

Leprosy and the Community

The strength of a leprosy control project, and the best hopes for its success, lie less with the doctor at its centre than with the junior staff at its periphery, whose primary duties, concerned with case finding and case holding, involve a daily confrontation with the general public. Their work is planned to fit into a pattern of leprosy control activity, but only rarely have the planners any personal experience of the personal problems and difficulties which are the every day experience of these essential workers, whatever we designate them, Leprosy Inspectors, Non-Medical Assistants, Health Home Visitors, or just plain para-medical workers.

An independent time-work study of the duties of this grade of leprosy worker is something of a novelty. The findings of such a study of a leprosy control project in Tanzania are presented here in condensed form, because the problems exposed are common to many rural leprosy control projects in more than one continent, and are therefore of wider interest. Out of respect for all concerned, the anonymity of the project under study has been preserved.

Editorial note

AN ANALYSIS OF SOME FIELD ACTIVITIES IN A LEPROSY CONTROL SCHEME IN TANZANIA

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This study was made in order to analyse some aspects of the field work in a rural leprosy control project, in particular the activities of the Health Home Visitor, and make recommendations for a more efficient and effective performance.

The Leprosy Control Scheme Concerned

The project is a substantial one. Some geographical and demographic data are shown in Table 1. The area is divided into four districts.

The Regional scheme is supervised by one Leprosy Medical Officer, assisted by one Medical Assistant, two clerks, three shoemakers, three drivers, one nursing orderly/laboratory auxiliary, two Rural Medical Aides (concerned with routine clinic supervision) and 20 Home Health Visitors (HHV's) distributed throughout the four districts. These are polyvalent staff, whose primary duties are, health education, case finding, and case holding, in relation to leprosy and tuberculosis.

In-patient treatment is given in four general hospitals and at Rural Health Centres. Out-patient treatment is given at all Rural Health Centres and general

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TABLE 1

District	A.	B.	C.	D.	Total region
Area in sq miles	3500	2350	1500	250	7600
Population	371,396	305,645	236,581	104,218	1,017,840
Main tribes	Sukuma Zinza	Sukuma	Sukuma	Kerewe	
Migration	yes	yes	yes	no	

dispensaries, supplemented by roadside clinics (mango tree stations). The coverage of the area is satisfactory. All patients are living within 3–4 miles of a treatment centre.

The treatment centres are visited monthly by the Medical Officer, Medical Assistant, or Rural Medical Aide, the HHV participating when the touring team is in his locality. Treatment is given at all centres by the visiting team. Patients who are absent on the date of the visit are able to collect their drugs afterwards at the nearest treatment centre. Persistent defaulters are visited at home by the HHV.

Method of Assessment of the Activities of Health Home Visitors

The author joined four HHV's in their daily work, for a period of two weeks each, a total of eight weeks. Based on this personal experience of their work and its problems, a questionnaire was devised and sent to all the HHV's in the region (20). In addition, an analysis was made of a defaulter study made in the previous year, and covering 527 cases, while the monthly reports of six HHV's were also subjected to detailed study over a period.

Results

(a) Time spent on various activities

On average, 23.4 days per month were actually being spent by HHV's on their duties, and time devoted to the various aspects is shown in Table 2.

TABLE 2

Time spent on various activities by HHV's as reported and as actually observed

Activity	Monthly reports		Personal observation	
	Average working days per month	%	Average working days per month	%
Treatment safari	7.9	33.9	3.5	17.2
Home visits	5.7	24.2	9.9	42.4
Administration	2.9	12.3	2.1	9.1
School examination	1.7	7.4	1.7	7.6
Health education	1.2	5.1	0	0
Miscellaneous	4.0	17.1	6.1	25.7
Total	23.4	100.0	23.4	100.0

Points of difference, and relative priorities, will be noted.

(b) Health education

Although undoubtedly health education is one of the most important duties of the HHV, during the eight weeks I accompanied HHV's, no specific, intentional health education activity was undertaken. This does not exclude the possibility that in other periods, and by other HHV's more attention is being paid to this activity, but it strongly suggests that there is some lack of motivation in this respect. From the questionnaire it was gathered that over the region as a whole health education was given as an integrated part of the work on 34 occasions during the month, and on 37 occasions as a special activity. Health education is time consuming, because many questions are usually asked and detailed discussions required, but the stated time of 1.2 days per month suggests that if health education is given at all, it is rather casually done. Many workers feel the need for more and better visual aid material.

(c) Administration

Sixteen of the HHV's are employed by Government, and official administrative requirements demand that they travel to the District centre to collect their salary on a fixed day each month. Much time is spent on this. If payment could be made through the Medical Officer on his monthly safari, one or two working days each month would be saved.

The personal administrative work required of HHV's consists of the making of notes in respect of home visits, sorting out cards of defaulters, and compiling monthly reports. Although HHV's only accounted for 5.5 working hours per day, they were of the opinion that they needed 3.5 days per month for this work. From personal observation I would consider that one day a month should suffice. The questionnaire showed that HHV's do not think that office work is important and do not like this part of their duties.

Recording system. In addition to the central District recording system, records of patients are kept at static treatment centres. The HHV has thus two alternatives. He can either collect the list of defaulters each month at the District headquarters while sharing in the treatment safari, or he can do it in more fragmentary fashion by collecting information on a day to day basis from the treatment centres he visits. The first method has the advantage that it is more easy to plan efficiently the home visits to be made in the following month. The second, more commonly practised method, often makes it necessary to visit a village more frequently than once in a month, and may miss altogether patients who prefer to attend clinics away from their area of residence. It is recommended that HHV's compile a "Home visit book" containing the names of all patients in their area, listed according to their place of residence.

