Educational Posters and Leaflets on Leprosy: Raising Awareness of Leprosy for Health-Care Workers in Rural South Africa

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SYNOPSIS

Leprosy is still occurring in the Republic of South Africa, but it has been eliminated as a public health problem. The country's leprosy care and control program is being provided as a primary health-care program within the general health-care services. Maintaining health workers' leprosy knowledge and awareness at the primary health-care level is one of the program's goals. In one of the country's rural areas, the availability of good-quality leprosy poster and leaflets at primary health-care facilities has been shown to contribute significantly to maintaining health workers' leprosy knowledge and awareness.

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A major event in the field of public health and communicable disease control during the 20th century was the discovery of a highly effective multidrug therapy (MDT) for leprosy, which consisted of a combination of Rifampicin, Clofazimine, and Dapsone.[1] Since its introduction in 1982 by the World Health Organization (WHO),[1,2] MDT has successfully led to the elimination of leprosy as a public health problem in many endemic countries.[3] The elimination of leprosy as a public health problem is defined by WHO as a prevalence of less than one case of leprosy per 10,000 inhabitants.[2] The effectiveness of MDT in eliminating leprosy as a public health problem also brought about a paradigm shift in leprosy control, from specialized vertical programs to integration into general health-care services.[2,4]

Leprosy as a public health problem has long been eliminated in the Republic of South Africa, and the leprosy-control program has been integrated into general health-care services at the primary health-care (PHC) level.[5] A major goal of the country's leprosy-control program is maintaining a high level of leprosy awareness by health-care workers at the PHC level to ensure early diagnosis and treatment of the disease in the face of low prevalence.[5,6]

Leprosy control in South Africa is accomplished through a partnership between the government, through its National Department of Health, and a nongovernmental organization, The Leprosy Mission Southern Africa (TLMSA). Leprosy case finding in the country occurs through passive case detection by health workers at general health-care service facilities, such as PHC clinics, district hospitals, and provincial hospitals. TLMSA provides technical assistance by way of training PHC workers, and also conducts leprosy clinics at district and provincial hospitals, where patients referred from PHC clinics are seen.

The activities of the leprosy-control program, aimed at maintaining health workers' awareness of the disease at the PHC level, include in-service training of PHC workers, leprosy seminars and symposia for PHC workers, leprosy video presentations at PHC clinics, and leprosy posters and leaflets displayed at PHC clinics and other health-care facilities. This article highlights the contribution that leprosy posters and leaflets are making toward maintaining leprosy knowledge and awareness among health workers at PHC clinics in the Eerstehoek area of Mpumalanga province, South Africa.

LEPROSY KNOWLEDGE AND AWARENESS OF PHC WORKERS IN EERSTEHOEK

Mpumalanga province is one of the provinces in South Africa in which leprosy cases still occur, but at a very low level of prevalence. During 2006, the leprosy-control program registered only six new cases throughout the province, and the total number of patients on treatment at the end of the year was 28 (personal communication with Thomas Sihlangu of TLMSA, March 2007). The province is in the eastern part of South Africa, bordered by Mozambique and Swaziland to the east, and its population was estimated at 3.5 million in mid-2006.[7] The leprosy prevalence rate per 10,000 inhabitants could thus be calculated at 0.0001 for the province during 2006. The Eerstehoek area of the province is rural, shares a common border with Swaziland, and is inhabited by approximately 206,814 people. Two of the six new cases of leprosy in the province during 2006 were found in this area.

In a 2003 study that evaluated leprosy knowledge of PHC workers in the Eerstehoek area, one area that was studied was the health workers' source of leprosy knowledge.[8] The PHC workers were asked in a questionnaire to indicate their leprosy knowledge from six possible sources: formal teaching at nursing school, leprosy seminars and symposia, in-service training, leprosy video at PHC clinic, educational leprosy posters and leaflets, and radio and television information about leprosy.

Fifty-two out of 73 health workers employed at the 19 PHC clinics in the area participated in the study. The 52 health workers were those who were found on duty when the clinics were visited during normal business hours. All 52 workers agreed to participate in the study. The group consisted of 25 professional nurses, 21 enrolled nurses, and six enrolled nurse assistants. When asked to indicate their source of leprosy knowledge, 22 (42%) of the health workers indicated formal teaching at nursing school, three (6%) noted seminars and symposia, 11 (21%) referenced in-service training, two (4%) noted video presentation, 35 (67%) indicated leprosy posters and leaflets, and eight (15%) referenced radio and television information.

