

RACHS Group A – Pooled DM			
Outcomes	Controls	IDM	Sig
ICU LOS (days)	3.6±3.0	3.9±5.4	0.17
Hosp LOS (days)	9.9±7.9	12.1±17.9	0.50
EVIDENCE OF IRI			
PRISM Score*	7.6±4.8	7.6±4.3	1.00
Lowest MV O ₂ sat* (%)	48.9±12.3	49.1±12.7	0.91
Highest lactate* (mmol/L)	3.0±1.7	2.9±1.2	0.91
Highest glucose* (mmol/L)	12.0±4.1	12.2±3.3	0.23
Highest urea (mmol/L)	8.1±4.1	9.0±4.3	0.19
Highest creatinine (µmol/L)	46.7±16.0	44.9±13.2	0.68
Days intubated	3.1±3.2	2.7±2.8	0.53
RACHS Group B – Pooled DM			
Outcomes	Controls	IDM	Sig
ICU LOS (days)	5.6±3.6	5.2±2.6	0.97
Hosp LOS (days)	24.6±18.5	24.0±16.5	0.97
EVIDENCE OF IRI			
PRISM Score*	11.3±4.6	13.2±6.2	0.30
Lowest MV O ₂ sat* (%)	41.4±13.8	43.4±9.1	0.66
Highest lactate* (mmol/L)	6.2±3.3	5.9±1.8	0.87
Highest glucose* (mmol/L)	15.6±3.1	14.8±2.4	0.44
Highest urea (mmol/L)	14.2±8.5	14.2±10.0	0.76
Highest creatinine (µmol/L)	64.3±29.6	95.5±117.9	0.65
Days intubated	8.2±6.1	9.3±4.8	0.19

Table. Surgical outcomes for IDM vs Controls by RACHS Group. RACHS: risk adjustment for congenital heart surgery; DM: diabetes mellitus; IDM: infants of mothers with DM; ICU: intensive care unit; LOS: length of stay; Hosp: hospital; IRI: ischemia-reperfusion injury; PRISM: Pediatric Risk of Mortality; MV: mixed venous. *First 24 to 48 hours

Women and Childrens Health Research Institute (WCHRI)

P051

THE FEASIBILITY OF A VIRTUAL PHYSICAL ACTIVITY COUNSELLING INTERVENTION IN CHILDREN WITH CONGENITAL HEART DISEASE

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BACKGROUND: While long-term survival has improved significantly in recent years, we are now recognizing the high prevalence of cardiovascular (CV) risk factors in children with repaired congenital heart disease (CHD). Low levels of physical activity (PA) are one of the important modifiable CV risk factors. Evidence-based interventions for this high-risk group are needed, as it is not known how to best help children with CHD to be more active. In this study, we aimed to assess the feasibility and acceptability of a PA counselling intervention in children with CHD.

METHODS AND RESULTS: We designed a 12-week PA intervention based on behaviour change theory which could be remotely delivered to children across British Columbia and the Yukon. We recruited children with moderate-to-complex CHD aged 9-12 years from BC Children's Hospital. At baseline, we measured moderate-to-vigorous PA using accelerometers and participants' readiness to change their PA using questionnaires to determine their intervention eligibility. Participants who were not meeting PA guidelines and expressed readiness to change qualified for the intervention.

The intervention consisted of 6 sessions with a PA counsellor via Zoom where participants learned strategies to increase their PA through workbook activities. We measured PA again at the intervention midpoint and post-intervention. Intervention feasibility (study recruitment and retention) and acceptability (intervention attendance and engagement) were assessed. We recruited 21 participants who completed baseline measures (48% male, 11.2 [IQR 10.4-12.1] years), although recruitment success has been lower than anticipated (53%). Of these participants, 6 were already meeting PA guidelines, 2 were not willing to change their PA, and 3 had incomplete baseline PA data. Ten participants qualified for the intervention, where 20% were male (10.8 [IQR 9.6-11.8] years) with a baseline median moderate-to-vigorous PA of 34.1 min/day (IQR 24.4-39.2). Four participants are currently participating in the PA intervention and 6 participants have completed it. Study retention has been excellent (100%), session attendance was 100% thus far, and workbook activities completed between sessions have been well received (23 completed, 7 partially completed, 3 incomplete). Median moderate-to-vigorous PA increased by 4.5 min/day ($p=0.813$, 95% CI -5.25 to 43.04) from pre- to post-intervention.

CONCLUSION: This PA counselling intervention is feasible and acceptable to families and children with CHD. Study retention rates and activity completion rates confirm that the intervention is engaging and well received by children with CHD. Preliminary objective PA data suggests that the intervention may have facilitated increased PA for participants.

Canadian Institutes of Health Research - Masters Award

P052

THE IMPACT OF THE COVID-19 PANDEMIC RESTRICTIONS ON THE PROVISION OF ACHD CARE ACROSS CANADA

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BACKGROUND: Patients with adult congenital heart disease (ACHD) are at increased risk for poor outcomes when compared to the age matched non-ACHD population and require specialist care to optimize outcomes including well-being and survival. The COVID-19 pandemic significantly impacted healthcare provision across Canada with reduction on in person evaluations. The effect of the COVID-19 restrictions on ACHD care including clinic evaluation, diagnostic and procedures in Canada has not been well characterized.

METHODS AND RESULTS: All Canadian Adult Congenital Heart Network affiliated ACHD centers were contacted and asked to collect data on outpatient clinic and procedural volumes for the