

Impact of a program for self-management on adolescents with type 1 diabetes

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ABSTRACT

BACKGROUND: Given the high incidence of type 1 diabetes in adolescents and its impact on adolescents' development and level of treatment adherence, it seems necessary to develop a structured intervention to promote patients autonomy through the development of self-management skills. The proposed intervention is based on an educational program for self-management of adolescents with Spina Bifida, validated by Malheiro^[1], and adapted for pediatric populations from Kate Lorig's Expert Patient Educational Program. The intervention will be based on the psychoeducational strategies used by Malheiro^[2], such as problem-solving, planning, role-playing, tutorials, and lay-leds (patients who are experts in managing their chronic condition) as a model role.

OBJECTIVES: To evaluate the feasibility of a complex intervention, we aimed conduct a pilot study to: adapt and implement the educational program for self-management of adolescents with Spina Bifida, to adolescents with type 1 diabetes; evaluate its effects on self-management skills, quality of life, knowledge, self-efficacy and variance in HbA1c levels. **METHODS:** A mixed methods study with pre and post evaluation with quantitative and qualitative methods. We will be used to evaluate the program (psychoeducational strategies, themes, timings) and its effects (reported by the adolescents and their caregivers) through questionnaires and focus group interviews. It is our intention to develop and implement a structured intervention consisting in several sessions, of which contents will be drawn from a integrative review about the effectiveness of psychoeducacional interventions of adolescents with type 1 diabetes and the results of a focus group interviews. The target population is composed by adolescents with type 1 diabetes, aged 15 to 19 years old. Data collection instruments: Disabkids (health-related quality of life)^[3]; Self Efficacy Diabetic Scale (SEDS)^[4]; Knowledge test about the disease^[5]; and scripts for the focus groups interviews, between lay-leds (young adults experts in self-management of type 1 diabetes) and their parents. **CONCLUSIONS:** We

expect that this intervention may promote a differentiated approach for disease managing, with implications for behavioural change in adolescents with type 1 diabetes.

Keywords: *Adolescent; Type 1 Diabetes; Self-management; Program*

References:

- [1] Malheiro Isabel, Luísa Barros, Gaspar MF. Training camp : effects of an educational program for self-management , on adolescents with spina bifida. 2017; 16(2): 1–17.
- [2] Malheiro I, Barros L, Gaspar F. Efeitos de um Programa de Educação para a Autogestão em Jovens com Spina Bífida: Uma Abordagem Qualitativa. In: A P Costa, J Ribeiro, E Synthia, D Neri de Sousa (Eds). Atas do 6º Congresso Ibero-Americano em Investigação Qualitativa: Investigação Qualitativa em Saúde. 2017; 2: 1175-1185 Aveiro: Ludomedia ISBN // 978-972-8914-76-9. Available from: <https://proceedings.ciaiq.org/index.php/ciaiq2017/article/view/1454>
- [3] Carlos Carona, Neuza Silva, Helena Moreira, Maria Cristina Canavarro, Monika Bullinger. DISABKIDS-12 (DISABKIDS Chronic Generic Module – Short version). 2014.
- [4] Pereira MG, Almeida P. Auto-eficácia na diabetes: Conceito e validação da escala. *Análise Psicológica* [Internet]. 2004; 22: 585–95. Available from: http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0870-82312004000300013
- [5] Flora M, Gameiro M. Self-Care of Adolescents with Type 1 Diabetes Mellitus: Knowledge about the Disease. *Rev Enferm Ref* [Internet]. 2016; 4(8): 17–26. Available from: http://rr.esenfc.pt/rr/index.php?module=rr&target=publicationDetails&pesquisa=&id_artigo=2565&id_revista=24&id_edicao=90