Leprosy in Bangladesh, 1984-88

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Summary

A total of 2517 patients with leprosy were studied in Leprosy Control Institute and Hospital, Mohakhali, Dhaka, during the period 1984-1988. Among the total cases, 1891 (75.1%) were male and 626 (24.9%) were female. The male to female ratio was 3 : 1. The age groups comprised 185 (7.4%), below 15 years and 2332 (92.6%), 15 years and over. Most of the cases were diagnosed by clinical examination and classified as Indeterminate form (I), 52 (2.1%) ; tuberculoid form (T), 1326 (52.7%) ; borderline tuberculoid form (BT), 439 (17.4%) ; borderline lepromatous form (BL), 110 (4.4%) ; and lepromatous form (L), 590 (23.4%).

Introduction

In Bangladesh, it is estimated that 150,000 cases of leprosy occur in population of 110 million with a prevalence rate 1.36/1000. Among the estimated cases, so far, 65,000 cases have been registered in different leprosy centres in the country. 13/1000 is the highest prevalence rate in the northern part of the country and 1/1000 is the least prevalence rate in the central part of the country. During the study period (1984-1988), 2517 patients registered in Leprosy Control Institute and Hospital, Mohakhali, Dhaka, for treatment, rehabilitation and follow up. If a large population based study can be done, the total number of estimated cases may be raised.

Materials and Methods

The materials of this study were all patients with leprosy reported to the Leprosy Control Institute and Hospital, Mohakhali, Dhaka, during the period of 1984-1988. The total number of reported cases was 2517. Medical records available at the out patient department of the hospital were scrutinized and information regarding age, sex, type of disease, deformity, year of registry and area of residents was obtained. 10% of the cases were detected through voluntary reporting and 90% were detected through surveys and others (referred by general hospital and medical practitioner). The patients were classified as Indeterminate, tuberculoid, borderline tuberculoid, borderline lepromatous and lepromatous form of leprosy.

Results and Discussion

This study showed that the number of patients with leprosy registered during the period of 1984-1988

has slightly increased. A low of 479 patients with leprosy was reported in 1985 and a high of 559 in 1988 (Table 1). The average number of patients reported was 503.4 per year.

Of the total 2517 patients reported with leprosy during 1984 to 1988 in Leprosy Control Institute and Hospital, Mohakhali, Dhaka, 1891 (75.1%) were males and 626 (24.9%) were females, for a ratio of 3.0 : 1 (Table 2). The distribution of leprosy among male and female on yearly basis was shown in Table 3. Of these patients, 185 (7.4%) were below 15 years and 2332 (92.6%) were 15 years and over.

(Table 4) ¹. Among the elder group, maximum age incidence was found to be between 25-45 years old. The youngest age incidence was 4 years and the oldest was 80 years old. According to type of disease, the tuberculoid type had the highest number of patients 1326 (52.7%) and indeterminate had the lowest number of patients 52 (2.1%); other categories were borderline tuberculoid type, 440 (17.5%); borderline lepromatous type, 109 (4.3%); lepromatous type, 590 (23.4%); (Table 6).

The distribution of types of leprosy was shown in Table 7. It showed that there was statistically significant difference in the distribution of leprosy types in male and female. It was found that tuberculoid type was more in female and lepromatous type was more in male. There was no difference in the age distribution between both sexes (Table 5).

Among the total cases, 302 (12%) cases showed deformity (grade II and III) and it was found in adults. Of these deformities, 250 (82.8%) cases belong to paucibacillary group and 52 (17.2%) cases belong to multibacillary group. There was no deformity in children.

Multidrug therapy (MDT), WHO regimens, was introduced in Bangladesh in 1982 but it was first executed in 1985. At present 54% of the total detected registered cases throughout Bangladesh were covered with MDT but about 95% of the patients registered in Leprosy Control Institute and Hospital, Mohakhali, Dhaka, were covered with MDT. Approximate number of performing MDT from 1988 to 2000 in Bangladesh will be 85% of the total detected registered patients.

