

COMMENTS AND RESPONSES

Response to Comment on: Bopp et al. Routine Data Sources Challenge International Diabetes Federation Extrapolations of National Diabetes Prevalence in Switzerland. Diabetes Care 2011;34:2387- 2389

We appreciate the comment by Unwin et al. (1) on our article (2). Despite the adaptations of the figures described in their letter, we feel that there is still room for improvement, which we wish to address herewith. Unfortunately, for most countries there are no representative studies allowing reliable estimates of national diabetes prevalence rates and trends. The efforts of the International Diabetes Federation (IDF) to close these gaps therefore deserve great merit. We also very much welcome the fact that the IDF regularly updates its figures. With interest we notice that the estimates published recently are much more similar to ours than those of the previous version that was available when we submitted our brief report. Excluding presumably undiagnosed diabetes, the number of individuals with diabetes is virtually identical. This is not surprising because both the IDF and our upper estimate are based on the same data source (Swiss Health Survey 2007) (2).

Despite this congruence, also in the latest edition of the IDF Diabetes Atlas, the age-standardized diabetes prevalence

in Switzerland for 2011 is still higher than in neighboring Germany (6.0 vs. 5.5%). In our brief report we pointed to the higher obesity prevalence and cardiovascular disease mortality in Germany, which in our view argues against a higher diabetes prevalence in Switzerland (2,3). We also have reservations about applying the same proportion of undiagnosed diabetes (36.6% in the total population) to most European countries (4). Bonaldi et al. (5) estimated the proportion of undiagnosed diabetes in France to $\leq 20\%$ and cite 15% for the U.K. They report that “almost half of the adults had had glucose measured at least once every 2 years,” suggesting that almost all undiagnosed diabetes cases emerge from slightly more than 50% of the population. One can expect that individuals at higher risk for diabetes (e.g., elderly, obese, individuals with a family history) are more often screened than others. Therefore the diabetes prevalence of individuals not measured can be expected to be lower. Consequently, instead of considering our figures as “conservative,” one could also regard the IDF estimates for Switzerland to be still rather “liberal.” However, we wish to underline that the main aim of our report was not to give an estimate of the number of individuals with diabetes in Switzerland but to evaluate how three different data sources could be combined in order to reduce limitations and to enable subgroup analyses.

Another constraint concerns IDF expectations for 2030, which assume virtually identical trends (i.e., small decreases) in diabetes prevalence in European countries. This is at odds with the different stages in the obesity epidemic in which these countries probably stand (3). At present, Switzerland is one of the European countries with the lowest prevalence, and there is some evidence that peak prevalence has already been reached (3,6). If indeed a trend reversal has occurred in Switzerland, the differences in diabetes prevalence to countries such as Germany or the U.K. are likely to become larger over time (6).

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References

1. Unwin N, Guariguata L, Whiting D, Weil C. Comment on: Bopp et al. Routine data sources challenge International Diabetes Federation extrapolations of national diabetes prevalence in Switzerland. *Diabetes Care* 2011;34:2387–2389 (Letter). *Diabetes Care* 2012;35:e38. DOI: 10.2337/dc11-2464
2. Bopp M, Zellweger U, Faeh D. Routine data sources challenge International Diabetes Federation extrapolations of national diabetes prevalence in Switzerland. *Diabetes Care* 2011;34:2387–2389
3. OECD. Health at a Glance: Europe 2010 [PDF online], 2010. OECD Publishing. Available from http://dx.doi.org/10.1787/health_glance-2010-en. Accessed 1 February 2012
4. Guariguata L, Whiting D, Weil C, Unwin N. The International Diabetes Federation diabetes atlas methodology for estimating global and national prevalence of diabetes in adults. *Diabetes Res Clin Pract* 2011;94:322–332
5. Bonaldi C, Vernay M, Roudier C, et al. A first national prevalence estimate of diagnosed and undiagnosed diabetes in France in 18- to 74-year-old individuals: the French Nutrition and Health Survey 2006/2007. *Diabet Med* 2011;28:583–589
6. Faeh D, Bopp M. Excess weight in the canton of Zurich, 1992–2009: harbinger of a trend reversal in Switzerland? *Swiss Med Wkly* 2010;140:w13090