

ROLE OF SCHOOL SURVEY IN THE CONTROL OF LEPROSY

SUSHIL CHANDRA,* GURMOHAN SINGH † PARAMJIT KAUR ‡

Summary

Students attending high school in two community blocks in district Varanasi were examined for evidence of leprosy. Among the 995 students surveyed, 20 cases were detected. There was no case of lepromatous leprosy. In endemic areas, repeated examination of school children will help considerably in the early detection of leprosy and its control.

Early detection of cases and adequate treatment of these is most important for the control of leprosy. According to the recommendation of WHO (1966), case finding methods should include examination of selected groups like school children when the prevalence rate in any area is about one per 1000 or higher.

Material and Methods

School health survey was done in two community blocks viz. Harahua and Cholapur of district Varanasi where the prevalence rates of leprosy were 6.5 and 6.4 per 1000 population respectively as per the records of leprosy control unit.

A meeting of the teachers was held in school at the time of the first visit and they were acquainted with the

basic facts about leprosy, its prevalence rate in the area and the importance of screening school children for leprosy. This preliminary meeting helped in getting the co-operation of teachers.

Observations

A total of 995 students in the age group of 10-16 years were surveyed (Table I).

TABLE I
Age-wise distribution of students surveyed

Age in years	Cholapur School	Harahua School	Total
10 - 11	76	87	163
12 - 13	131	176	307
14 - 15	178	261	439
15 - 16	40	46	86
Total	425	570	995
Mean	13.4	13.4	

Their mean age in both schools was 13.4 years.

20 cases of leprosy were detected during the survey. Maximum number of patients were in the age group of 14-15 years. The maximum number of cases were of the tuberculoid type. There was no case of lepromatous leprosy (Table II).

* Lecturer, Skin & V.D.,
G.S.V.M. Medical College
Kanpur.

† Professor & Head, Skin & V.D.,
Institute of Medical Sciences,
B.H.U., Varanasi.

‡ Reader, Department of Preventive &
Social Medicine,
Institute of Medical Sciences,
B.H.U., Varanasi.

Received for publication on 2-8-1979.

TABLE 2
Clinical types of leprosy in Cholapur
and Harahua Schools

Type of leprosy	Cholapur School	Harahua School	Total
Tuberculoid	3	9	12
Maculoanaesthetic	2	3	5
Polyneuritic	1	1	2
Borderline	—	1	1
Lepromatous	—	—	—
Total	6	14	20

Discussion

The risk of leprosy for children (less than 15 years) is significantly greater than that for adults. In a survey of rural population of Hooghly district (India) Verma⁵ (1976) found the highest prevalence rate (8.3 per 1,000) in the age group of 5-14 years. Rao et al⁴ (1975) observed the risk of leprosy maximally in the age group of 5-14 years. Ekambaram¹ (1969) also found high prevalence rate of leprosy in school children of age group below 15 years. Ganapati et al² (1973) in their survey of 2,932 school children in an endemic area of greater Bombay recorded a prevalence rate of 11.3 per 1000 with only one infectious case. These observations indicate the importance of school survey in early detection and control of leprosy.

Kurian et al³ (1975) carried out school survey in Gudiyatham Taluk, Tamil Nadu. Among the 76,891, children examined 217 new cases of leprosy were detected. There was no case of lepromatous leprosy. There were 2 cases of borderline leprosy. Other cases were of indeterminate or tuberculoid type. In the greater Madras leprosy control project school survey was carried out. 81 percent of 41,824 pupils on rolls were examined. Among the 33,935 seen, 607 were detected to have leprosy giving a prevalence rate of 18 per 1,000. The prevalence of leprosy in school survey conducted in

Panaji⁶ was found to be 5.3 per 1,000 children; males predominating. Majority of the patients had single tuberculoid lesion on the exposed part of the body.

In the present study we found the prevalence of leprosy in school children to be 20 per 1,000. Such a high prevalence rate may be explained by the fact that the survey was done by dermatologists and not by paramedical personnel.

There are many advantages in a school survey. It is easier to examine the children thoroughly in schools than in their homes. A large number can be examined in a short time. Children behave better in schools under the guidance of teachers. By repeated visits of survey teams to schools, teachers who form a very important section of the community in rural areas and who are village leaders in many places are kept aware of many of the basic facts about leprosy and the importance of attempts to control this disease. They can be enthused to help in the survey and the control of leprosy.

In school surveys, the cases detected are mostly of the nonlepromatous type. Therefore cure can be obtained within a relatively short period of treatment.

References

1. Ekambaram V & Gangadhar Sharma CS : Epidemiological findings of multiple leprosy surveys in a rural area in Madras State, *Leprosy in India* 41(2), 55-72, 1969.
2. Ganapati R, Naik SS and Sane AB : Leprosy among school children in greater Bombay - result of surveys. *Leprosy in India* 45, 151-162, 1973.
3. Kurian PV, Smt Vasundhara V and Devanbu D : School survey as an effective method for leprosy control in rural areas. *Leprosy in India* 47(2), 75-78, 1975.

4. Rao PSS, Karat ABA and Kaliaperumal UG: Transmission of leprosy within household. International Journal of Leprosy 43(1), 45-54, 1975.
5. Verma OP: Some epidemiological features of leprosy in a rural area in Hooghly District. Leprosy in India 48(4), 371-381, 1976.
6. Sehgal VN, Rege VL and Mascarenhas, MP: The prevalence and pattern of leprosy in a school survey. International Journal of Leprosy 45(4), 360-363, 1977.
7. WHO Expert Committee on Leprosy (1966): Third report WHO Techn Rep Ser No. 319, Geneva 12.

Congratulations :

Dr. P. N. Rangiah, Professor Emeritus in Venereology (Madras Medical College) has been invited to continue as a member of the WHO Expert Advisory Panel on Venereal Diseases, Treponematoses and Neisseria Infections for a further period of two years from 24th May, 1981.

—*Managing Editor.*