### ABSTRACT SUBMISSION FORM

LET'S TALK ABOUT



Exploring the role of sex and gender on health research





# **CHRD 2020: Abstract Submission Form**

#### **Submitter Name**

Gabrielle Derraugh

#### **Email**

g.williamsonderra@gmail.com

#### Title

Virtual follow-up of long-term physical, mental and educational outcomes for children with congenital diaphragmatic hernia

#### Background

Improved survival of babies born with congenital diaphragmatic hernia (CDH) has predisposed these children to long-term morbidities. There is currently limited long-term outcome data that can be used to counsel parents and provide evidence-informed long-term care.

## **Objective**

The objective of this study was to determine if children born with CDH have different long-term physical health, mental health and educational outcomes compared to age-matched controls.

#### **Methods**

We performed a retrospective cohort study of CDH children born between 1992-2017. CDH cases were identified from Winnipeg's Surgical Database of Outcomes and Management (WiSDOM), and a 10:1 date-of-birth matched control population was selected using the Manitoba Centre for Health Policy (MCHP) data repository. International Classification of Disease (ICD) codes, Drug Program Information Network (DPIN), special education funding, Early Development Instrument (EDI), Grade 3, 7, 8 assessments, grade 9 completion and high-school graduation were used to assess outcomes.

#### Results

A total of 90 CDH children and 896 controls were identified. We found that CDH children 0-5 years-of-age have a higher risk of chronic airway obstruction, pneumonia, other diseases of the lung, other diseases of the respiratory system, chronic pulmonary heart disease, symptoms concerning nutrition and development, diseases of the esophagus, intestinal obstruction, deformities of curvature of spine, developmental disorders, specific delays in development and hearing loss. CDH Children 6-12 years-of-age were found to have a higher prevalence of asthma, diseases of the esophagus and hearing loss. No difference in physical health outcomes was found for children 13-19 years-of-age. Mental health outcomes and

educational outcomes were found to be similar between CDH cases and controls.

### Conclusion

The results from our study suggest that children born with CDH have worse physical health outcomes compared to controls, primarily in the first five years-of-life. No difference was found for mental health or educational outcomes in the first 19 years-of-life.

### Theme:

Clinical

# Do you have a table/figure to upload?

No

# Are you willing to participate in Goodbear's Den?

Yes

## **Presenter Status:**

Masters Student

# What was your role in the project?

Design

# **Authors**

Name	Email	Role	Profession
Matthew Levesque	matthew.Levesque@um anitoba.ca	Co Author	
Robert Balshaw	robert.balshaw@umanito ba.ca	Co Author	
Suyin A. Lum Min	slummin@hsc.mb.ca	Co Author	
Richard Keijzer	richardkeijzer@gmail.co m	Co Author	