Abstract

Most estimates in the literature for the economic cost of treating a diabetic foot ulcer (DFU) are from industrialized countries. There is also marked heterogeneity between the complexity of cases considered in the different studies. The goal of the present article was to estimate treatment costs and costs to patients in five different countries (Chile, China, India, Tanzania, and the United States) for two hypothetical, but well-defined, DFUs at the extreme ends of the complexity spectrum. A co-author, who is a treating physician in the relevant country, was asked to choose treatment plans that represented the typical application of local resources to the DFU. The outcomes were pre-defined as complete healing in case 1 and trans-tibial amputation in case 2, but the time course of treatment was determined by each investigator in a manner that would be typical for their clinic.

The costs, in local currencies, for each course of treatment were estimated with the assistance of local hospital administrators. Typical reimbursement scenarios in each country were used to estimate the cost burden to the patient, which was then expressed as a percentage of the annual per capita purchasing power parity-adjusted gross domestic product. There were marked differences in the treatment plans between countries based on the availability of resources and the realities of local conditions.

The costs of treatment for case 1 ranged from Int$102 to Int$3959 in Tanzania and in the United States, respectively. The cost for case 2 ranged from Int$3060 to Int$188,645 in Tanzania and in the United States, respectively. The cost burden to the patient varied from the equivalent of 6 days of average income in the United States...
for case 1 to 5.7 years of average annual income for case 2 in India. Although these findings do not take cost-effectiveness into account, they highlight the dramatic economic burden of a DFU for patients in some countries.

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