Type 1 Diabetes and Attention Deficit Hyperactivity Disorder: Development of New Educational Material

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Background
Patients with type 1 diabetes and Attention Deficit Hyperactivity Disorder (ADHD) fail to attend from clinic visits more often than patients without ADHD. If they come to the visit, they are often late, plasma glucose self-monitoring meters are absent, blood specimen collections are frequently forgotten and difficulties in managing self-care are noticed. Decreased ability of planning, perception of time, impulse control, setting goals, ability of organizing actions over time and a decreased rewarding system are the core symptoms of ADHD (1,2). In individuals diagnosed with ADHD, correlations between decreased executive functions and poor diabetes control has been shown (3).

Aims
Primary: To develop education materials adapted for patients with type 1 diabetes and ADHD, aiming to improve the understanding and knowledge of their personal diabetes care.
Secondary: To develop information material about ADHD and diabetes useful to staff at the diabetes clinic.

Table 1. Summary of information booklet for staff

- Highlight date and time in letter of invitation. Send sms to announce the visit.
- Minimize distractions: Clear your desktop, close the window and turn off the phone.
- Write down an agenda, point by point for the visit. Choose a few topics, minimising the risk for patient loosing concentration.
- Use flow chart and pictures.
- Encourage and give positive feedback. Negative feedback will increase the risk of decreased motivation
- Go through diabetic tools, insulin regime and reminders.
- Consider if collaboration with a psychiatric or habilitation clinic could be of use for your patient.
- Summarize the session to reassure the patient has got the message. Hand out memory notes or let the patient take a photo of the notes.

Conclusions
Information material with less written text and more pictures is easier to process for people with ADHD. Continuity in terms of contact with the same well prepared health professional and encouragement is of importance to achieve therapeutic goals.

Fig 1, 2. Flow charts illustrating relations and actions for high and low blood glucose levels.

Results
Education material with pictures for patients has been produced (fig 1, 2). An information booklet for staff about ADHD has been written (table 1). Comments from three of our patients:
"For me, using pictures is the only way of learning".
"Information in text gets confusing, I don’t read it. The flow charts are good reminders how to think about meals and doses".
"It is practical to follow the arrows in the flow chart, I know what to do".

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References
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