

Leprosy control in The Gambia

HJR MEESTERS

Leprosy Control Programme, PO Box 1, Makeni, Sierra Leone.

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Summary The changes in the epidemiological situation of leprosy in the Republic of The Gambia are assessed from the statistics of the registered patients and through comparison of several leprosy surveys.

A marked decline in the number of registered cases (from 7,000 in 1970 to 1,675 in 1977) and in the estimated prevalence of leprosy (2.5% in 1947, 0.6% in 1977) is demonstrated.

Several aspects of leprosy control in The Gambia are discussed. The need to continue a specialized programme is stressed.

Introduction

The Republic of the Gambia is situated in West Africa extending along both banks of the River Gambia to a distance of 11 to 24 km. and for about 482 km. from its mouth. Its capital is called Banjul. It is an enclave of the Republic of Senegal and it has an area of about 10,360 sq. km. and a population of about 500,000 (population census 1973). The population density, 50 per sq. km. is one of the highest in Africa. The Country is easily accessible.

Leprosy Control in the Gambia is done by a specialized service of the Medical and Health Department, which started its activities in 1957.

General Medical Services are developing fast but are still insufficient in their coverage.

Leprosy statistics

ESTIMATED PREVALENCE:

In 1947, Ross¹ (and others) surveyed 17,000 people and found the prevalence of leprosy to be 2.5%. MacFadzean and McCourt² found in 1954 a prevalence of 2.4%. Based upon a random sample survey in 1977 and 1978 of 19,083 people, the prevalence is now estimated to be about 0.6%.

STATISTICS CONCERNING THE REGISTERED PATIENTS:

(1) Total number

At 31/12/78 there were 1,594 patients registered or about 0.32% of the population. So about 50% of the estimated cases are under treatment.

cf 1957	800
1960:	6,207
1970:	7,000
1975:	2,483
1976:	1,784
1977:	1,675

(2) Sex distribution, age and classification in 1978

In 1978, 56% of the registered patients were male. Before 1976, always less than 50%. 136 patients or 8% of the registered patients were 14 years or younger. In the beginning of the project this figure was much higher: 39% in 1961.

Classification is done according to Ridley and Jopling.

TT + T	728 or 45.7%
BT + BB	435 or 27.3%
BL-L-LL	420 or 26.3%
I	5 or 0.3%
?	6 or 0.4%

(3) Newly registered patients in 1978

Total number:	364
cf 1975:	228
cf 1976:	276
cf 1977:	210

Classification

TT-T:	260 or 71.4% of the total newly registered patients.
TB-BB:	54 or 14.8%
BL-L-LL:	43 or 11.8%
I:	6 or 1.7%
?:	1 or 0.3%

Children

63 or 17.4% of the newly registered patients were 14 years old or younger. None were lepromatous.

cf 1963:	38%
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Non-Gambians

80 or 21.9% of the newly registered patients came from abroad. 15 or 19% of these were lepromatous.

Disability

46 or 12.6% of the newly registered patients were disabled.

Newly registered patients who had been treated before

At least 78 newly registered patients had been treated before with dapsone, in the Gambia or elsewhere.

Survey

159 or 44% of the newly registered patients were found during surveys.

(4) Discharged patients in 1978

Total number: 134
cf 1975: 616
cf 1976: 293
cf 1977: 187

(5) Out-of-control patients in 1978

15% of the patients were defaulted in 1978
1976: 15%
1977: 12%

The lepromatous patients follow more or less the same pattern.

(6) Attendance rate 1976–1978

The Medical Officer saw 60% of the patients which he should have seen.

(7) Dead patients in 1978

Total number: 32
cf 1975: 42
cf 1976: 25
cf 1977: 26

(8) Relapsed cases in 1978

6 patients discharged in the past relapsed.

(9) Disability in 1978

Disability is recorded in grades as recommended by the W.H.O. Figures of disability grade 1 are included.

The total number of disabled patients receiving dapsone is at least 744 or 46% of the registered patients.

