

## **Greetings from the All Our Families Study**

Welcome to fall! I hope your summer was pleasant and restful, and you were able to enjoy some of our great Alberta weather. This summer, our team was able to have a get-together in Confederation Park to meet new staff and catch up with the old. On a personal note, one of my favorite summer experiences was hiking the Skyline Trail near Jasper, and catching up with family.

One of the AOF team highlights this summer was completing the analysis of the data you provided over the COVID-19 pandemic and sharing this information with stakeholders and decision makers. Now I will retreat into my study for a sabbatical to immerse myself in the literature on flourishing. You may notice in our upcoming surveys that we are interested in better understanding how women and families find ways to stay well and thrive in uncertain times. The leadership team will continue to meet over my sabbatical: AOF team co-lead Dr. Sheila McDonald, AOF Program Manager Muci Wu, and AOF Research Assistant Mary Canning will be taking good care of daily activities.



As you have probably noticed, there has been a break in the surveys; many of you completed the third COVID-19 Impact surveys prior to the Spring 2022 Newsletter. Nonetheless, the All Our Families team has been working hard on the next steps in our study.

In this newsletter, we will provide more details on the upcoming 12-14 year developmental survey (Study Updates). In our Research to Real Life section, our summer students have created some infographics to give you a visual representation of some of the COVID-19 Survey results. Our featured expert this newsletter is Dr. Stacey Page who will answer some questions about the importance of

Research Ethics. Along with these items are some updates on the team's summer activities and staff news. Finally, we want to share some pictures of our team's 'other' family members.

I wish you a safe and happy fall and look forward to being back with you after my sabbatical, in the spring of 2023!

Suzanne





## **Study Updates**



In the next few weeks, you will see an invitation for both yourself and your All Our Families child to participant in the next developmental survey. This edition will look more like the surveys you have completed prior to the COVID-19 pandemic where we ask questions about major life milestones and your health. We will also welcome your AOF child to complete their own developmental survey: your child's version will ask about their habits, screen time, friends and health. The last time we sent a survey like this out to you was when your All Our Families child was about to turn 8 years old. This time, the survey will be launched to everyone at the same time, and therefore your child will be within an age range of 12-14.

As always, we greatly appreciate your contributions to the study, and look forward to receiving your responses.





## Ask an Expert

As you may (or may not) know, studies like All Our Families must comply with a number of Research Ethics principles in order to continue to operate. These principles ensure adherence to ethical standards when conducting research and are updated regularly to uphold maximum protection of participant information. In this newsletter, we have invited Dr. Stacey Page to answer a few common questions about how Research Ethics operate.



## 1. How did you become interested in ethics?

Ethics are rules or principles that help to distinguish between rights and wrongs. Referencing rules suggests that ethics are black and white. However, what makes ethics engaging is that these rules or principles can be applied in different ways when seeking to resolve dilemmas. That is, people may have different perspectives and may make different arguments for what is right or wrong. Oftentimes, how we judge "rightness" or "wrongness" is shaped by our own understanding, values, priorities, and life experience. Biomedical ethics is the applied use of ethics principles in medicine, to help make decisions about care. Core principles include respect for people's autonomy, beneficence or "doing good" and fairness. I have always found controversial issues and stories relating to health and health care interesting. My formal introduction to ethics was through classes focussing on biomedical ethics during university. Subsequently, I was exposed to research ethics during graduate course work and while working as a research assistant in health care settings. Research ethics applies similar principles to the conduct of research. My interest was piqued, and I looked for opportunities to learn more in research ethics. This led me to a graduate student position on the Conjoint Health Research Ethics Board at the University of Calgary, and I have been with the Board in several different capacities ever since.

## 2. What is the origin of developing ethics in research?

Historically, the regulation of research, and Research Ethics Boards, have evolved in reaction to awareness and intolerance of research that was conducted in complete disregard of peoples' rights. There are numerous cases from the past where people suffered, were seriously harmed, or even died because of research participation. Among the earliest standards is the Nuremberg Code. This Code of conduct was established in 1948 after the Nuremberg War Crimes Trials and was the first international standard that advanced the need for voluntary participation and informed consent for research.