The study results revealed that leprosy posters and leaflets contributed the most to health workers' leprosy knowledge and awareness. With regard to knowledge of leprosy, the study found that 67% of the health workers could mention early signs and symptoms of the disease, such as skin hypo-pigmentation with loss of sensation, skin thickening and lumps, thickening and/or tenderness of peripheral nerves, loss of sensation in the fingers or toes, weakness of fingers or foot,

and painless injuries or burns or blisters on the hands or feet. Sixty-two percent of health workers could mention late signs of leprosy, such as deformities of hands and/or feet, chronic painless foot sores, and facial deformities. However, more in-depth knowledge—i.e., the causative agent of leprosy, the method by which leprosy is spread, the classification of leprosy, and the specific drug treatment for leprosy—was very poor.[8]

DISCUSSION

Leprosy posters and leaflets are commonly used in educational campaigns to promote public awareness of the disease in the parts of the world in which it is endemic. Studies on leprosy educational campaigns targeted at the general public in Tanzania,[9] India,[10] and Thailand[11] have mentioned the use of leprosy posters and leaflets in their campaigns. As a public health education tool, leprosy posters and leaflets typically use simple language to convey messages and slogans about the disease to the lay public. The Leprosy Mission International website shows one example of a simple leprosy education poster (Photo 1),[12] which probably could deliver a more effective public health message if changed to read: "Hands that feel no pain could be leprosy; leprosy can be cured; visit your nearest clinic."

The public health education poster on leprosy (Photo 2) displayed at PHC clinics and other health-care facilities in South Africa provides basic and important clinical signs and symptoms of the disease, and delivers public health leprosy slogans such as "leprosy can be cured." Thus, the poster serves double-duty: maintaining public awareness of the disease and giving health workers the knowledge of signs and symptoms of the disease so that they are able to suspect and/or diagnose the disease. The poster is jointly produced by TLMSA and the National Department of Health, South Africa, and widely distributed for display at public health-care facilities in every part of the country. While the poster does not provide in-depth clinical information about leprosy, it does offer just enough information about the signs and symptoms of the disease to enable health workers at the PHC level to recognize the disease and refer patients to hospitals for definitive diagnosis and treatment.

Photo 1. A leprosy poster at The Leprosy Mission International website could be more effective if changed to read: "Hands that feel no pain could be leprosy; leprosy can be cured; visit your nearest clinic."

In addition to the poster, TLMSA also distributes educational leaflets on leprosy to PHC clinics and other public health-care facilities from time to time. One leaflet entitled "Community Health Workers Leprosy Info Guide" teaches with photographs everything about the signs and symptoms of leprosy that a PHC worker should know to be able to suspect the disease (Photo 3).

It is worthy to note that the six new cases of leprosy in Mpumalanga province during 2006 were found by PHC workers and referred to leprosy clinics at district hospitals for commencement of treatment by TLMSA (personal communication with Thomas Sihlangu, TLMSA, March 2007).

CONCLUSION

Leprosy is a chronic communicable disease with an extraordinarily long incubation period of up to 30 years or longer.[13] As such, even when the target of eliminating the disease as a public health problem is achieved in endemic areas, a small proportion of the population infected several years ago will show clinical disease that results in the occurrence of new cases for many years to come.[14] Therefore, it is imperative that every possible means be used to ensure that health-care workers in low endemic areas are knowledgeable about the disease.

Good-quality educational leprosy posters and leaflets at health-care facilities in endemic areas appear to be a very good source of leprosy knowledge for health-care workers. The positive contribution of leprosy posters and leaflets to PHC workers' knowledge and awareness of leprosy in the Eerstehoek area of Mpumalanga province in South Africa seems to suggest that constant availability of good-quality posters and leaflets at health-care facilities in a leprosy low endemic area could be a very important strategy for maintaining health-care workers' knowledge, awareness, and index of suspicion of the disease in the face of its low prevalence.

Photo 2. The South African leprosy poster

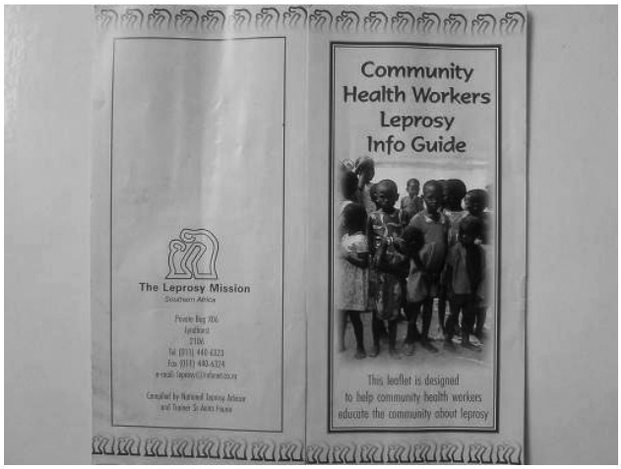

Photo 3. Leprosy leaflet of The Leprosy Mission Southern Africa

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