# Abstracts of the 2022 Annual Conference of the Canadian Paediatric Society

invited to individual interviews that further explored their experience and any resulting professional and personal impacts.

RESULTS: The two topics selected for HER rounds were *Implicit Bias in Medicine* and *Linguistic Barriers to Healthcare*, with high post-rounds survey uptake of 80% (20/25) and 65% (14/22), respectively. Among respondents, 73.7% and 78.6% indicated that learned objectives would impact their clinical practice; 80% found both presentations engaging; 80% and 61.6% found educational value of HER to be good/excellent; and 94.7% and 78.6% indicated interest in future HER presentations. Three respondents completed interviews. After thematic analysis, overarching themes included receptiveness to creating more equitable infrastructures in PEM; equity being a shared and multi-disciplinary responsibility; and strategies for implementing HER topics into practice.

CONCLUSION: There is a need in academic and clinical medicine to address implicit bias and structural racism as contributors to health inequities. Positive feedback from this study suggests HER may be an acceptable and feasible forum to promote safe discussion and reflective practice on potentially provoking topics within interdisciplinary PEM educational sessions.

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# TRIAGE ADMINISTRATION OF ONDANSETRON FOR GASTROENTERITIS IN CHILDREN; A RANDOMIZED CONTROLLED TRIAL

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**BACKGROUND:** Acute gastroenteritis is an important reason for emergency department (ED) consultation in children. Ondansetron is reported to be effective in reducing vomiting in children with gastroenteritis, leading to less intravenous rehydration and hospital admission.

**OBJECTIVES:** The aim of this study was to assess the effectiveness of triage nurse-initiated administration of ondansetron for children with suspected gastroenteritis in the paediatric ED to reduce the number of patients requiring observation following the first physician assessment.

DESIGN/METHODS: This was a randomized controlled trial performed in a tertiary care paediatric ED. All children 6 months to 17 years old who presented to the ED with at least four episodes of non-billous, non-bloody vomiting in the previous 24 hours and the last vomiting occurring within the previous 2h were eligible. The intervention consisted of administration of a liquid formulation of an adapted to weight dose of ondansetron at triage compared to a color- and taste-matched placebo. The primary outcome was the number of patients requiring observation after the first physician's evaluation. Secondary outcomes were the number of episodes of vomiting after receiving the intervention, length of stay in the ED, comfort, and the proportion of children who returned for a medical visit within 48 hours. A sample size of 248 participants was initially identified to have a power of 90% to find a 20% difference in the proportion of children needing observation following physician evaluation.

RESULTS: Because of multiple external factors, including the COVID-19 pandemic, recruitment was stopped before the expected sample size was reached. A total of 91 patients were included and randomized to receive ondansetron (n= 44) or a placebo (n=47) just after triage. The baseline characteristics of the participants was similar between the two groups. A total of 40 (45%) participants were discharged immediately after the first evaluation by the treating physician. This was similar for both groups 44% vs. 45%; (95% CI for the difference -20 to 19%). There was no difference between the two groups for the total length of stay (median 232 vs. 227 minutes; p= 0.677) and for the length of stay after being seen by the physician (72 vs. 68 minutes; p=0.821). There was no statistical difference between the two groups in the number of vomiting episodes (difference of 15%; 95% CI -2, 31), and proportion of participants needing a rescue medication (difference: 19%; 95%CI:-0.6 to 36%) or an intravenous rehydration (difference: 8; 95%CI:-6, 22).

CONCLUSION: This study failed to demonstrate any benefit in using ondansetron at triage for children with presumed gastroenteritis.

