Factors Influencing the Quality of Service to Leprosy Patients

Although confusion concerning the chemotherapy of leprosy has now to a large extent been resolved by the courageous and extremely clear recommendations of a WHO Study Group, to be published later this year in the Technical Report Series[1], the past decade has seen a bewildering succession of drug regimens proposed by expert groups in various parts of the world. These have differed not only in the drugs advised, but in their combination, dosage, and duration. A few years ago, the confusion was such that the member organizations of one large body concerned with leprosy (ILEP; the International Federation of Anti-Leprosy Associations) petitioned its medical commission for clear-cut advice on the best use of available drugs, pointing out that field workers and others responsible for the day-to-day running of control programs were showing signs of demoralization at the lack of practical advice from those in possession of expert knowledge.

Stimulated partly by this insistent and highly understandable request and partly by a personal need for clarification of a complicated subject, I took a large sheet of paper one evening early in 1981, and attempted to list the main regimens of drugs which had been advised by various committees or conferences during the preceding few years, and then to relate these to a number of factors affecting the quality of leprosy control programs. The idea at that time was a) to draw attention to a number of important factors, other than the drugs, which must be taken into consideration in attempting to treat leprosy, and b) to restrain countries or large regions with poor or deficient services from embarking on complicated, expensive and perhaps hazardous regimens of drug treatment before they had made a good attempt to put their house in order. This exercise proved impossibly difficult and in some ways almost futile; it became rapidly apparent that one cannot, with any benefit, sit in an office and lay down rules or detailed recommendations about the use of drugs in areas of the world which differ profoundly from each other, not only in physical factors, but—more importantly—in the motivation, training, and quality of medical staff. The idea of a correlation between drug treatment and the quality of service was therefore abandoned, but it left a scheme or table (The Figure) which listed some 17 factors considered to be important in assessing the quality of service to leprosy patients. With the help of colleagues in Geneva, and the Medical Commission of ILEP, the chart was modified many times during 1981, and then distributed to teaching centers and field workers, who seem to have found it of value for personal use and reference, small group discussions, and formal teaching.

The original scheme was printed on a paper or board known in the UK as A3, based on a system[2] developed by the International Organisation of Standardisation (ISO). It measures 297 × 420 mm and is exactly double the size of A4 (210 × 297 mm) which is now the standard paper size in the UK, the Commonwealth, and some European countries, for office correspondence and most routine manuscripts from universities, schools, and scientific units. A3 will obviously fold down the middle to make A4, and can thus be easily included in notes or a manuscript written on A4. Furthermore, A3 is convenient and easy to handle on the desk; it is also useful for teaching, demonstrations, or small group discussions, when it can usefully be included in a flip-chart. A3 can be photostatically reduced to A4, enlarged to A2 (420 × 594 mm), or laminated and sealed in double-sided transparent plastic, to correspond in size with large color prints for leprosy diagnosis and teaching, which have previously been described[3].

It has been suggested that a scheme of this kind, grading the quality of service from

[1] Chemotherapy of leprosy for control programmes. Report of WHO Study Group. WHO Technical Report Series 675, 1982.

[2] *Specification for Sizes of Papers and Boards. British Standard 4000.* London: British Standards Institution, 1968.

[3] Training and Education Notes. *The Star,* March–April 1981, p. 11.

THE FIGURE. Leprosy: factors influencing the quality of service to leprosy patients.