## 3. What is the overarching purpose of a Research Ethics Board?

Research Ethics Boards (REBs) are independent committees comprised of a number of people who have diverse expertise including ethics, law and research methods. REBs typically include someone with a community or lay-person perspective as well as someone with cultural expertise. A health research ethics board will also have several people with various areas of medical specialization, for example, women's health, pediatricians, respirologists, mental health experts. The required medical expertise is shaped by the type of research the Board is expected to evaluate. The purpose of a Research Ethics Board (REB) primarily is to ensure that the rights and well-being of participants are protected. That is, that research will be conducted in a way that respects individual participants, ensures their welfare is safeguarded and makes sure that people are treated fairly. To do this, REB members review research projects, focussing on the quality of the research, its risks and benefits and the explanation of the research that people are giving prior to agreeing to take part. By ensuring the ethical acceptability of research, REBs also help to foster public trust and engagement in research. Patients and other members of the public are more likely to take part if there is an assurance that studies have been reviewed and meet with ethics standards.

## 4. Within the All Our Families study, we have to update our Ethics every year. Why is this so important?

Research ethics review is undertaken before research is allowed to start. The approval given to researchers is valid for one year. To renew this approval, researchers must provide a report to the REB about how their study is going. This includes how many people they have recruited, if new information about the research has become available, if there have been any unanticipated problems, and if they have made any changes to their study that have not already reported. This annual reporting allows the REB to make an informed judgement about whether the research should be allowed to continue and ensures that the research continues to meet with regulatory standards.



## 5. What is an ethics violation and what happens in that situation?

Ethics violations occur when research has not been conducted in congruence with its approval. These lapses can vary from very minor things like forgetting to date a consent form properly, to more significant problems like participant information being inadvertently released, or study drugs being given incorrectly. It is the lead researcher's responsibility to report to the REB when such violations occur. The point of such reporting is in part for the REB to determine if the study





should continue. It is also an opportunity for the cause of such violations to be reviewed, for the circumstances that led to the violation to be reviewed, and for corrective actions to be implemented so that such issues don't happen again moving forward.

Dr. Stacey Page is the current Chair of the Conjoint Health Research Ethics Board, which serves the Cumming School of Medicine and Faculties of Nursing and Kinesiology. She is a member of the Human Research Ethics Board at Mount Royal University as well as a member of the Research Ethics Board at the Alberta University for the Arts. Dr. Page is on the Board of Directors of the Canadian Association of Research Ethics Boards and serves on several national committees on issues relating to privacy, consent and research oversight. Her primary research interests (not surprisingly!) focus on research ethics, particularly as they apply to consent, privacy, secondary data use, biobanks and precision medicine.

## **Research to Real Life**

We thought you would be interested in learning some initial results and comparisons from the COVID-19 Impact surveys that many of you completed. These graphics represent some of the work that our summer students completed.

## Youth and Screen Time

Our Summer Student Ria Mangat examined results of the youth survey's screen time questions on your AOF child's screen use and habits over the course of the pandemic. From these responses, she created this infographic with some interesting highlights.













## Digital Device Use During the COVID-19 Pandemic Amongst Youth

ALL OUR FAMILIES

All Our Families Study Calgary, Alberta, Canada



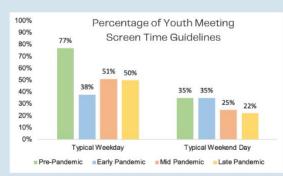
Between November 2021 and January 2022, **1,034 youth** in the All Our Families Study, a prospective longitudinal birth cohort, completed a COVID-19 impact survey.

- 46% of youth were female, 52% of youth were male, and 2% of youth preferred to self-identify their gender.
- Youth ranged in age from 10 to 13 years with a mean age of 11.6 years.
- All Our Families COVID-19 data collection periods:
- Pre-pandemic (maternal report) January 2017 to May 2020
- Early pandemic July 2020 to August 2020
- Mid pandemic March 2021 to April 2021
- Late pandemic November 2021 to January 2022

#### **Comparison to the Pre-Pandemic**



Fewer youth were meeting screen time guidelines on a typical weekday in the late pandemic compared to the pre-pandemic.



#### **Digital Device Use**

- 52% of youth streamed movies, videos, and shows daily.
- 44% of youth sent texts or messages daily.
- 42% of youth played video games or games on apps daily.
- 38% of youth used a computer for homework at least once a week.
- 62% of youth rarely posted on or looked at social media.

#### **Screen Time Guidelines**

The Canadian Paediatric Society recommends **no more than 2 hours** of recreational screen time a day for youth.

#### In the late pandemic:

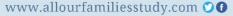




15% of youth often or almost always wished their parent or caregiver would spend less time on their digital devices.

#### **Moving Forward**

- Extensive digital device use can have negative effects on physical and mental health (e.g., reduced physical activity, reduced social connectedness).
- Engaging in activities with youth that promote less screen time, greater physical activity, and greater connectedness such as sports and board games may be important during pandemic recovery.
- For example, communities can host sport and game nights for the neighbourhood, art and music classes, and create drop-in space for social connection without specific agenda.

