The challenge of multidisciplinary research: improving diabetic pregnancy together

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We thank Geelhoed *et al.* for their interest in our paper.^{1,2} Our dispute focuses on the type of gluco-monitoring that should be evaluated as well as on the scientific methods used to do that.

With respect to the type of CGM, we evaluate a so-called retrospective or blinded monitoring, while Geelhoed et al. advocate real time use. In 2010, when we applied for funding of our study, retrospective monitoring had recently become available, whereas real time monitoring only did so a year after our application. The process of evaluation of health care interventions does not, in our opinion, allow frequent switches of the interventions to be evaluated. We therefore applaud the invitation to evaluate the real time monitor, but we can only start such a project after our current study has been completed. Of note, although Geelhoed *et al.* write 'One does not have to be 'a believer' to hypothesise that this (i.e. real time CGM) may also pertain to pregnant T1D', in fact the only study evaluating real time CGM in diabetic pregnancy did not show any advantages.3 Also, we encounter many women who drop out of gluco-monitoring in our study, even though we use the retrospective monitoring, that is applied 'only' 25% the time, thus highlighting a potential disadvantage of continuous monitoring. The burden of (RT)-CGM experienced by pregnant women is significant and often a reason to decline, to quit or refuse to use it again in their next pregnancy.4

Second, we respectfully disagree with Geelhoed *et al.* on the scientific methods that should be used for evaluation

of health care interventions. Although registries such as Geelhoed *et al.* are performing are useful for estimates of prevalence and quality control, they are not suited for the comparative evaluation of health care interventions such as CGM. Thus, unfortunately, their registry will never provide a reliable answer on the question whether CGM is effective over conventional monitoring of diabetes in pregnancy. This is specifically of concern for clinicians who practise in academic centres, as society facilitates these centres in the assumption that they perform sound evaluations of health care.

In view of the fact that our study is halfway – and would probably have been completed if we had joined forces from the start – we propose to collaborate in a next study evaluating RT-CGM.

REFERENCES

- Voormolen DN, de Vries JH, Franx A, Mol BW, Evers IM. The challenge of multidisciplinary research: improving diabetic pregnancy together. Neth J Med. 2013;71:270-3.
- Geelhoed PHLM, Diamant M, Wolffenbuttel BHR. The challange of multidisciplinary research: improving diabetic pregnancy together (Letter). Neth J Med. 2013;71:444-5.
- Secher AL, Ringholm L, Andersen HU, Damm P, Mathiesen ER. The effect of real-time continuous glucose monitoring in pregnant women with diabetes: a randomized controlled trial. Diabetes Care. 2013;36:1877-83.
- Secher AL, Madsen AB, Ringholm L, et al. Patient satisfaction and barriers to initiating real-time continuous glucose monitoring in early pregnancy in women with diabetes. Diabet Med. 2012;29:272-7.