	FACTOR	A—GOOD Infrastructure and leprosy service both almost optimum. Leprosy service in process of handing over to infrastructure.	B—AVERAGE Both services moving towards satisfactory standards in some areas but still generally inadequate and special leprosy service still needed.	C—FAIR Both services generally inadequate but developing. Infrastructure incapable of leprosy control without a special service.	D—POOR Infrastructure and leprosy service both weak or rudimentary.
1	ACCURACY OF DIAGNOSIS, CLASSIFICATION, RECORDS + RETURNS. THOROUGHNESS OF POPULATION + CONTACT SCREENING	All of consistently high standard. OMSLEP or similar system in regular use.	Inconsistent but developing. Screening does not yet cover more than about 75% of the population and contacts.	Inadequate but improving. Main defects are at least recognized. Screening does not cover more than about 50% of the population and contacts.	Inaccurate and inadequate on all scores. Defects are not recognized and no attempt has been made to seek help from WHO or other agencies.
2	CLINICAL ASSESSMENT, ESPECIALLY OF ACTIVITY/ INACTIVITY	WHO criteria for activity/inactivity applied to all patients yearly. All suitable patients are released from control.	WHO criteria for activity/inactivity applied only irregularly and at average intervals greater than one year, cases reviewed for release from control irregularly and at intervals which are usually greater than one year and less than two.	WHO criteria for activity rarely applied. Cases reviewed for release from control at intervals greater than two years.	No attempt to classify cases as active or inactive. Few, if any cases released from control.
3	COMPLIANCE	Regularly checked by tactful inquiries and tablet counts. Facilities available and used for tests of dapsone in urine and other body fluids.	Occasional questioning and tablet counts. No regular use of tests for dapsone in urine or other body fluids.	Not assessed.	Not assessed.
4	DEFAULTING	Low: more than 75% non-lepromatous patients achieve more than 75% attendance. More than 90% of lepromatous patients achieve more than 90% attendances.	Still significant: but about 75% of all patients achieve more than 50% of attendances.	Over 50%, certainly less than 75%, of patients achieve 50% of attendances.	High on average: most patients achieve only 25% or at most 50% of attendances to collect drugs.
5	DRUG DISTRIBUTION SYSTEM	Reliable and regular at all times. Staff are conscientious and dependable.	Not perfect but essential drugs usually available.	Occasionally breaks down. Essential drugs sometimes not available.	Frequently breaks down. Essential drugs often not available. Staff neither conscientious nor dependable.
6	FINANCIAL RESOURCES	Adequate for main aspects of leprosy control and medical infrastructure. Yearly expenditure on health care per head of population approaches $10.	Inadequate for some aspects of one or both services.	Inadequate for most aspects of both services.	Inadequate for both medical care generally and leprosy control services. Expenditure on health care per head of population less than $1 per year.
7	HEALTH EDUCATION, COMMUNITY AWARENESS AND COOPERATION	Regular and effective. Government, voluntary agencies and the public all fully alerted. Personal approach to the patient as an individual is accepted, standard procedure.	Partial but inadequate. Government and voluntary agencies have started to work together. Public interest awakening. Personal approach to the patient or to groups of patients is developing but not yet standard practice.	Unsatisfactory: government and voluntary agency services not coordinated with allocation of areas. Public not hostile but also not interested. Personal approach to the patient still far from satisfactory.	Non-existent. Community attitude probably hostile. No attempt to talk to patients about the disease, either individually or in groups.

