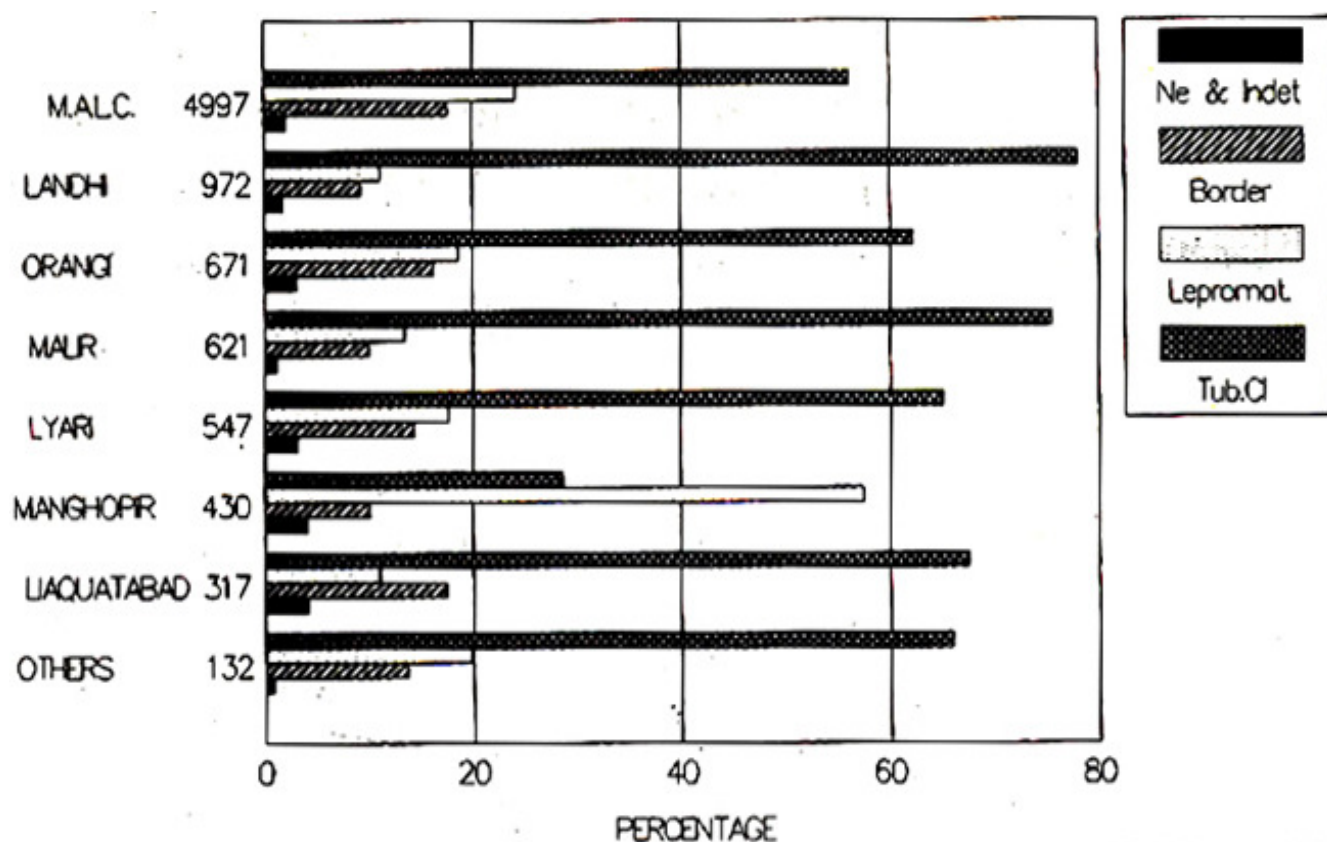


Figure 2. Types of leprosy in different centres.

Eighty percent of patients were unaware of the contact case and 4% had contacts within the family. Out of 129 patients who contacted the disease from family members, 62 were children. Most of the children contacted the disease from their mothers though in some cases both parents were lepers.

COMMENTS

Karachi is a city in which people from different ethnic groups have settled in different waves of migration of 1947, 1971 and 1977. Large number of people have also moved to Karachi from other provinces in search of better jobs. In this retrospective study, Afghans were affected in the third decade with lepromatous type of leprosy. This may be due to suppression of immunity with advancing age as suggested by Browne. Sixty-eight percent of Indian migrants had tuberculoid form with only 15% developing lepromatous type. Pathans from NWFP were likely to be afflicted equally by either the lepromatous or tuberculoid type. The pattern of disease observed in residents of subcontinent and those from neighbouring Afghanistan may be due to genetic differences or variations in the immunological responses in different ethnic groups. The male to female ratio of 1.6:1 may not be a true representation of the distribution of leprosy, as examination of women is an arduous task due to cultural and religious constraints. The areas of city where most lepers live are Landhi, Orangi and Lyari. Manghopir being a hyperendemic area where all the lepromatous cases migrating from Afghanistan reside. Eradication should be aimed at these areas to control the spread of infection to other areas of Karachi.

REFERENCES

1. Pfau, R., and Haq. O. Leprosy in Pakistan. *Lepr.Rev.* 1986;57:355- 59.