

Vienna, Sept. 30<sup>th</sup>, 2009

Comment by

Ida Wijsman, Coordinator Diabetes Care, Gelre Hospital, Zutphen, the Netherlands

## **Uncovering the most prevalent barriers in diabetes management and highlighting ways to overcome them**

### **Self-monitoring of blood glucose in diabetes management**

The daily treatment of diabetes mostly relies on the patients and requires their substantial attention and effort. Achieving tight glycemic control is demanding in their everyday life. But as research shows, people with diabetes who monitor their blood glucose levels on a regular basis are less likely to risk complications and secondary diseases.<sup>i</sup> In order to benefit from this, the self-monitoring of blood glucose needs to be integrated into the daily routine and has to be combined with the appropriate therapeutic intervention and sometimes also a behaviour change. The adherence to recommended self-monitoring frequencies is the foundation for an optimal glycemic control in any insulin therapy.

### **Barriers preventing a regular SMBG**

There are various kinds of reasons for the non-adherence to SMBG, many of them seemingly minor. But to overcome all barriers, it is important to uncover them. The survey “Patient-reported barriers in diabetes management and areas of opportunity for healthcare professionals” identifies the current status of insulin-treated patients’ adherence to self-

---

<sup>i</sup> Martin S, Schneider B, Heinemann L, Lodwig V, Kurth H-J, Kolb H et al. Self-monitoring of blood glucose in type 2 diabetes and long-term outcome: an epidemiological cohort study. *Diabetologia*. 2006;49(2):271-8.

monitoring of blood glucose (SMBG) and insulin therapy.<sup>ii</sup>

The cross-sectional survey conducted in the Netherlands comprises 150 telephone interviews with insulin-treated people with diabetes. While the adherence to insulin therapy proved to be very high, the most prevalent problems could be found in SMBG. More than two thirds of the participants stated problems in lifestyle alignment like the lack of time as one of the predominant reasons for the non-adherence to SMBG. The most important factor was the handling of test strips. Furthermore, more than 20% of the non-adherent people with diabetes did not consider SMBG to be important. These people therefore did not adhere to a structured monitoring routine. These results point in the direction of earlier research in other countries.<sup>iii</sup>

### **Possible solutions for overcoming barriers**

As the survey indicates, people with diabetes often have difficulties to embed SMBG as a cornerstone of successful diabetes management into their everyday life. Consequently, there is a clear need for intensified training for diabetes self-management to reduce existing barriers to testing and to increase patients' motivation and adherence to SMBG. It is therefore important for healthcare professionals to continue educating their patients about the benefits a regular blood monitoring can have and the short- and long-term risks involved in case of the non-adherence to SMBG. Another solution for overcoming barriers is the provision of devices that take the needs of people with diabetes into account. These systems have to provide practical solutions and strike a new path to overcome barriers like testing-on-the-go and test strip handling that are still existent today. With these systems healthcare professionals will be able to better support their patients' diabetes management and to achieve improved therapeutic outcomes.

---

<sup>ii</sup> Wijsman I. Patient-reported barriers in diabetes management and areas of opportunity for healthcare professionals. Poster presentation at the 14th Annual Conference of the Federation of European Nurses in Diabetes (FEND); 2009 September 25-26; Vienna, Austria.

<sup>iii</sup> Vincze G., Barner JC, Lopez D Factors associated with adherence to self-monitoring of blood glucose among persons with diabetes. *The Diabetes Educator*. 2004;30(1):112-5.