With improved health services being offered to the community through the primary health care centres, the leprosy services were integrated with the general health services and primary health care.^{2, 3} All categories of health personnel are being gradually trained on leprosy as well as developing awareness in the community through health education.^{2, 3}

Early case detection, registration, treatment, followup patients and their contacts must be enforced rigorously to promote efficient control programmes in the country.^{2, 3}

Due to limited laboratory facilities for diagnosis of leprosy, the most of the cases were diagnosed based on clinical manifestation. So, well equipped clinical laboratory for more precise diagnosis of diseases include leprosy will be needed in the near future.

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References

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Table 1. Registered cases of leprosy in Leprosy Control Institute and Hospital, Mohakhali, Dhaka. (1984-1988)

year	Patients Registered
	No
1984	480
1985	479
1986	513
1987	486
1988	559
Total	2517

Table 2. Distribution of leprosy among male and female. (1984-1988)

Sex	No	%
Male	1891	75.1
Female	626	24.9
Total	2517	100.0

Table 3. Distribution of leprosy among male and female on yearly basis. (1984-1988)

Year	Male		Female		Total
	No	%	No	%	
1984	377	78.5	103	21.5	480
1985	348	72.7	131	27.3	479
1986	384	74.9	129	25.1	513
1987	371	76.3	115	23.7	486
1988	411	73.5	148	26.5	559
Total	1891	75.1	626	24.9	2517

Table 4. Age distribution in leprosy patients. (1984-1988)

Age range (years)	No	%
<15	185	7.4
≥15	2332	92.6
Total	2517	100.0

Table 5. Age distribution in male and female patients. (1984-1988)

Age range (years)	Male		Female	
	No	%	No	%
<15	139	7.4	46	7.3
≥15	1749	92.6	583	92.7
Total	1888	100.0	629	100.0

Table 6. Types of leprosy on yearly basis. (1984-1988)

Year	I	T	BT	BL	L	Total
	NO (%)	NO (%)	NO (%)	NO (%)	NO (%)	
1984	11(2.3)	286(59.6)	62(13.0)	15(3.0)	106(22.1)	480
1985	11(2.3)	243(50.7)	89(18.6)	22(4.6)	114(23.8)	479
1986	12(2.3)	260(50.7)	101(19.7)	25(4.9)	115(22.4)	513
1987	6(1.2)	256(52.7)	88(18.1)	22(4.5)	114(23.5)	486
1988	12(2.1)	281(50.3)	100(17.9)	25(4.5)	141(25.2)	559
Total	52(2.1)	1326(52.7)	440(17.5)	109(4.3)	590(23.4)	2517

Table 7. Distribution of type of leprosy in male and female. (1984-1988)

Sex	I	T	BT	BL	L	Total
	NO (%)	NO (%)	NO (%)	NO (%)	NO (%)	
Male	23(1.2)	952(50.3)	342(18.1)	86(4.5)	488(25.9)	1891
Female	29(4.6)	374(59.8)	97(15.5)	24(3.8)	102(16.3)	626
Total	52(2.1)	1326(52.7)	439(17.4)	110(4.4)	590(23.4)	2517

Note : Differences in the distribution of leprosy types were statistically significant.

($P < 0.001$). Lepromatous was more frequent in male and tuberculoid was more frequent in female.

バングラデシュのらい (1984年-88年)

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ダッカらい病院

1984年から1989年の間に、ダッカ市モハカリにあるらい病院を受診した2517人の患者について解析した。男は1891人(75.1%)、女は626人(24.9%)で、性比はおよそ3:1であった。年齢別にみると15才以下が185人(7.4%)、15才以上は2332人(92.6%)であった。ほとんどの症例は臨床的に診断された。病型は、未分化群52例(2.1%)、数結核型1326例(52.7%)、BT439例(17.4%)、BL110例(4.4%)、らい腫型590例(23.4%)であった。