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**POOR SLEEP, INCREASED STRESS, AND COMPLICATIONS IN YOUTH WITH TYPE 2 DIABETES (T2D)**

**Melissa Gabbs**, Max Rady Faculty of Health Sciences, University of Manitoba; **Theresa Pinto**, Faculty of Medicine, Dalhousie University; **Allison Dart**, Max Rady Faculty of Health Sciences, University of Manitoba; **Elizabeth Sellers**, Max Rady Faculty of Health Sciences, University of Manitoba; **Jonathan McGavock**, Max Rady Faculty of Health Sciences, University of Manitoba; **Brandy Wicklow**, Max Rady Faculty of Health Sciences, University of Manitoba

**Background:**

Youth onset T2D disproportionately affects families with fewer resources.

**Objective:**

The relationship stress and disrupted sleep patterns have on developing T2D related complications remains to be determined.

**Methods:**

A cross-sectional analysis of youth with T2D from the iCARE study with complete Pittsburgh Sleep Quality Index (PSQI), Perceived Stress Scale-14 (PSS-14), and Kessler Psychological Distress Scale (K6) questionnaires were included. Youth were stratified based on having ‘Good Sleep’ or ‘Poor Sleep’ by PSQI and we tested for differences in stress scores and clinically relevant outcomes [hypertension, microalbuminuria, HbA1c, body mass index z-score (BMIz)].

**Results:**

Of the 188 youth ( $15 \pm 2.44$  years, BMIz  $1.85 \pm 0.60$ , 62.5% female), 47% rated their sleep quality as ‘Poor.’ Youth with ‘Poor Sleep’ displayed higher PSS stress scores ( $p=0.010$ ) and K6 scores ( $p=0.022$ ). We observed no differences in HbA1c ( $p=0.108$ ), BMIz ( $p=0.280$ ), hypertension (‘Good Sleep’ = 54.5%; ‘Poor Sleep’ = 44.9%;  $p=0.243$ ) or microalbuminuria (‘Good Sleep’ = 29.3%; ‘Poor Sleep’ = 32.2%;  $p=0.789$ ) status between sleep groups.

**Conclusion:**

Nearly half of youth with T2D report poor sleep, which correlates with increased stress and mental distress. Early metabolic impacts of poor sleep are not currently evident however, the long-term effects of poor sleep and psychological distress warrant further study.