



How Psychological Factors Affect Medication Adherence in Youth with Type 2 Diabetes

Sara Schur¹, Allison Dart^{1,2}, Jonathan McGavock¹, Elizabeth Sellers^{1,2}, Lucas Mosienko¹,
Brendan Dufault¹, Melissa Gabbs¹, Brandy Wicklow^{1,2}

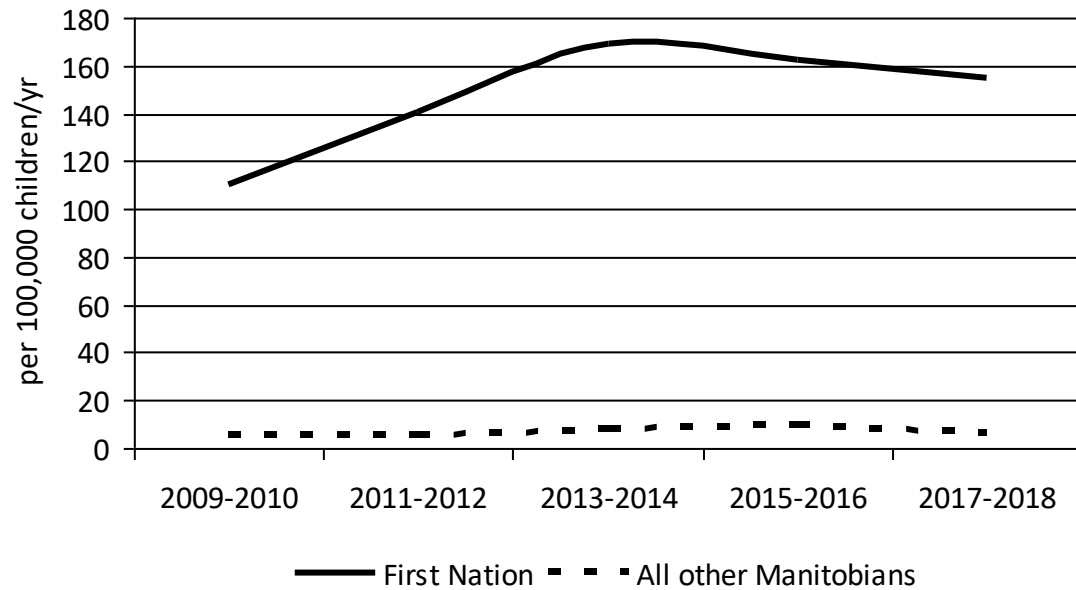
1. The Children's Hospital Research Institute of Manitoba

