CHRD 2024: Abstract Submission Form

Presenter Name
Katie Falla

Presenter Status
Residents

Role in the project
Design
Perform Experiments
Analyze Data
Write Abstract

Research Category
Clinical

Title
Developing and Revising a Knowledge Tool for Pediatric Respiratory Distress

Background
Recent years have seen an increase in pediatric respiratory illnesses and the need for knowledge translation tools on pediatric respiratory distress.

Objective
This study's objectives were for Translating Emergency Knowledge for Kids (TREKK), a national not-for-profit network that aims to improve emergency care for children to: develop a pediatric respiratory distress algorithm with Healthcare Providers (HCP); and to quantitatively and qualitatively describe the algorithm's usability.

Methods
1. Literature on pediatric respiratory distress was identified in a librarian-led search, then reviewed and synthesized into a clinical algorithm.
2. HCP completed a survey with feedback for the algorithm. The survey included Likert scales from 1 to 10, (10="strongly agree", 1="strongly disagree"). Descriptive statistics summarized the results.
3. Qualitative data from three focus groups with HCP participants were analyzed using thematic analysis.

Results
Eighty-five HCPs completed the survey. They represented multiple roles and work settings within the healthcare system. All Likert scale averages were □8.25 (SD=2.08, algorithm improved HCP confidence in managing pediatric respiratory distress). Regarding whether they would use the algorithm in clinical practice, mean=8.43 (SD=2.13). Regarding overall satisfaction, mean=8.70 (SD=1.49).

The focus groups included 19 participants from diverse roles (e.g. physicians, nurses) and work settings (e.g. urban, rural). Thematic analysis revealed that the algorithm:
1. facilitates the identification of the sickest patients.
2. is an educational tool, particularly for non-pediatric trained HCPs and HCPs in rural/remote settings.
3. is lacking in respiratory failure content and should address advanced respiratory support.

Conclusion
TREKK's pediatric respiratory distress algorithm meets the needs of the HCPs who participated in the study. Survey participants had a good impression of the algorithm and felt it would be useful in their clinical practice. The algorithm can identify sicker patients and educate non-pediatric trained HCPs. The next best step is the development of resources on advanced respiratory support.

Do you have a table/figure to upload?
No

Authors

Name	Email	Role	Profession
Katherine Falla	kfalla@hsc.mb.ca	Presenting Author	Resident
Lisa Knisley	LKnisley@chrim.ca	Co Author	
Megan Bale-Nick	megan.balenick@umanitoba.ca	Co Author	
Terry Klassen	terry.klassen@usask.ca	Co Author	