8	LABORATORY SERVICES	Available and reliable for slit-skin smears in new cases, those under treatment and those ready for release from control. Facilities available (or obtainable) for investigation of dapsone resistance.	Developing but usually far from satisfactory; able to meet some of the needs for new, treated, or relapsed cases. Facilities not readily available for investigation of dapsone resistance.	Do not meet "target" requirements: i.e., annual re-examination of slit-skin smears.	Defective. Routine slit-skin smears not done.
9	NATIONAL LEPROSY CONTROL POLICY	Highly developed, regular, built-in assessment: frequent reporting and liaison with WHO and other agencies. OMSLEP or similar form in regular use.	Developing, but incomplete. Some attempt to use OMSLEP or comparable assessment system.	Poorly developed and incomplete. No attempt to use OMSLEP or comparable assessment system.	Non-existent. No immediate or long-term plan. No approach to WHO or other agencies for advice.
10	OTHER FACTORS "LOCALLY DETERMINED" (Racial, Religious, Climatic, Educational)	All investigated, analyzed, and noted in the overall program.	Partially considered. Still much room for improvement.	Not properly considered.	Never considered.
11	OUT-PATIENT SERVICES	Well developed, adequate. No fixed clinic is more than 5 km from the patient. Push-bikes, motor-bikes and some cars available for routine work and supervision.	Developing. Most clinics are less than 5 km from most patients. Push-bikes and motor-bikes in use for routine work and supervision.	Fixed only and at distances averaging more than 10 km from most patients.	Fixed only and inadequate: at distances of more than 25 km from majority of patients.
12	PERSONNEL: NUMBER AVAILABLE AND QUALITY OF TRAINING	Adequate at all levels: from doctor to primary health care worker, all have leprosy in their curriculum.	Inadequate but developing. Need for leprosy component in training curricula of all health personnel at least recognized.	Inadequate at most levels. Some teaching and training of selected staff for leprosy work, but not of other personnel.	Inadequate at all levels. No systematic, regular teaching of leprosy to any cadre of health personnel.
13	ROADS & COMMUNICA-TIONS	Main difficulties have been solved. Roads, bridges, communications, all good.	Improving: most problems either overcome or under consideration.	A number of impediments still unsolved, resulting in a significant waste of time, money, and energy.	Serious impediments are widespread. Roads, bridges, etc. are defective. Communications poor or non-existent.
14	PHYSIOTHERAPY, SURGERY, REHABILITATION, FOOTWEAR	Work and supervision. Well developed for all cases. Simple field physiotherapy practiced. Hospital services readily available for reconstructive surgery and orthopedic appliances.	Basic footwear available in many but not all centers. At least one center able to do some surgery, with the other services.	Some footwear available at a few centers. No effective surgery or other services.	Non-existent.
15	REFERRAL CENTERS AND HOSPITAL BEDS	Adequate for all needs. General hospitals accept leprosy patients routinely.	Improving: specialist referral centers adequate in most areas, with beds. Some general hospitals will accept leprosy cases.	Inadequate. Perhaps one specialist center for whole country or large region. Limited number of hospital beds available. General hospitals refuse admission to leprosy cases.	No center or hospital with personnel experienced in leprosy. No hospital beds available and general hospitals refuse to admit leprosy patients.
16	SUPERVISION	Excellent. All patients seen at not more than four weekly intervals. Patients requiring closer attention can be seen at weekly intervals when necessary.	Developing: structured but performed only irregularly or at long intervals.	Weak, irregular, uncertain.	Non-existent. No attempt to follow-up absentees (especially LL and BL cases). No in-service training and encouragement of local staff.
17	PRIMARY HEALTH CARE (PHC)	PHC workers fully used to 1) detect early cases and refer for diagnosis, 2) assure compliance to self-administered drugs, and 3) prompt the patient to attend for supervised drugs and follow-up examinations.	PHC potential is recognized but not yet well developed in quality or numbers.	PHC cover is partial but inadequate; potential not fully appreciated.	PHC workers not used; concept not considered.

A—GOOD to D—POOR may be of value to those who are in the process of improving the standard of their control work, in that it could provide a kind of check list of essential elements to be compared at perhaps 6–12 monthly intervals. While it may indeed prove helpful in this respect, it must be admitted that it so far lacks precision and quantification at certain crucial points. It is, for instance, regrettable that one cannot offer something more precise on the adequacy or inadequacy of a laboratory service, and at several points under A to D, there is clearly need to define what is meant by terms such as "dependable" and "satisfactory." Should this publication result in evidence that a chart or system of this kind may be of practical value in leprosy control, these defects will be corrected and, at the same time, a more systematic attempt will be made to define tasks and objectives by which performance may be more accurately assessed.

Finally, it must also be acknowledged that 17 factors may not be enough, or that the emphasis is wrong. Such a chart, if it is to be useful in practice, must develop in the hands of those who are in contact with patients, and who now face the exciting challenge presented by the recent WHO *Recommendations on the Chemotherapy of Leprosy for Control Programmes*. Indeed the application of these recommendations will, in itself, surely assist in the definition of those factors which matter most in bringing drug treatment to a larger number of patients, effectively and safely.

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