Number of patients with eye problems: 233

Number of patients with hand problems: 676

Number of patients with foot problems: 633

Disability not known: 86 patients or 5% of the registered patients.

Ulcers: 246 patients have ulcers.

Leprosy work

(1) Treatment

Treatment is given by a field worker who visits the patient every 2 or 4 weeks on a motorcycle. Nearly all patients live within a mile from a treatment centre. All adult patients get 50 mgr. DDS daily.

New lepromatous patients (BL, L, LL) get 100 mgr. DDS daily; the first 4 months 100 mgr. clofazamine daily is added.

Leprosy patients are admitted in the general wards of the main hospital in the capital, for lepra reaction, ulcer care and eye-lid operations.

There is a small leprosy village up-country where 7 patients were admitted; mainly old, very disabled burntout cases.

An orthopaedic shoemaker is attached to the programme.

(2) Case finding in 1978

(a) School surveys

The total number of children seen in 1978 was at least 8,069.

cf 1976: 8,114

cf 1977: 16,433

16 new cases were found, none disabled or lepromatous. Total prevalence of new cases found in school surveys 1976–1978 is 0.104%.

(b) Village surveys

In 1978 out of 49,501 people enumerated 33,071 were seen, or 67%. cf in 1977: 21,530 seen. We found 143 new cases or 0.4% of the people seen.

Based on the 1977 and 1978 village surveys, of which a part was an at random sample (21,450 enumerated, 19,083 seen or 92%) the estimates as far as leprosy is concerned for the Gambia are as follows:

Prevalence rate of all leprosy cases is 0.6%. (Standard deviation 0.036%).

The prevalence rate in males is higher than in females. Of non-registered cases 0.255% versus 0.248%.

The prevalence rate in the age group 0–14 years is 0.2%. For registered cases, 0.06%; for non-registered, 0.14%.

About 20% of the non-registered cases are non-Gambians.

About 5% of the non-registered cases will be disabled.

Most probably due to migration, the pattern of leprosy prevalence has changed. The Western Division always had the lowest prevalence and now has the highest. Nearly all BL-L-LL cases are under treatment.

(c) *Prison surveys*

All the prisoners in the country (522) were checked, 1 new T case was found.

(d) *Public Works Department*

300 staff members of the P.W.D. up-country were checked, 3 new T cases were found.

(e) *Education*

The Medical Officer gave lessons at the School of Public Health, the School of Nursing and the School of Community Nursing. During the school surveys talks about leprosy were given. A radio broadcast about leprosy was broadcast over Radio Gambia.

(f) *Training paramedical staff*

A refresher course was organized for all staff members.

(g) *Staff and transport*

Staff of the leprosy control project assisted in 1977 and 1978 with mass vaccination campaigns.

There are 11 leprosy field workers.

The field worker/patient ratio is low, 1:145.

There are 4 Gambian senior staff and one expatriate medical officer.

For transport the project makes use of 3 landrovers, 1 Peugeot and 15 motorcycles.

Discussion

Compared with the past, leprosy is nowadays a less serious problem:

- (1) The estimated prevalence has come down from 2.5% in 1947 to 0.6% now.
- (2) The number of patients under treatment has decreased from 7,000 in 1970 to less than 2,000 now.
- (3) Only 8% of the registered patients are 14 years old or younger, compared with 39% in 1961.
- (4) Patients are now less disabled.
- (5) We have the impression that nearly all BL-L-LL cases are now on treatment.

But, after over 20 years of leprosy control only about a half of the patients needing chemotherapy receive it. The estimated prevalence (0.6%) and the estimated prevalence rate for children (0.2%) are such that, in the opinion of the author, leprosy control should still receive special attention. As long as basic general medical services are not within reasonable distance of the patient a specialised programme is needed. Migration over the border poses a special problem for leprosy control.

Both the total number of registered patients, 1,594, and the field-worker/patient ratio (1:145) are low. To make more use of the project, other health activities should be undertaken. The staff has shown to be capable to do so.

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References

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