

DIABETES MELLITUS IN CHILDREN AND ADOLESCENTS IN NORTHERN SAUDI ARABIA

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ABSTRACT

Background: World Health Organization has predicted a worldwide rise in the prevalence of diabetes mellitus. The objective of this study was to determine the prevalence of diabetes mellitus (DM) among children and adolescents in the district of Turaif, Northern Saudi Arabia. **Methods:** A cross-sectional descriptive survey included 589 children and adolescents aged 1–21 years were surveyed. Capillary random glucose was performed in all subjects. Random blood sugar level of 200 mg/dl or higher suggests diabetes level of > 140 mg/dl but < 200 mg/dl, suggests pre-diabetes. **Results:** The prevalence of DM and pre-diabetes were 1.7 % and 5.1 % respectively. No diabetic children below 5 years, 1.4% of children 5-10 years, 1.1% of 10-16 years and 3.2% of adolescents > 16 years were diabetic. On the other hand, 2.3% of children below 5 years were pre-diabetics, 5.7% of children aged 5-10 years, 1.1% of children aged 10-16 years, and 3.2% of adolescents > 16 years were pre-diabetic. Diabetes was more in males (1.8%) than females (1.6%) while 3.1% of males and 6.3% of females were pre-diabetics. However with regards to age and gender, there were no significant differences has been observed (P value >0.05). **Conclusion and recommendations:** The prevalence rate of DM among children and adolescents was 1.7%. Awareness campaigns and prevention programs about diabetes in childhood and adolescence should be instituted and the existing ones must be strengthened. Adequate commitment from the Ministry of Health is also advocated.

Keywords: Diabetes mellitus; Children; Adolescents; Turaif, Saudi Arabia; Random blood glucose.