

The childhood onset diabetes electronic registry (CODEr) in Kuwait: What we learned and what we achieved



Dalia Al-Abdulrazzaq^{1,2}, Fahad Al-Jasser^{2,3}, Fouzeyah Othaman², Abeer Al-Tararwa⁴, Hala AlSanae³, Iman Al-Basari⁵, Azza Shaltout², Hessa Al-Kandari^{2,4}

¹Department of Pediatrics, Faculty of Medicine, Kuwait University, Kuwait

²Unit of Population Health, Dasman Diabetes Institute, Kuwait

³Department of Pediatrics, Amiri Hospital, Ministry of Health, Kuwait

⁴Department of Pediatrics, Farwaniya Hospital, Ministry of Health, Kuwait

⁵Department of Pediatrics, Mubarak Al-Kabeer Hospital, Ministry of Health, Kuwait

Abstract

Introduction: A national registry for diabetes is an effective public health tool for disease prevention and management, especially in countries like Kuwait where there is increasing number of children with type 1 diabetes (T1D). The aim of this study is to report on clinical characteristics of children with T1D registered at the Childhood-Onset Diabetes electronic Registry (CODEr) in Kuwait.

Design and Methods: This is a retrospective review of children with T1D aged 14 years or less registered in CODEr between the periods of 2011-2017.

Results: A total of 864 children aged 14 years or less (410 Males and 454 Females, p =not significant, ns) were newly diagnosed with T1D during the study period. Females were more likely to have an underweight/normal Body mass index (BMI) at diabetes presentation ($p=0.001$). Furthermore, females had a higher mean HbA1C at diagnosis (11.6 ± 2.41 , $p<0.0001$). Out of the total 864 patients, 287 had presented with Diabetic ketoacidosis (DKA) (35.9%) of which most were mild (133/287, 46.3%). From the year 2011 till 2017, the percentage of children older than 5 years of age presenting with severe DKA has been significantly decreasing (Figure.2, $p=0.033$).

Conclusion: We learned from the CODEr, that in Kuwait the diagnosis of T1D might be viewed culturally as a social stigma as females seem to be diagnosed later with lower BMI and higher HbA1C. This must be tackled by raising more awareness in the community. However, we believe that through the registry process over the years, we have been able to significantly lower the percentage of older children presenting with severe DKA. Further intensifying efforts should be implemented to achieve such success with younger age groups.

Biography

Dalia Al-Abdulrazzaq completed her MD medicine from Kuwait University (1995-2002). She is an Associate Professor at Faculty of Medicine; Kuwait University



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