COMMENTS AND RESPONSES

Medical Management of Hyperglycemia in Type 2 Diabetes: A Consensus Algorithm for the Initiation and Adjustment of Therapy: A Consensus Statement of the American Diabetes Association and the European Association for the Study of Diabetes

Response to Nathan et al.

I read with great interest the consensus statement by Nathan et al. (1) on behalf of the American Diabetes Association and the European Association for the Study of Diabetes, suggesting a consensus algorithm for initiation and adjustment of therapy for the medical management of hyperglycemia in type 2 diabetes. Describing the process used to develop the algorithm, the authors mentioned two sources: clinical trials that address the effectiveness and safety of different modalities of therapy and clinical judgment, that is, the collective knowledge and clinical experience of the authors, which takes into account benefits, risks, and costs in the treatment of diabetes (1). Because the authors point to the "paucity of high-quality evidence in the form of well-controlled clinical trials that directly compare different diabetes treatment regimens," they propose that the scarce evidence-based information should be supplemented by "value judgments, where the benefits of treatment are weighed against risks and costs in a subjective fashion" (1). This need for value judgment, in particular in the context of the preparation of a consensus statement that may influence the therapy of millions of patients, presupposes a high level of independence and balanced judgment from the authors. The carefully written and critical description of the different modalities of treatment suggests that this was probably the case for the present guidelines (1).

At the end of the article, there is a lengthy description of dualities of interest, ranging from 2 to 13 reported dualities per author (mean ± SEM 10.1 ± 1.4); most of them are related to pharmaceutical companies involved in the production and commercialization of many of the agents described and recommended in the guidelines. As defined by The Endocrine Society, a duality of interest is present when two or more interests are potentially in conflict, while a conflict of interest exists when a given relationship or practice gives rise to two or more contradictory interests (2). Specifically, Thompson (3) describes conflict of interest as "a set of conditions in which professional judgment concerning a primary interest (such as patient welfare or the validity of research) tends to be unduly influenced by a secondary interest (such as financial gain)." The dualities of interest listed for authors of the present guidelines include research grants, serving on scientific advisory boards, and receipt of honoraria for speaking engagements (1). In other words, part of the research funding and private income of several of the authors of the present guidelines may depend on pharmaceutical companies that benefit from the incorporation of their drugs in the guidelines. This gives rise to duality of interest and, potentially, to conflict of interest.

Is this a source of real concern? On the "no" side, we can count on the high professional standing of the authors and on the hypothetical if unlikely possibility that such a large number of dualities of interest (five of the seven authors report more than 10 dualities of interest) may somehow counterbalance each other, leaving the author(s) in a relatively balanced position. On the "yes" side is the accumulating evidence that dualities of interest do indeed change conclusions and interpretation of studies. For instance, a broad review (based on 1,140 studies) evaluating the relationship between industry sponsorship and outcome in original research indicates a statistically significant association between industry sponsorship and proindustry conclusions (pooled Mantel-Haenszel odds ratio 3.60) (4). Moreover, there is evidence that acceptance of gifts by physicians increases the possibility that they will prescribe the drugs made by the pharmaceutical company donors, independently of the scientific data supporting these clinical decisions (5). Finally, expert clinicians advising pharmaceutical companies gain access to privileged and non–peer reviewed information and work with highly committed individuals, whose professional lives revolve around a single product, generating another potential source of bias (6).

How can we solve this conundrum? One possibility is to restrict the preparation of consensus statements to colleagues with few or, ideally, no dualities of interest with pharmaceutical companies that may benefit from the guidelines (these colleagues do exist). Another alternative is to invite one or two independent commentators, with no relevant duality of interest, to analyze the guidelines and provide their views to be published as an addendum to the text. Additional alternatives may be considered; the crucial point is to acknowledge that duality of interest is a serious issue that must be carefully considered and addressed by learned medical societies and health care agencies.

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