## Access to medication: key to achieving treatment goals

To contribute to the observations of Mendis et al. 1 published in the April 2007 issue of the *Bulletin*, we wish to add information on how limited availability and affordability of medication may negatively determine the outcomes of chronic diseases. We note an absence of data in this paper regarding asthma treatment in various Brazilian states and a small sample used to represent the whole country. This could introduce a bias for results analysis.

Brazil, a country of continental dimension, is divided into five different regions. According to the Brazilian Department of Health,2 there is a heterogeneous distribution of income among individuals. In the south, 19.94% of the population earns less than half the current minimum salary of 380 Brazilian reais (US\$ 190). In other regions, people earning less than half the minimum salary represent 21.39% of the population in the south-east; 27.88% in the middle-west; 46.19% in the north and 56.53% in the north-east. Thus, Rio Grande do Sul, a southern state, cannot be used as a general example to represent other regions of Brazil.

The State of Parana, also in the south, makes asthma medications freely available including inhaled steroids, short- and long-acting beta-adrenoceptor agonists and rhinitis treatment. Beclomethasone dipropionate inhalers are available in primary care public outlets in several cities and certainly would change figures shown in Table 4.

A quick survey of different pharmacies revealed that a beclomethasone canister with 200 doses (250 µg each) has an average price of 37 reais (approximately US\$ 20). A salbutamol (albuterol) canister of 200 doses (100 µg each) costs 17 reais (approximately US\$ 9). For individuals using 2 puffs of inhaled steroids and 9 puffs of salbutamol, the costs would be US\$ 19, representing 9% of the minimum salary or 2.4 work days (per working month of 24 days).

Certainly, availability and accessibility to medications are determinants for adequate treatment of chronic diseases. A study conducted in Latin American countries, the Asthma Insights and Reality in Latin America (AIRLA) survey, has shown that only 6% of asthmatics use inhaled steroids.3 In our town of Curitiba, there was a radical change in these numbers after implementing a local asthma programme. Aggressive health policies, training medical teams and, in particular, promoting free access to anti-asthma medication increased the number of patients with persistent asthma receiving inhaled steroids from 28% (before the year 2000) to 82%.4

The goals of meeting guidelines for asthma and other chronic conditions can be achieved if sufficient resources are applied to low-income populations. Improving health policies begins with supplying adequate resources for a specific country's circumstances. We agree with Mendis et al.1 that, although many drugs for chronic diseases are theoretically provided free or at low cost in public sectors, their availability is inadequate. Education of patients and health personnel, availability and access to medications can change the management of such diseases dramatically.

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