

Endoped Abstract

Target Setting and Quality Improvement in Pediatric Diabetes Care

Gun Forsander ^{1,2}

 ¹ Department of Pediatrics, Institute for Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Box 426, 405 30 Gothenburg, Sweden; gun.forsander@vgregion.se
² Region Västra Götaland, Sahlgrenska University Hospital, The Queen Silvia Children's Hospital, Rondvägen 10, 416 50 Gothenburg, Sweden

Submitted: 4 November 2020, accepted: 14 November 2020, published: 17 November 2020

Keywords: diabetes self-care; target setting; person-centered care; technology; education

How to cite: Forsander, G. Target Setting and Quality Improvement in Pediatric Diabetes Care. *Cent. Eur. Ann. Clin. Res.* **2020**, *2*(1), 29; doi:10.35995/ceacr2010029.

© 2020 Copyright by the authors. Licensed as an open access article using a CC BY 4.0 license.



Background and Aims

Diabetes management imposes considerable challenges to patients and families. Poor metabolic control is strongly associated with serious health complications, both acute and in the long run. The costs for society and health care organizations because of diabetes-related complications are huge and override markedly the costs for technical equipment such as pumps and sensors.

Regimen adherence is assumed to be a key determinant of metabolic control, and some studies of children and adolescents have shown this to be the case, although it is clear that other factors contribute to it [1]. Minority groups are at high risk for diabetes-related poor metabolic control and health complications [2,3]. My talk aims to present educational tools and strategies in a broad sense. The ultimate goal is to support an optimal diabetes self-care, striving for normoglycaemia. Every patient and family should ideally receive backup from the diabetes team based on the individual's needs and circumstances.

Materials and Methods

Some local studies performed at the Queen Silvia Children's hospital (DSBUS), Gothenburg, over recent years, as well as national initiatives to improve the outcome of diabetes self-care, will be presented. The Swedish National Pediatric Registry (SWEDIABKIDS) is an online registry which is updated on a daily basis and allows for in-house and national comparison [4]. The national goal on a group level for HbA1c value is now for patients aged 0–17.99 years is 48 mmol/mol (6.5%).

Results

In Sweden, 96% of children with diabetes aged <18 years are on it/rtCGM and around 65% are on a pump. All equipment, as well as insulin and glucagon, is reimbursed and free of charge for the patients. In January 2020, HbA1c < 48 mmol/mol (6.5%) was noted in 44.3% of the children at DSBUS (total Sweden 36%) and HbA1c < 57mmol/mol (7.4%) in 78.3% of

the children at DSBUS (total Sweden 68%). HbA1c > 64mmol/mol (8%), which we regard as a breaking point for immediate intervention by the multidisciplinary diabetes team, was noted in 8% of the children at DSBUS (total Sweden 13.3%).

Conclusions

A formula for success in diabetes care is: Target setting; Person/family centered care; A high level of knowledge in the team; A dedicated team work; Structured, repeated education of all team members, children, families, school staff; Access to modern, high quality insulin brands and updated technology without limitation of prescriptions related to the family's social situation or economy [5].

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

Reference

- Forsander, G.; Bogelund, M.; Haas, J.; Samuelsson, U. Adolescent life with diabetes-Gender matters for level of distress. Experiences from the national TODS study. *Pediatr. Diabetes* 2016. [CrossRef] [PubMed]
- Boman, A.; Bohlin, M.; Eklöf, M.; Forsander, G.; Munthe, C.; Törner, M. Health care to empower self-care in adolescents with type 1 diabetes mellitus and an immigrant minority background. SAGE Open Med. 2017, 5, 2050312117700056. [CrossRef] [PubMed]
- Herlitz, A.; Munthe, C.; Torner, M.; Forsander, G. The Counseling, Self-Care, Adherence Approach to Person-Centered Care and Shared Decision Making: Moral Psychology, Executive Autonomy, and Ethics in Multi-Dimensional Care Decisions. *Health Commun.* 2016, *31*, 964–973. [CrossRef] [PubMed]
- 4. Annual Report 2019. Swediabkids—Swedish National Quality Registry for Diabetes in Children and Adolescents. Swediabkids, Årsrapport 2019. Available online: www.ndr.nu.
- Korsgren, O.; Skyler, J.; Skog, O.; Sundberg, F.; Forsander, G.; Ludvigsson, J. Imagining a better future for all persons with type 1 diabetes. *Nat. Rev. Endocrinol.* 2019. [CrossRef] [PubMed]