

AAP DISTRICT VIII SECTION ON NEONATAL PERINATAL MEDICINE

**2021 ANNUAL CONFERENCE ORIGINAL RESEARCH (BASIC SCIENCE or CLINICAL)
ABSTRACT SUBMISSION FORM**

Presenting Author: **Dr Anthony Hopkins** Title (MD, DO, NP, other): **MBBS MRCPCH**

Institution **British Columbia Women's Hospital NICU**

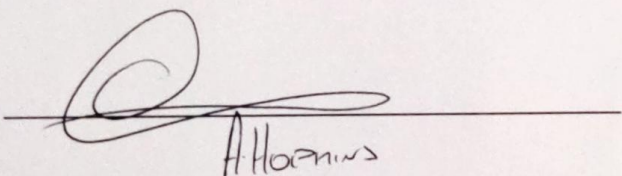
Street Address **4500 Oak Street, Vancouver, BC V6H 3N1**

Telephone: **1 236 991 0910** E-Mail: **anthony.hopkins@cw.bc.ca anthopkins@msn.com**

Trainee? Yes No

If yes, type and year of training **UBC NICU Fellow Year 2**

FOR PUBLICATION OF THE CONFERENCE PROCEEDINGS, I HEREBY GIVE PERMISSION TO REPRODUCE MY PRESENTATION, WITHOUT FURTHER CONSENT.

Signature:  Date: 19th Feb 2021

Please paste abstract to the second page of this document, using the template provided. **Please do not exceed one page using font size of at least 10.**

This completed form and your basic science or clinical research abstract should be returned via e-mail attachment to: aklodha@ucalgary.ca attention to Abhay K. Lodha, MD

DEADLINE FOR RECEIPT OF ABSTRACT IS FEBRUARY 19, 2021. Submissions will be accepted for either poster or oral presentation. Authors will be notified of acceptance and format for presentation (poster or poster symposium) by **March 12, 2021.**

Title: How has COVID-19 affected tertiary NICU staff?

Authors: Anthony Hopkins, Arianne Albert, Shabnam Ziabakhsh, Deepak Manhas, Susan Albersheim,

Institution: BC Women's Neonatal Intensive Care Unit

Background: The Neonatal Intensive Care Unit (NICU) inherently has risks of burnout and psychological morbidity for health care providers. The COVID-19 pandemic has required the rapid adaptation of work practices to accommodate social distancing and Personal Protective Equipment (PPE) policy changes, causing significant change to NICU operations and the lives of staff. Many departments have recognized the wellbeing implications to staff and made program changes to try and mitigate this risk. In this study, we aim to begin to understand how COVID-19 and its associated workplace practice changes have impacted the existing situation for healthcare providers.

Methods: A REDCap online survey was distributed to tertiary NICU physicians, nurses, nurse practitioners, respiratory therapists and allied health professionals in British Columbia and Alberta. We employed a combination of closed- and open-ended questions to understand the participants' views on work in the NICU during the pandemic and how this has impacted their wellbeing.

Results: We received 142 replies of which 121 were complete. Of these, 93 were from Alberta, 45 from British Columbia, and 4 did not provide their province. Physicians, nurses, respiratory therapists and allied health professionals of all career grades were included.

Of the respondents, 33 (22.7%) had directly cared for a patient with COVID-19.

120 respondents completed a section on significant life changes outside of work, of which 98.3% reported a major change as a result of COVID-19. These included homeschooling children (40, 33.3%), caring for vulnerable relatives (19, 15.8%), shielding vulnerable relatives (107, 89.2%), changes to a family member's employment (36, 30%), being unable to connect with friends and family outside their city/province (101, 84.2%) or "other significant change". These changes were described by respondents with themes of personal isolation, delayed care for their or their family's non-COVID-19 physical and mental health conditions, anxiety at working on multiple sites and a lack of access to their usual daily coping strategies such as sports.

There were a series of Likert-scale question, with 0 = "Completely disagree" and 100 = "Completely agree".

<i>"Would you agree that, overall, the neonatal intensive care environment has been supportive through the pandemic?"</i>	Median 65
Mean Score 61.53 (SD 21.5)	
<i>"Do you agree access to PPE (Either regular items such as scrubs or specific items such as N95 masks) improved over the course of the pandemic?"</i>	Median 66
Mean Score 59.4 (SD 26.3)	
<i>"Has access to the usual range of bedside equipment (Such as ventilators or IV lines) changed from pre-pandemic?" (0=Completely negative change, 100=Completely positive change)</i>	Median 36
Mean Score 38.2 (20.1)	
<i>"In your view, has staffing changed on your NICU compared to pre-pandemic conditions?" (0=Completely negative change, 100=Completely positive change)</i>	Median 36
Mean 38.24 (SD 20.1)	
<i>"Has the pandemic had an emotional effect on you through your work in the NICU?" (0=Completely negative, 100=Completely positive"</i>	Median 30
Mean Score 30.1 (SD 15)	

Conclusion: All NICUs have made significant adaptations to their operating procedures and sought to support their staff through the pandemic, and these data suggest that this is recognized by the majority of participants. This is necessary but not sufficient. The successes we can demonstrate in the logistical response must be taken in context of a global change affecting staff physical, psychological and social circumstances which changes their relationship with the intensive care environment. NICUs have enacted a series of morale supporting programs in recognition of this. In future, work we aim to undertake mixed quantitative and qualitative analysis to better understand the current state of staff wellbeing, the nature of the difficulties experienced by staff and their perception of the interventions used to support them.