

COMMENTS AND RESPONSES

Comment on: Bosi et al. Intensive Structured Self-Monitoring of Blood Glucose and Glycemic Control in Noninsulin-Treated Type 2 Diabetes: The PRISMA Randomized Trial. Diabetes Care 2013;36:2887- 2894

With interest we read the article of Bosi et al. (1) regarding the effects of structured self-monitoring of blood glucose (SMBG) in noninsulin-treated patients with type 2 diabetes. Malanda et al. (2) and Polonsky and Fisher (3) have quite strikingly discussed the pros and cons of SMBG in this patient group. Malanda et al. argued that, in general, SMBG does not have any (relevant) effect on glycemic control, no value in detection of hypoglycemia, no effect on quality of life, and is far from cost-effective. Polonsky and Fisher argued that the wrong question was answered, as in many studies SMBG was investigated in unstructured

ways and that we should focus on SMBG as part of structured care. Bosi et al. give part of the answer to this discussion. Their conclusion is that structured SMBG improved glycemic control.

However, in our view the conclusion should be that the improvement found may be significant, but is not clinically relevant. The effect of structured SMBG on HbA_{1c} was -0.12% (95% CI -0.210 to -0.024). The whole 95% CI was below the 0.3% that was used by Bosi et al. in their power calculation as a minimal difference between groups, implying that in their a priori assessment, the authors assumed a difference of below 0.3% would not be relevant.

With reaching a 0.12% benefit in an open-label trial with not only three profiles every week but also “intensively structured” education and care, the conclusion should be that despite all the efforts of patients and health care providers no relevant effect on HbA_{1c} was found. It can therefore be argued that this study adds to the evidence in general that concludes that use of SMBG in noninsulin-treated people with diabetes has no clinical relevant effects on a secondary outcome measure such as HbA_{1c}. If, despite all the evidence, colleagues still believe SMBG is relevantly (cost-)effective, then future research would benefit from studies comparing structured SMBG with a control group that receives as much attention in pharmacological and non-pharmacological guidance and education without SMBG to be able to investigate the additional effect of SMBG as part of structured education and care.

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