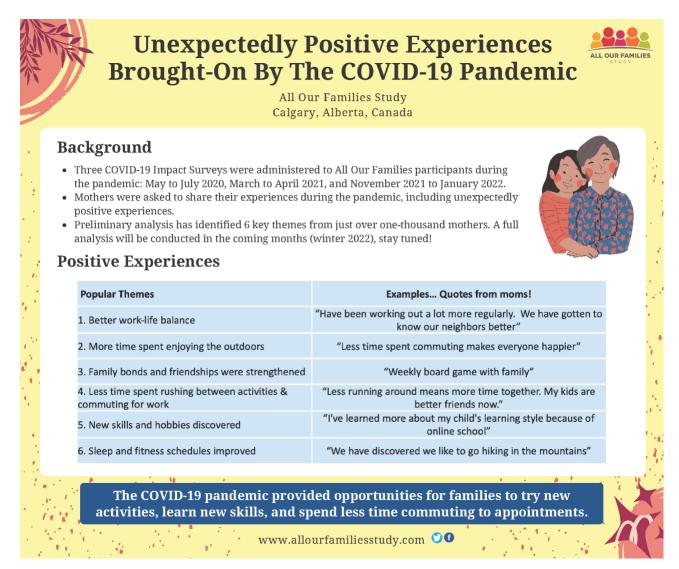






### **Unexpected Positives**

In the second and third COVID-19 Impact surveys, we asked you about any unexpected positive experiences you discovered for yourself and your family during the pandemic, which Summer Student Leigha Grise compiled. Below is a brief overview of some of your responses.



## **Recent Publications**

We would like to profile a recent publication using All Our Families data. Using some of the earlier data, Kristen Horsley (and colleagues) looked at women who experienced hypertension disorders of pregnancy (HDP) and the impact on the initiation and duration of breastfeeding.





Hypertensive Disorders of Pregnancy and Breastfeeding Practices

> Horsely et al., 2022 DOI: 10.1111/aogs.14378

# Compared to women without HDP, women with HDP reported:

- Higher rates of overweight/obesity.
- Higher rates of planned or emergency cesarean delivery.
- Gave birth ~1 week earlier.
- Shorter intended breastfeeding duration (by ~10 weeks), and shorter total breastfeeding duration (by ~6 weeks).
- Lower rate of exclusive breastfeeding practice (36% vs 60%), and higher rates of formula only feeding (28% vs 15%).





### **Background:**

- Hypertensive disorders of pregnancy (HDP) occur in 7-10% of pregnancies, and are linked to adverse maternal cardiovascular health outcomes.
- HDP contributes to 16% and 30% of maternal deaths in developed and developing countries respectively.
- Breastfeeding has been associated with reduced risk of adverse maternal cardiovascular outcomes, hypertension, and type 2 diabetes.

### **Study Objective:**

To investigate the association between HDP and breastfeeding outcomes in the first year after birth (postpartum).

#### Methods:

- Women with a singleton pregnancy (N=1418) completed self-report questionnaires at <25 weeks, 34-36 weeks gestation, 4 and 12 months postpartum.
- Diagnosis of HDP was available through linked electronic medical records (N=122).
- Possible covariates controlled for included maternal age, annual income (household), ethnicity, parity (i.e., number of times the mother had given birth), infant gestational age at birth, mode of delivery (i.e., vaginal delivery, c-section), and maternal pre-pregnancy weight (BMI).

## **Conclusions:**

 HDP is associated with shorter duration of exclusive breastfeeding. Resources to support women with HDP in achieving breastfeeding goals (e.g., lactation consultants) may provide cardioprotective benefits, and mitigate negative impacts of HDP on heart health.

www.allourfamiliesstudy.com I the lith Research Ethics Board, University of Calgary, Ethics ID E-22128.







Briefly, Kristen found that women who experienced HDP had higher rates of caesarean births, earlier deliveries, lower rate of exclusive breastfeeding, and shortened breastfeeding durations. Full details can be found in the article below.

Horsley KM, Chaput K, Nguyen TV, Dayan N, Tomfohr L, Tough S. Hypertensive Disorders of Pregnancy and Breastfeeding Practices: A Secondary Analysis of Data from the All Our Families Cohort. Acta Obstetricia et Gynecologica Scandinavica (AOGS). 24 May, 2022, 101,8. <u>doi.org/10.1111/aogs.14378</u>

## **Staff News**

This summer saw a couple of staff events within All Our Families!