Table 1 Baseline characteristics of the study participants

Characteristics	Ondansetron	Placebo	
n=43		n= 47	
Median age in months (IQR)	36 (26, 75)	53 (24, 72)	
Median weight in Kg (IQR)	15 (12, 21)		
Sex male (%)	24 (56)	26 (55)	
Vomiting in previous 24h			
• 3-5	• 6 (14)	• 3 (6)	
• 6-10	• 20 (47)	• 19 (40)	
• >10	• 17 (40)	• 25 (53)	
Diarrhea in previous 24h			
• 0	• 31 (72)	• 32 (68)	
<ul> <li>1-5</li> </ul>	• 8 (19)	• 11 (23)	
• 6-10	• 3 (7)	• 2(4)	
• >10	• 1 (2)	• 1 (3)	
Length of symptoms:			
• 0-4h	• 2(7)	• 3 (10)	
• 4-<24h	• 6 (19)	• 6 (19)	
• 24-<72h	• 6 (19)	• 5 (16)	
<ul> <li>&gt;= 72h</li> </ul>	• 17 (55)	• 17 (55)	
Median wait time in minutes to see physician	163 (125, 213)	160 (126, 211)	
Final diagnosis			
Gastro-enteritis	• 31 (72)	• 37 (79)	
<ul> <li>Vomiting not specified</li> </ul>	• 6 (14)	• 7 (15)	
Pharyngitis	• 1(2)	• 1(2)	
Other	• 5 (11)	• 2(4)	

#### Table 2 Results for the study participants

Outcomes	Ondansetron n=43	Placebo n=47	Difference in % (95% CI)
Patients discharged immediately after initial medical assessment	19 (44)	21 (45)	-1 (-20 to 19)
Median BARF score at physician evaluation	2 (0, 4)	2 (0, 4)	p=0.996*
Oral rehydration volume (mL) at physician evaluation	60	58	2 (-18 to 21)
Any vomiting before seeing the physician	12 (28)	6 (13)	15 (-2 to 31)
Need for rescue medication	17 (40)	10 (21)	19 (-0.6 to 36)
Need for IV rehydration	6 (14)	3 (6)	8 (-6, 22)
Median length of stay after physician evaluation	72 (17, 194)	68 (20, 140)	p=0.821*
Median ED length of stay	232 (180, 395)	227 (180, 335)	p= 0.677*
Vomiting in following 24h			p= 0.708**
• 0	31 (72)	25 (53)	'
<ul> <li>1-5</li> </ul>	9 (21)	15 (32)	
<ul> <li>&gt;5</li> </ul>	1 (2)	3 (6)	
<ul> <li>Missing</li> </ul>	2 (5)	4 (9)	
Diarrhea in the following 48h			p= 0.564**
• 0	33 (77)	22 (47)	
<ul> <li>1-5</li> </ul>	7 (16)	13 (28)	
<ul> <li>&gt;5</li> </ul>	0	6 (13)	
<ul> <li>Missing</li> </ul>	3 (7)	6 (13)	
Return to the ED in the following 48h	3 (7)	4 (9)	-2 (-14 to 11)

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# MENTAL HEALTH IN CHILDREN DURING THE COVID-19 PANDEMIC: THE EXPERIENCE OF A NORTH AMERICAN TERTIARY CARE PEDIATRIC EMERGENCY DEPARTMENT

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**BACKGROUND:** The COVID-19 pandemic is a unique distressing period of experience to the public with strict physical, social and economic restrictions. Moreover, the impact of this experience on children with school closures, online education and social isolation may have a profound psychosocial impact.

OBJECTIVES: The objective was to evaluate and characterize the changes in mental health issues in children presenting to a large tertiary pediatric emergency department (ED) before and during the COVID-19 pandemic.

**DESIGN/METHODS:** We performed a retrospective chart review of all children who presented with any mental health related diagnosis according to the ICD-10 classification from March 1, 2019 to February 28, 2020, and during pandemic periods (March 1, 2020 to February 28, 2021). Data on presentation, diagnosis and outcome were extracted and compared using Chi square test and z tests as appropriate.

RESULTS: Our centre experienced a 39% reduction (57,522 visits vs. 35,485 visits) in all ED visits but a significant increase (p=0.002) in mental health issues during the pandemic period of 5.22% compared to 4.88% during the previous year (2811/57522 visits vs. 1959/35485). Among 1,959 children presenting to ED during the pandemic, the majority (53%) were female children compared to a male predominance of 55% before the pandemic. The highest peak of visits was observed in the 14 to 16 years age group, irrespective of gender and pre/pandemic periods. The category that included "eating disorders" showed a distinct rise of 46% (p<0.001) during the pandemic period. Two categories "Intentional Self-Harm" and "External