2. Department of Pediatrics and Child Health, Faculty of Medicine, University of Manitoba



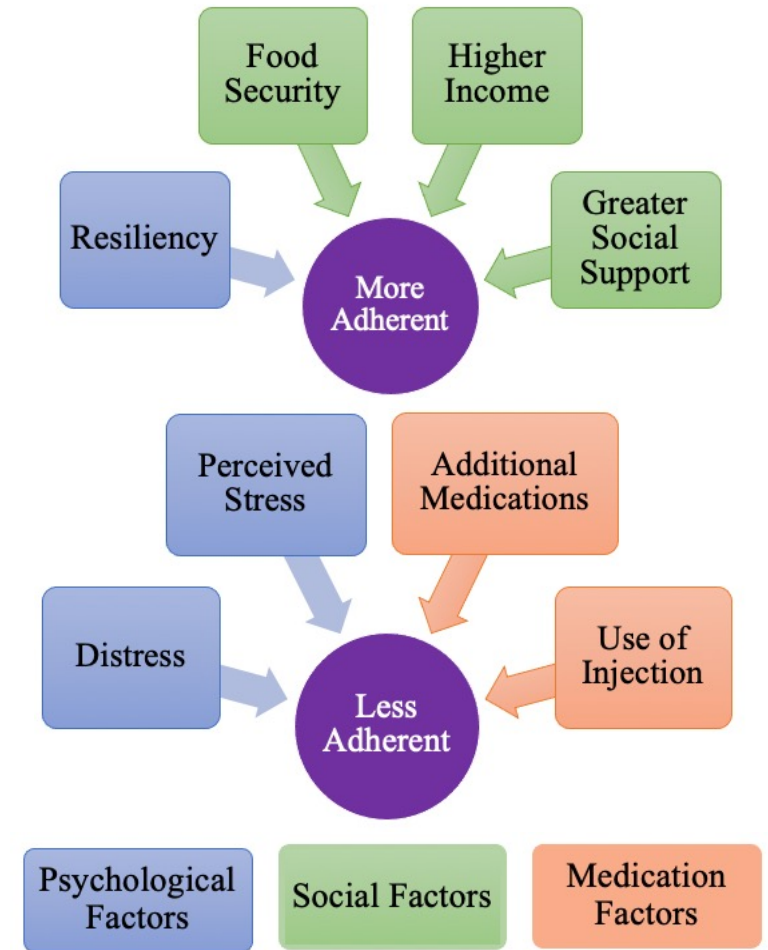
Type 2 Diabetes

Youth Onset T2D – Incidence in Manitoba



Target: $\leq 7.0\%$ HbA1c

Hypothesis



Adherence

Questionnaires

- Resiliency → Child and Youth Resiliency Measure (CYRM)
- Distress → Kessler Distress Scale (K6)
- Perceived Stress → Perceived Stress Scale (PSS14)
- Social Support → Social Support Survey
- Food Security → Food Security Survey
- Medications → Medication Questionnaire



The Improving renal Complications in Adolescents with type 2 diabetes through REsearch (iCARE) cohort study

Subject ID:

Date: / /

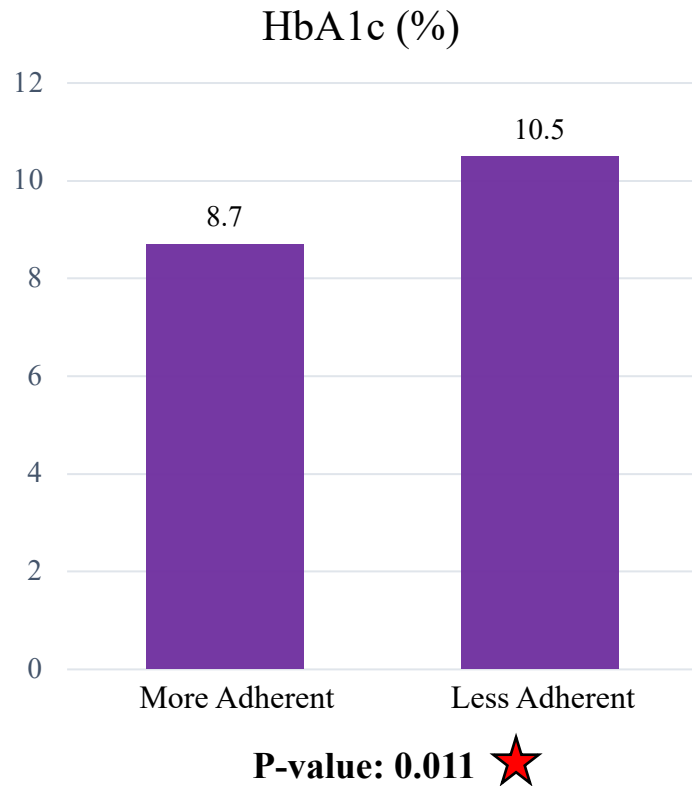
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Visit: Baseline – V0 Visit 1 Visit 2 Visit 3 Visit 4 Visit 5