In June, we met for an afternoon of terrarium building. Dianne White with the University of Calgary's Department of Science led the group in the fine art of creating a miniature decorative green space, while staff, new and old, visited and created.



In July, the staff again met for a 'visit in the park'. The weather cooperated and mosquitos were at a minimum as we met in Confederation Park to again visit and catch up, as well as meet some new AOF members. After two years of pandemic and remote working, it was great to see each other in person.









AOF would like to acknowledge a few staff highlights:

**Zahra Clayborne** joined the All Our Families team in June as a postdoctoral fellow. She completed a BSc in psychology from the University of Calgary in 2015, and a PhD in epidemiology from the University of Ottawa in 2022. Her training is in mental health epidemiology, including a past position with the Public Health Agency of Canada in positive mental health surveillance. She will be working with the team to define and study flourishing and languishing in AOF families.

**Tona Pitt** has left his role as an Analyst to become an All Our Families Trainee. He recently started working on his PhD, and his area of focus is in how community design can impact child health.

**Anjola Adeboye** completed her undergraduate thesis on "Operationalizing Flourishing in Adults Using Directed Acyclic Graphs and Longitudinal Cohort Data from All Our Families: A Methods Exploration." This fall she began her MSc in Community Health Sciences with a focus in Population and Public Health.

## **The Power of Pets**

For those of you who have always had pets (cat, dog, etc.) you know what an important role pets play in our lives. There is plenty of evidence supporting the benefits of having a pet in the family, including companionship, unconditional love, and teaching responsibility. Research has found that having a pet can help with managing stress, depression and anxiety, and increases in overall health.

In the third COVID-19 Impact survey, we asked participants about their pets, and if a Pandemic Pet came into their lives. From that survey, 31% of participants reported that they welcomed a new pet into their household.

The All Our Families team would like to introduce a few pets, pandemic and otherwise, of our own.



Team Member: Tona **Pet Name: Bailey** Age: 2 years old Bailey is a Shetland sheepdog who enjoys running (a lot), playing in snow, and tearing up toys.







Team Member: Jessica-Lynn **Pet Names: Abbey and Toni** Ages: 6 and 8 years Abbey enjoys snuggles, bird and rabbit watching, playing with toy mice, and food. Toni enjoys string feathers talking to birds and watching Star Wars and

Toni enjoys string, feathers, talking to birds, and watching Star Wars and John Wick movies with family.



Team Member: Anjola **Pet Name: Maisy** Age: 2 years Enjoys asking for belly rubs at the most inopportune times, barking at anyone who crosses the street, and watching cartoon network.



Team Member: Brae-Anne **Pet Name: Miva** Age: 10 years Enjoys morning snuggles, licking kids' faces, and long walks along the river



Team Member: Muci **Pet Name: Whisky** Age: 11 months Enjoys digging holes in the yard, collecting sticks at the park, and rolling in smelly grass.



Team Member: Mary **Pet Name: Jax** Age: 2 years Enjoys chasing bubbles in the back yard, singing with his family, and watching NHL hockey.



Team Member: Sheila **Pet Names: Luna and Tux** Ages: 9 months and 1 year Enjoys playing tug-of-war and taking over the bed (Luna) and sneaking out to the back-deck when the door opens (Tux)





Help your child feel like a superhero at their COVID-19 shots!

The <u>Peak Research Lab</u> is recruiting families (parent + child) for a study about how children aged 4 to 11 experience their COVID-19 vaccinations. In the study you will:

- Learn evidence-based strategies for pain management
- Fill out short questionnaires about you and your child
- Ask your child about their vaccination experience
- Participate in a brief telephone interview
- Receive \$40 in gift cards as a thank-you for your commitment

For more information and/or to participate, please send your name and number to <u>abcpainlab@ucalgary.ca</u> with subject 'CN study'.

## CHILDREN'S COVID-19 NEEDLE STUDY

## HELP YOUR CHILD FEEL LIKE A SUPERHERO AT THEIR COVID-19 SHOTS!

We are recruiting families (parent + child) for a study about how children aged 5 to 11 experience their COVID-19 vaccinations

## IN THE STUDY YOU WILL:

- Learn evidence-based strategies for pain management
- Fill out short questionnaires about you and your child
- Ask your child about their vaccination experience
- Participate in a brief telephone interview
- Receive \$40 in gift cards as a thank you for your commitment

For more information or to participate, please send your **name & number** to **abcpainlabeucalgary.ca** with subject 'CN Study'

\*Note\*: Participants must enroll in the study <u>prior to child's first COVID-19 vaccination</u> This study has been approved by the University of Calgary Conjoint Health Research Board (REB21-1997)







