Better measures of affordability required

A Cameron and colleagues (Jan 17, p 240) address the important topic of affordability of medicines in low-income and middle-income countries. The magnitude of the affordability problem depends on medicine prices and on the income level and distribution in a country.

Regarding income level, a convenient yet uncommon metric is used by Cameron and colleagues—ie, the salary of the lowest-paid unskilled government worker (LPGW). Use of this unusual measure hampers the interpretation of results and might overestimate the affordability of medicines. As they acknowledge, often “a substantial proportion of the population” earns less than the LPGW.

In collaboration with WHO and Health Action International, we investigated this situation in 17 of the countries in the Cameron study. It turned out that, in 13 of these countries, half or more of the population was actually able to spend (much) less than the LPGW. The LPGW therefore is relatively well-off in most countries and at least half of the population in the 13 countries need to work more days than the LPGW to pay for necessary medicines.

Using household expenditure data and income distributions, we applied more common measures of affordability of medicines, based on impoverishment (ie, earning less than US$1 or $2 per day) and catastrophic spending on medicines (ie, more than a certain proportion of total spending). Our results highlight that the already compelling results shown by Cameron and colleagues are, in fact, substantial overestimates of the affordability of medicines. Unfortunately, therefore, even more people lack financial access to necessary medicine, stressing the need for intervention.

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Authors’ reply

Comparison of treatment costs with the salary of the lowest-paid government worker (LPGW) is recommended by WHO and Health Action International as a means of estimating medicine affordability and has been reported in various publications. This measure uses local medicine prices collected with a standard survey to determine the number of days’ wages the LPGW would need to purchase a course of treatment. Although it provides a simple method of illustrating the effect of medicine prices on the average consumer, and has the advantage of being a metric available in all countries, the LPGW measure is not without limitations.

Even if a treatment is affordable for the LPGW, it might not be affordable for the often substantial proportion of the population earning less than this salary in low-income and middle-income countries. Further, it does not account for the need for other non-discretionary expenditures (eg, food), seasonal fluctuations in income, the number of dependants living on this wage, and other treatment costs such as consultations and diagnostics. Finally, it does not address individual preferences in coping with the financial demands of medicine purchases. Despite these limitations, it remains a useful, relatively simple and easy to comprehend indication of affordability which can assist in assessing the accessibility of treatment and interpreting...