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Editorial

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Personal and practical aspects of diabetes medicines and devices

"Laughter is the best medicine – unless you have diabetes, then insulin comes pretty high on the list."
Jasper Carrott

An insulin war has erupted and there are likely to be casualties. On one side we have the "puritan" scientists, clinicians and journalists who take the view that the widespread use of insulin analogues is unnecessary and expensive and has been foisted on unsuspecting people with diabetes by unscrupulous pharmaceutical companies (Cohen and Carter, 2010). The implication of this view is that clinicians have been gullible recipients of effective marketing, rather than having changed their prescribing behaviour based on compelling evidence. The reality is probably somewhere in between.

Those with long clinical memories will recall that, soon after their introduction, insulin analogues were well received by patients and healthcare professionals alike. These insulin analogues were seen to be particularly useful in the primary care setting, allowing many colleagues to offer insulin initiation in type 2 diabetes for the first time. This popularity came in spite of some fairly mediocre performance in clinical trials in terms of differences from traditional insulins (Waugh et al, 2010) – suggesting that such trials may not have captured the practical outcomes that really matter to people with diabetes and the healthcare professionals involved in their care.

The same could be said of self-monitoring of blood glucose (SMBG) in type 2 diabetes, especially among those not using insulin. What has generally failed to be acknowledged by SMBG trial designs is that, in order to positively impact clinical outcomes, SMBG results need to be linked to appropriate changes in treatment and behaviour; someone (hopefully the person undertaking the test) should be able to do something constructive with the information provided by SMBG to achieve better glycaemic control. In many of these studies, the study design does not require any action to be taken based on SMBG results, making it unsurprising that only modest benefits are achieved. Some studies also appear to have been developed with the idea that people with diabetes perform SMBG and supply the results to their doctor or nurse, without any consequence for the tester themselves (Clar et al, 2010).

It is difficult to achieve behaviour change that results in positive diabetes-related clinical outcomes using traditional models of patient education (Loveman et al, 2008). It now looks as if there will be consumer electronics (and software applications) created specifically to reduce the burden of diabetes and other chronic disease (Schonfeld, 2010). Such products would remove the hassle from gathering information (i.e. eliminate the need to learn the theory behind the result) and simply inform the user of the results and link them to positive behaviour change. It remains to be seen whether patient education puritans will throw their collective hands up in horror at idea of machines replacing traditional methods.

Given the above, perhaps we need to re-visit clinical trial protocol design and give more thought to developing interventions – pharmacological or technological – that matter to people with diabetes. It is about time that diabetes care became more personal and practical.

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