MEDICATIONS				
(Check all that apply)				
Does Participant take any medications? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Primary responsibility for injections: <input type="checkbox"/> Participant <input type="checkbox"/> Guardian <input type="checkbox"/> Other: _____				
Medication	Type	Frequency	Doses Missed	Reasons to Miss
Insulin #1 <input type="checkbox"/> None	<input type="checkbox"/> Lantus <input type="checkbox"/> 30/70 Premix <input type="checkbox"/> NPH <input type="checkbox"/> Rapid <input type="checkbox"/> 25/75 Premix <input type="checkbox"/> Levemir <input type="checkbox"/> Basalog	<input type="checkbox"/> Once daily <input type="checkbox"/> Twice daily <input type="checkbox"/> Three times daily <input type="checkbox"/> Four times daily <input type="checkbox"/> Every other day	<input type="checkbox"/> All of the time <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> _____ missed/wk <input type="checkbox"/> Never	<input type="checkbox"/> Interferes with activity <input type="checkbox"/> Hard to take <input type="checkbox"/> Forget <input type="checkbox"/> Not feeling well <input type="checkbox"/> Side effects <input type="checkbox"/> Not Home <input type="checkbox"/> Ran out <input type="checkbox"/> Refuse <input type="checkbox"/> Can't afford <input type="checkbox"/> Don't think necessary
Insulin #2 <input type="checkbox"/> None	<input type="checkbox"/> Lantus <input type="checkbox"/> 30/70 Premix <input type="checkbox"/> NPH <input type="checkbox"/> Rapid <input type="checkbox"/> 25/75 Premix <input type="checkbox"/> Levemir <input type="checkbox"/> Basalog	<input type="checkbox"/> Once daily <input type="checkbox"/> Twice daily <input type="checkbox"/> Three times daily <input type="checkbox"/> Four times daily <input type="checkbox"/> Every other day	<input type="checkbox"/> All of the time <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> _____ missed/wk <input type="checkbox"/> Never	<input type="checkbox"/> Interferes with activity <input type="checkbox"/> Hard to take <input type="checkbox"/> Forget <input type="checkbox"/> Not feeling well <input type="checkbox"/> Side effects <input type="checkbox"/> Not Home <input type="checkbox"/> Ran out <input type="checkbox"/> Refuse <input type="checkbox"/> Can't afford <input type="checkbox"/> Don't think necessary
Primary responsibility for oral medications: <input type="checkbox"/> Participant <input type="checkbox"/> Guardian <input type="checkbox"/> Other: _____				
Medication	Type	Frequency	Doses Missed	Reasons to Miss
Oral Anti Diabetes Medication #1 <input type="checkbox"/> None	<input type="checkbox"/> Metformin <input type="checkbox"/> Glicazide <input type="checkbox"/> Glyburide <input type="checkbox"/> Other: _____	<input type="checkbox"/> Once daily <input type="checkbox"/> Twice daily <input type="checkbox"/> Three times daily <input type="checkbox"/> Four times daily <input type="checkbox"/> Every other day	<input type="checkbox"/> All of the time <input type="checkbox"/> Sometimes <input type="checkbox"/> Rarely <input type="checkbox"/> _____ missed/wk <input type="checkbox"/> Never	<input type="checkbox"/> Interferes with activity <input type="checkbox"/> Hard to take <input type="checkbox"/> Forget <input type="checkbox"/> Not feeling well <input type="checkbox"/> Side effects <input type="checkbox"/> Not Home <input type="checkbox"/> Ran out <input type="checkbox"/> Refuse <input type="checkbox"/> Can't afford <input type="checkbox"/> Don't think necessary

- Less Adherent**
- All of the time
 - Sometimes
- More Adherent**
- Rarely
 - Never

Results & Conclusion



Psychological Factors	More Adherent (n=69)	Less Adherent (n=80)	P-value
K6 Score	6.6 ± 5.1	7.6 ± 5.1	0.206
PSS14 Score	24.8 ± 7.5	25.8 ± 6.3	0.387
CYRM Score	110.9 ± 15.6	107.3 ± 19.0	0.292

Social Determinants	More Adherent (n=69)	Less Adherent (n=80)	P-value
Income Category (% low)	70.5	77.6	0.503
Social Support Score	73.2 ± 17.7	65.4 ± 19.6	0.033 ★
Food Security (%)			
Food secure	48.0	19.3	0.005 ★
Moderate food insecurity	32.0	42.1	
Severe food insecurity	20.0	38.6	

Medication-Related Factors	More Adherent (n=69)	Less Adherent (n=80)	P-value
Oral Anti-Diabetes Med (%)	55.1	35.0	0.020 ★
Additional Medications (%)			0.532
0	65.2	73.8	
1	21.7	17.5	
2	13.0	8.8	



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