

## **Children with Type 1 Diabetes**

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**Background:** The prevalence of diabetes in the Middle East is amongst the highest worldwide; Bahrain ranks amongst the top 10 countries. In particular, increasing number of children are being diagnosed with type 1 diabetes mellitus (T1DM) posing a significant public health concern.

**Objective:** To evaluate the magnitude of type 1 diabetes in Bahrain.

**Design:** A Case-Control Retrospective Study.

**Setting:** Pediatric Diabetes and Endocrine Clinic and Local Health Centers (LHC).

**Method:** Fifty-nine cases and 53 controls were included in the study. Data from the Diabetes Registry were recorded for subjects meeting the inclusion criteria and questionnaire was administered to healthy controls. Chi Square or Student's t-test was used as appropriate. Logistic regression analysis was used to evaluate independent predictors of T1DM.

**Result:** Fifty-nine children aged 6-12 years diagnosed with T1DM in the years 2009 and 2010 were compared to 53 healthy controls. Children with T1DM were more likely to have suffered from a pre-diabetes illness such as tonsillitis 32 (54.2%) compared to controls 3 (5.7%), and have undergone a surgery prior to diagnosis 14 (23.7%), and to have mothers with T2DM or family history of GDM. No significant difference in infant-feeding practices was observed between children with type 1 diabetes and the healthy controls.

**Conclusion:** Children with T1DM were more likely to have suffered from other infectious illnesses before the diagnosis was established. Whilst unable to fully investigate any potential genetic differences between cases and controls, this study provides support for the theoretical role of infections as a trigger for T1DM.

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