

## Letter to the Editor

### REASONS FOR INTERRUPTING MULTIDRUG THERAPY AGAINST LEPROSY: THE PATIENTS' POINT OF VIEW

Adherence to treatment of chronic diseases is a complex issue and involves not only responsibility of the 'diseased' person, but also the health professional teams and the patients' social networks. In the last years, non-adherence to multidrug therapy (MDT) against leprosy has been reduced significantly in Brazil. However, during field work of a major epidemiological study in Tocantins State (north Brazil), which included 1076 individuals of 78 municipalities diagnosed with leprosy between 2006 and 2008, we identified 351 (32.6%) participants who said that they had interrupted MDT at least once. Currently, Tocantins is the State with highest leprosy detection rates in Brazil (annual detection rate of 88.54/100-000 in the general population, and of 26.48/100-000 in < 15 year-olds in 2009). The median time of interruption stated by the study participants was 15 days, with a maximum of three years (interquartile range: 6–30 days). The respondents (56% males; median age: 39 years) were asked an open question about their reasons for interrupting, and information was given by 348 participants (Table 1).

**Table 1.** Reasons given by respondents for interrupting multidrug therapy (n = 348). Twelve individuals gave two reasons

Reason for interrupting MDT	n	%
Non-availability of drugs at health care center	220	63.2
Forgot to take the medicine	51	14.7
Adverse events	29	8.3
Travelling/moved to another city	17	4.9
Suffered from other diseases with higher priority	7	2.0
No interest to be treated	4	1.1
Difficult access to health care center	3	0.9
Pregnancy	3	0.9
Not acknowledging having leprosy	3	0.9
Medication finished on the weekend/public holiday	3	0.9
Did not pick up medication at the health care center	3	0.9
Pills too big	2	0.6
Other family members were hiding medication	2	0.6
Community health agent did not visit and bring medication	2	0.6
Did not perceive any improvement	2	0.6
Felt better	2	0.6
No health professional at health care center available to distribute medication	2	0.6
Thought that treatment had already finished	2	0.6
Felt ashamed of having leprosy	1	0.3
Alcoholism	1	0.3
Parents not available to bring affected child to health care center	1	0.3

Correspondence to: Professor Jorg Heukelbach, Departamento de Saúde Comunitária, Faculdade de Medicina, Universidade Federal do Ceará, Rua Professor Costa Mendes 1608, 5º Andar, Fortaleza CE 60430-140, Brazil (Phone: ++55-8533668045; Fax: ++55-85-33668050; e-mail: heukelbach@web.de)

In general, adherence can be categorised into factors related to the patient, the social network, the health professionals, the disease and its causing agent, the health system, and therapeutic scheme. Despite ongoing efforts of the local leprosy control programme, in our study the most common reason given by the respondents was the non-availability of medication at the respective health care centre, which usually lasted only a few days. Others forgot to take the medicine or interrupted due to drug-related adverse events. In total, these three reasons were given by 86.2% of respondents. Not acknowledging having leprosy, difficult access to the health care centre, pregnancy and stigma-related reasons were given less commonly. These data show that there are still some challenges to be tackled regarding the health care system in Brazil and the interaction with patients and their social networks, mainly in rural areas. Considering the consequences of low adherence to treatment, such as possible development of resistance of *Mycobacterium leprae* against MDT antibiotics, and persisting sources of transmission in the communities, future in-depth studies are needed to improve further adherence to MDT, mainly in highly endemic regions.

This study is part of the research project "MAPATOP1", funded by the *Conselho Nacional de Desenvolvimento Científico e Tecnológico* (CNPq), Brazil. OAC received a PEC-PG scholarship from CNPq, and ARO a scholarship from *Fundação Cearense de Apoio ao Desenvolvimento Científico e Tecnológico* (FUNCAP), Fortaleza, Brazil. JH is research fellow from CNPq.

*\*Department of Community Health,  
Federal University of Ceará,  
Fortaleza, Brazil*

*\*\*Ministry of Health of Tocantins State,  
Leprosy Control Program,  
Palmas, Brazil*

O. A. CHICHAVA\*  
L. ARIZA\*  
A. R. OLIVEIRA\*  
A. C. FERREIRA\*\*  
L. F. MARQUES DA SILVA\*\*  
J. C. BARBOSA\*  
A. N. RAMOS JR.\*  
J. HEUKELBACH\*