Letter to the Editor

PATIENT AND HEALTH SERVICES DELAY IN THE DIAGNOSIS OF LEPROSY IN KADUNA STATE, NIGERIA

Editor
A study on delay in the diagnosis of leprosy was conducted in Kaduna State, Northern Nigeria. Information was also collected on whom and how often the patients consulted elsewhere before reaching the leprosy services. More insight in these patterns is likely to provide us with clues for improved early case finding.

Methods and materials
An existing questionnaire on health seeking behaviour was used,1 and adapted to the Nigerian situation, e.g. various categories of traditional healers were added.2 The questionnaire was pre-tested to check the understanding by both interviewers and interviewees. Two supervisors of the leprosy control team were trained first and then interviewed patients in the field programme and at the leprosy hospital (convenience sample). Included were patients diagnosed in the last 6 months.

Results

STUDY POPULATION
In total 46 patients were interviewed. Another five interviews were discarded because of incomplete information. It was not reported that any patient refused an interview. Ethnicity and religion-type matched the distribution in the general patient population: 65% was Muslim, against 73-6% in the general patient population (1990–1997, local reports); 63% of the interviewees were Hausa-Fulani by ethnicity. Male-female ration was 2.5, significantly different from that of 1.4 in the general patient population (1990–1997, local reports) ($\chi^2 = 3.92, P = 0.048$). The age profile of the interviewees was also slightly different: men were younger and women a bit older than in the general patient population. The majority of the interviewees (60.9%) had no formal education.

HELP-SEEKING STEPS
Patients reported a variety of complaints as what they saw as the starting point of leprosy. In the vast majority, these were descriptions of skin lesions. Three patients mentioned only swollen joints or more vague connotations of discomfort. About half of the interviewees (48%) presented their problem (presumably the first signs of leprosy) to traditional healers, especially herb-sellers at the local markets (24%), Kuranic scholars (11%) and the more specialized herbalists (11%). Only 11% of the patients went first to the public health sector, while 17% went straight to leprosy services. Private practitioners were first consulted in 13% of cases.
Interviewees paid 2-7 visits (mean-value) to health care providers (including the traditional sector) before leprosy was diagnosed. Eight patients (17%) even exceeded 10 visits.

**WHO SUSPECTED LEPROSY FOR THE FIRST TIME?**

An important question was: ‘who was the first person to consider leprosy as the cause for your problem?’ It was found that family and friends were the most important group in this respect (45% of cases) (Figure 1). Health care providers, either modern or traditional, were the first to suspect it in only 26% of cases.

**DELAY**

The median delay between first signs and presentation it to a health provider (patient delay) was 4.5 months, while the median delay between the first consultation and starting effective treatment (health system delay) was 10 months.

Patient delay was similar for patients consulting either general health services or traditional healers. Health system delay was considerably longer when consulting traditional healers first (see Figure 2).

**Discussion**

**HELP SEEKING STEPS**

Patients reported certain symptoms as the beginning of leprosy. For obvious reasons, the relevance of these symptoms could not be verified. We satisfied ourselves with the thought that these symptoms had played a significant role in the health seeking behaviour that in the end led to a proper diagnosis of leprosy.

Some of the reasons to consult traditional healers are no doubt connected with their accessibility and the health belief models of patients. In a previous study in Nigeria 58% of the patients explained leprosy in terms of traditional beliefs. In Sierra Leone, leprosy has many cultural connotations as well, and herbalists are often consulted in early stages of the disease. In Botswana, the lack of knowledge about the causation of leprosy influenced health seeking behaviour of patients.
WHO SUSPECTS LEPROSY FOR THE FIRST TIME?

Involving traditional healers in a referral system for leprosy can be expected to shorten health system delay. Of course there are alternative strategies, e.g. a Leprosy Elimination Campaign in Northern Nigeria was very successful in terms of case finding efficiency, for costs similar to that of routine activities.6

DELAY

The study confirmed our earlier study in Adamawa State where the majority of patients had a delay of more than a year.7 A study in Nepal similarly showed a median delay of 18 months, with longer delays for those consulting traditional healers.7

Conclusions and recommendations

Traditional healers are more popular than modern health care providers in Northern Nigeria amongst people with the first signs of leprosy. This could be taken into account when designing case finding strategies.

Health system delay was considerably longer than patient delay in the study area. It therefore makes sense to concentrate on shortening this type of delay in diagnosis of leprosy.

Multi-media mass health education campaigns about early signs of leprosy can be expected to lead to a quicker diagnosis of leprosy, because it is the family who plays an important role in the decision to seek help.

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References