Reasons for not enrolling in the study include:

- Lack of social worker on site during completion of the questionnaire.
- Informed consent was not obtained by the participants or both guardians for minors: onsite social worker was required upon completion of the questionnaire.
- A sample of 90 subjects (30 cases and 60 controls) was the enrollment goal.
- The ACE questionnaire was used to evaluate prior exposure to stress events.
- A score from 0 to 10 was used to quantify prior exposure to the 10 types of stressors.
- Data on medical history, demographics and clinical outcomes (A1C, BMI) was obtained by self-report and chart review.

Methods

- Prospective case-control, IRB-approved study, started in November 2016.
- Eligible participants: males and females aged 15 to 21 years.
- Cases: diagnosed with T2DM using the ADA criteria no later than 6 mo. prior to enrollment.
- Controls: BMI z-score ≥ 1.5, no T2DM, presented to weight management clinic no later than 6 mo. prior to enrollment.
- Informed consent was obtained by the participants or both guardians for minors: onsite social worker was required upon completion of the questionnaire.
- The ACE questionnaire was used to evaluate prior exposure to stress events.
- A score from 0 to 10 was used to quantify prior exposure to the 10 types of stressors.
- Data on medical history, demographics and clinical outcomes (A1C, BMI) was obtained by self-report and chart review.

Results

- To date, approached: 33 cases and 32 controls.
- Enrolled: 8 cases (24%) and 8 controls (25%).
- Cases: age 15.2±2.0 years, BMI z-score range 1.15±2.69, A1C range 6.3%-14.3%.
- Controls: age 15.8±20.5 years, BMI z-score range 2.08-2.81.
- Reasons for not enrolling in the study include:
  - Inability to consent both guardians (for minors).
  - Lack of social worker on site during completion of the questionnaire.
  - Refusal of guardian to have child participate after reading the questionnaire.

Conclusions

- The poor enrollment rate highlights the challenge to assess stress events in this population of adolescents using a questionnaire.
- Understanding the impact of stress on the development of T2DM in adolescents and young adults may allow for the development of preventive strategies targeted at psychosocial health.

Future Goals

- Continue recruiting participants.
- Investigate the underlying causes of inadequate enrollment to increase participation rate.

References

- 1) Pickup et al., Diabetes Care 2004
- 2) Bonnet et al., Atherosclerosis 2000
- 4) Wingfield et al., Psychother Psychosom med Psychol 2011