Learning to manage leprosy after 2005: preserving critical knowledge and exploiting new technology

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Introduction

Amidst the many challenges currently facing leprosy services, two key training issues stand out. Firstly, the struggle to maintain an adequate pool of appropriately knowledgeable and skilled health workers in endemic areas, in order to sustain leprosy services in an integrated setting. The second major challenge is to utilize technology in the fields of training, communication and informatics, in a cost-effective manner.

During the next few years, we face the loss of knowledge and experience in the management of leprosy. Many experienced clinicians, from clinic level health workers to district supervisors, medical officers and specialists, will no longer be working with leprosy patients, for a variety of reasons. Many are retiring, or they are being re-assigned to other work; others are leaving to advance their careers elsewhere, either within the same country or abroad. Thus it will become more difficult for people with leprosy to access expert and timely care – both for the initial diagnosis and for the management of complications. Furthermore, these experienced clinicians have, until now, been responsible for the training and supervision of junior staff, who see and manage most cases. Thus over time, one may predict that the quality of care for most new leprosy cases will deteriorate. While this may be inevitable in low endemic areas, it may also become a problem in areas where large numbers of new cases are still presenting.

A similar problem is occurring in the commercial world as large numbers of senior staff are expected to retire in the next five to ten years. This has led to further thinking about the kind of knowledge that is particularly at risk of being lost and how it can be preserved.1

The converse of the problem of the loss of senior staff is the need to enable the many new health staff in integrated health units to learn the clinical and counseling skills necessary to suspect and manage leprosy. There are large numbers of such staff and each one will see at most only a few cases of leprosy throughout their career. Nevertheless, appropriate training at each level (both the primary clinics and the referral centers) will be essential if people affected by leprosy are to be given the treatment they need.2
The second major issue concerns the use of new technology to make learning more accessible and more easily managed. While this is being widely exploited in developed countries, leprosy endemic areas do not have the efficient and affordable Internet connectivity on which much of this development depends. Are there ways in which new technology can be exploited in parts of the world that are currently not well connected to the Internet?

**Preserving critical knowledge**

In the health sector, knowledge is largely in the public domain and is accessible through books and journals. Health workers learn the foundations of their subject during basic training and it is important that leprosy remains in the curriculum and is taught by experienced and innovative staff. Clinicians and specialists have a responsibility to ensure that their knowledge and experience is available to others by these means. Clinical and counseling skills and the attitudes towards patients that should accompany them, on the other hand, must be passed on directly in a process of mentoring – basically, sharing knowledge, attitudes, skills and experience through a one-to-one relationship.

One way to tie these ideas together is to emphasize training in the person’s place of work, through what is known as on-the-job training (OJT). Clinical skills need to be taught in a clinical setting and the trainer is usually in a position to be able to help organize services and to negotiate with the people in charge. For example, nerve function assessment may not have been carried out before in a particular health unit, so OJT may be much more successful in getting it started than sending a staff member away for a course elsewhere.

On-the-job training has been described more fully in ILEP’s recent Technical Guide on training. When properly structured, OJT works through a planned curriculum, so that each area of work is covered over time. It has a number of advantages over formal a training workshop, being usually less expensive and particularly suited to the teaching of clinical skills and procedures. A POD program in China used an initial workshop, but subsequent on-the-job training to consolidate the learning of practical skills and attitudes. The formation of self-care groups in Ethiopia required major changes in the attitudes of staff, which could only be achieved by on-the-job training over a period.

Finding creative ways to use the pool of just-retired staff, perhaps in part-time employment, to carry out on-the-job training, may be an effective way of passing on knowledge and experience to the next generation of health workers.

**Exploiting new technology**

The Internet is still inaccessible in a practical sense in many leprosy endemic areas; another problem with the various online tools to assist learning is that, at present, they are generally in English, so even if a good connection were available, many health staff would not be able to take advantage of them.

There are, however, other developments that can be used in poorer areas. CD-ROMs can be used almost anywhere and recent ILEP training materials are freely available for copying and distribution on CD-ROM. Another recent technological trend, especially in developing countries, is the widespread use of mobile phones and text messaging. In some
countries many health workers use them, so communication by phone between junior staff and senior colleagues may be the best way of tapping into knowledge and experience at a distance.\textsuperscript{11}

The Internet has undoubtedly driven certain changes in teaching and learning practice. Learners are now more in control of their own learning and can work at their own pace. They can get material from different sources and thus compare and integrate different experiences and opinions. A large amount of health information, including many medical journals, is available free of charge via the Internet in developing countries.

Empowerment of people to learn need not be limited to online learning. New technology is also changing the printing industry, so that it is now both convenient and cheap to produce learning materials locally. These can be produced in any language, as large print runs are no longer necessary for cost-effectiveness. The recently produced ILEP Learning Guides are freely available as print-ready files; in this format pictures can be replaced, as appropriate, and the text can be translated into a local language. The files can then be used by a local printer to produce the books cheaply and in the required quantities.

The concept of ‘just-in-time’ education seeks to ensure that accurate information on a topic is available when it is needed. If detailed information is given before it is needed, it must be memorized to be useful later on, but this is not feasible for uncommon conditions. While the Internet and telemedicine provide just-in-time education in sophisticated settings, appropriate printed material and the mobile phone can perhaps perform the same function in many poorer parts of the world. Combined with well-organized on-the-job training, such a strategy will allow expertise in leprosy to be maintained and deployed when and where it is needed.

References


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