Reviewer's report

Title: The 5x1 DAFNE Study Protocol: A cluster randomised trial comparing a standard 5 day DAFNE course delivered over 1 week against DAFNE training delivered over 1 day a week for 5 consecutive weeks

Version: 1 Date: 17 September 2012

Reviewer: Thomas Kubiak

Reviewer's report:

Discretionary Revisions

1. Just a question out of curiosity: Why is structured diabetes education to be offered to all people with T1DM in England and Scotland, but apparently not in Wales?

2. The description of the two treatments is a bit confusing. Suggestion: Briefly mention key characteristics in the text, contents etc. could then dislayed in a table.

Minor Essential Revisions

3. Please provide some more information on the randomisation procedure. Random blocks are fine but details are missing on how the blocks were generated...

4. I applaud the authors for the analytical approach with GEE. Is it a part of the plan to examine between centre variance? Please comment.

5. How did the authors check the exclusion criteria? Some of them seem a bit nebulous to me. What exactly were the severe diabetic complications? How was the participants' "enthusiasm" to adopt SBGM on a regular basis judged?

Major Compulsory Revisions

6. The authors line of reasoning pertaining to possible (dis)advantages of the 5 week DAFNE needs to be backed up by references. For instance, is peer support really a key factor for the programme’s success and is it reasonable to assume that a 5 week DAFNE format could be problematic at all? The tight one week format may indeed bolster group coherence and identity - however, again, is this an evidence-based factor for the programme's success?

Moreover, from an educational psychology perspective the less tight format spread over 5 weeks should be definitely be superior due to the room it gives to gain hands-on experience between lesson, as the authors correctly point out. However, there is already evidence for the effectiveness of weekly delivered format in T1DM patient education. E.g., that's the way the Dusseldorf programme
(which is essentially DAFNE) is delivered in many European countries. Same with the MEDIAS2 programme. There are also studies published that demonstrate the effectiveness of the format (admittedly, not compared to a tight format but, in case, of MEDIAS2 compared to one-to-one education). The authors should at least acknowledge this evidence.

7. I feel a bit uncomfortable about the way the qualitative part of the study is placed in the manuscript. It is only briefly mentioned in the abstract (without the authors making clear what the objectives of the sub-study were), followed by a lengthy description in the main text body. This description, however, lacks some relevant details (e.g., analytical approach). As main results of the qualitative sub-study have already been published, I suggest cutting down this suggest, merely briefly mentioning the sub-study's objectives and recruitment in the main text body. Definitely, the objectives should also go into the abstract if the sub-study is mentioned there.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.