The recent publication of the report on the *IDF Global Survey on Access to Medicine and Supplies for People with Diabetes* highlights continuing issues with the availability of essential medicines for people with diabetes. Regrettably, progress has been slow over the recent decades.

I write this with a very long historical perspective. I have served the IDF Task Force on Insulin, Test Strips and Other Diabetes Supplies since 1991. IDF as an organization recognized and actively pursued improvements firstly for the global supply of insulin and subsequently, other essential diabetes medicines.

The first survey was undertaken in the early 1990s and published in *Diabetes Care* in 1994. Then there were only 85 IDF Member Associations and the survey was conducted by mail. Response fact checking was impossible. The current survey was distributed electronically to 230 IDF Member Associations in 170 countries and territories, and when more than one in-country response was received, electronic interactions and clarifications were possible. It is very apparent that the IDF world was much different at the time of the first survey so that must be considered in making comparisons.

Important highlights from that first survey where 65 associations responded include:

- 78% said insulin was always available.
- 18% said insulin was available from 25% to 99% of the time.
- Two countries said insulin was available less than 25% of the time.

The survey questions and the makeup of IDF were very different in the early 1990s, but the reader can keep these responses in perspective as we review the most recent study.

The current report rightly points out the dramatic increase in diabetes worldwide and perhaps more importantly, the increase in diabetes prevalence in low - and middle - income countries which has occurred in a very disproportionate way. Likewise, WHO developed a Model List of Essential Medicines, which includes short and intermediate acting insulin, glucagon, glicazide and metformin.

The current report also includes inquiries about other essential medicines for people with diabetes which protect from cardiovascular complications. These include hypertension and lipid lowering drugs. The current report is based on a study comprised of two distinct components:

1. Access survey on government provision and availability.
2. Access snapshot on prices.

This second and important component of the current evaluation was the use of IDF’s Young Leaders, a group of 184 committed volunteers across the globe who were asked to visit outlets for medicines such as pharmacies and hospitals to enquire about availability and price.
110 countries are counted as middle income. The access snapshot by Young Leaders reached 34 countries. Clearly neither survey represents a random scientific sample, but together they provide useful data.

The results were expressed in several ways. Supply by the government vs non-governmental sources was detailed. In 81% of high-income countries short acting insulin was available 100% of the time and 84% of high-income countries for intermediate-acting insulin; the percentage in middle-income countries was 46% and 44% and low-income, not surprisingly, 0% (Figure 1). In high- and middle-income countries, the government provided insulins in 70% and over 50%, respectively, and as might be expected 0% in low-income countries. In addition, the data shows that where short and intermediate acting insulin is available >75% of the time, the response is 97% for high-income countries, 89% and 94% in middle-income countries and 40% for both in low-income countries. In the snapshot study the major causes for lack of insulin included price and inadequate supply.

Data for supplies reflect the insulin data but generally were a bit lower. Cost for all essential diabetes supplies was translated into disposable income (DI) using standard methodologies. Not surprisingly, glucose testing strips were by far the most expensive item and four strips could cost as much as 50% of DI (Figure 2).

Oral agent availability reflected insulin availability across the income categories but a month’s supply was much lower in all countries. Other required drugs for hypertension and lipid control were at the 75% level in over 90% of high- and middle-income countries and in a majority of low-income countries.

This survey represents a good global look at diabetes treatment drugs and supplies. There are still very large gaps in availability. IDF recommends several strategies. Price is a barrier and better supply chain distribution, procurement practices and equity prices are potential strategies. Likewise, education of people living with diabetes as well as those in charge of procuring medicines is essential so the most expensive products do not displace less expensive and effective medicines. Across the board for all essential diabetes medicines and supplies, availability needs improving in many countries.

IDF remains committed to making essential medicines available to all. This survey provides a better understanding of gaps.

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### References