(d) Mode of transport

Table 3 gives numbers of patients in relation to the distance between their homes and the HHV's base.

At present 15 HHV's are using a bicycle and five have a bicycle and also light motor cycle at their disposal. All desire a motor cycle. Table 4 shows the results of case finding using bicycle or motor cycle.

The differences are statistically significant (X^2 14.39 P 0.01).

A careful study of the relative usefulness of bicycle and motorcycle means of transport from the standpoint of actual results achieved, brings out the

TABLE 3
Distance from base to homes of patients

Distance	Numbers of patients. Whole region (questionnaire)	Area directly observed
less than 5 miles	257 (55.3%)	10 (20%)
5-10 miles	82 (17.6%)	13 (26%)
over 10 miles	126 (27.1%)	27 (54%)
not stated	62 (11.8%)	
Total	527 (100.0)	50 (100)

TABLE 4
Results of case finding using bicycle or motorcycle

Transport	Patients seen	Patients not seen	Case finding ratio
Bicycle	175 (68.4%)	135 (52.3%)	0.77
Motorcycle	65 (25.4%)	97 (37.6%)	1.49
By foot	16 (6.2%)	26 (10.1%)	1.63
Total	256	258	1.0

unexpected finding that the results of case finding using a motorcycle are inferior to case finding by bicycle or by foot. It is possible that the status symbol of a motor cycle creates a greater distance between the HHV and the people in rural areas. In addition, the cost per unit of a worker plus his transport where this includes a motorcycle, is nearly double what it is when transport is limited to a bicycle, and there is no evidence that the HHV with a motorcycle is significantly more inclined to visit distant homes than the HHV with a bicycle. It is concluded that preference should be given to bicycles, provided that the distance to be covered does not exceed 20 miles per day.

(e) *Home visits*

Unless the HHV has considerable local knowledge, it is frequently very time consuming to locate the house of a patient. The "village" often covers a large area in which the people live scattered in family groups. The patient's home is traced through the local Ballozi (ten house chairman). The Ballozi may not be at home. After he has been traced, his confidence and cooperation has to be won by explaining in full the importance of leprosy control activities in general and the reasons for contacting the patient in particular. The whole procedure may easily take one half to one hour. If the Ballozi is away, other people in the village have to be contacted. Time spent on these preliminaries diminishes rapidly once the HHV knows his area and is known by the people, but this process takes at least one year. Frequent transfers are thus undesirable.

Out of 527 home visits only one half of the total patients sought were found. The main reasons for failure were, the patient was absent temporarily (7%); emigration of patient (71%); patient unknown (i.e. name given was incorrect) 22%. Other reasons were a failure of the HHV to gain the confidence of the

Ballozi, community, or patient; and finally the HHV giving up the search too easily.

Home visit working hours. The average numbers of working hours spent on home visit days were given by five HHV's as 6–8 h, by four HHV's as 8–10 h, and by six HHV's, as 10–12 h. The time actually observed personally averaged 9 h per day. Although long working days are unavoidable, HHV's object on the whole to staying in villages overnight because of a lack of restaurants in local areas, and the custom that one does not take food for the road from home. Six HHV's made use of restaurants often, five occasionally, one rarely, and five never. Though occasionally patients do offer food, the HHV's are reluctant to accept this. Seven HHV's accepted food occasionally, five rarely, and seven never. There is here a real administrative problem, but not one totally beyond solution.

During the weeks of personal observation, it was felt that an average of 3.5 home visits could be made in a normal days work. In answers to the questionnaire, the following average figures were given; 3.2 by bicycle, 2.5 by motorcycle, 1.5 by foot. All three figures exceeded those actually observed in practice. Suggestions offered by HHV's to promote more efficient work included, uniform and raincoat to permit work on rainy days, a few simple drugs to heighten patient cooperation, a portable stretcher to encourage overnight stays in villages.

Reasons for defaulting. Once the patient has been located, the HHV has first to discover the reason for his not attending for treatment, and convince him of the need for re-adjustment. This may be a time consuming and sometimes unrewarding activity, the true reason being anxiety that the patient will be recognized as a sufferer from leprosy. Only when this is revealed can the HHV direct his health education towards problems which are relevant to the patient.

Public relations. It becomes clear that in his contacts with patients and the public, the public relations of a Health Home Visitor are of great importance, and in the selection of candidates as much emphasis should be placed on their potential in this direction as on intellectual capabilities. Social engagements of HHV's are important. Out of the 20 men in this scheme, three are TANU members, one an Area Chairman, and three are members of the Ward Development Committee. Although such activities consume 1.5 days a month on average, this is more than balanced by the gain in information on social affairs and the usefulness of this in health education, and by the raised status of the worker in the community.

Summary of Conclusions

- (1) The duties of the HHV are time consuming and his life is relatively hard.
- (2) Health education activities deserve more attention. There is a shortage of visual aids.
- (3) Administration consumes more time than is necessary. The HHV needs his own patient register arranged according to the residence of patients.
- (4) The training of HHV's should be directed towards greater polyvalent activity and not be restricted to leprosy and tuberculosis. Limited facilities for first aid and the treatment of other diseases should be made available.
- (5) Local knowledge and social responsibilities enhance the efficiency and importance of the HHV.
- (6) As a means of transport the bicycle is to be preferred to the motorcycle. More use could be made of public transport.

(7) The area of operation of each HHV should not exceed a diameter of 20 miles.

(8) Staying overnight in rural areas may be promoted by the supply of portable stretchers and by stimulating workers to take food from home.

(9) Both the number of home visit days and the number of actual visits per day could be increased.

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