

2006), has face validity in Francophone-Canadian children and adolescents receiving chemotherapy. Parents believed that their child was able to use the PeNAT to communicate the severity of their nausea and that the French-language PeNAT and supporting documents were easy or very easy to use.

Clinical practice guideline-consistent antiemetic agents are effective at preventing chemotherapy-induced vomiting (Hesketh et al., 2015; Patel et al., 2017; Gilmore et al., 2014). However, they are less effective at controlling nausea (Vol et al., 2016; Patel et al., 2020; Sparavalo, et al., 2012). Validated instruments to assess nausea severity are needed to determine the effectiveness of anti-nauseant interventions in pediatric patients. Such tools have been lacking for children receiving chemotherapy until recently. As a result, the assessment of interventions to optimize CIN control in children has been severely compromised. The PeNAT was originally developed and validated for use by English-speaking pediatric patients. For it to be widely applied both for research and clinical purposes, it must be translated into other languages. We chose to translate the PeNAT into French, one of Canada's official languages, and assess its face validity among Francophone-Canadian children. Face validity is the first step toward comprehensive validity testing.

Similar to what has been reported in other studies evaluating nausea severity in children using a validated tool (Patel et al., 2020; Dupuis, Kelly et al., 2018; Flank, Sparavalo et al., 2017; Flank, Nadeem et al., 2017), nausea was not well controlled in our patients. To fully optimize CINV control, specific anti-nauseant agents may be required in addition to antiemetic agents given to prevent chemotherapy-induced vomiting. Use of the PeNAT will help healthcare professionals and parents understand the pediatric patient's symptom burden more fully. For example, routine administration of the PeNAT to pediatric patients receiving chemotherapy may identify patients who could benefit from adjustment of antiemetic prophylaxis and thus experience improved nausea control.

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The strengths of our study are its adherence to international standards for medical translation and the participation of both pediatric oncology patients and their parents in face validity testing. Our study is limited, however, by its conduct in a single country. This version of the French-language PeNAT may not have face validity in the pediatric oncology population of other French-speaking nations. Another limitation is that validity testing of the French-language PeNAT is incomplete. Future studies should seek to establish other forms of validity such as predictive validity and construct validity.

In summary, we have translated the PeNAT and supporting documents into French and established the PeNAT's face validity in Francophone-Canadian children undergoing cancer chemotherapy, thereby facilitating their access to future, multi-centre trials of interventions aimed at improving CINV control. Furthermore, the use of the French-language PeNAT as a clinical tool to optimize CIN control in French-speaking children can now be explored. Future work will focus on continuing to validate the French- and English-language versions of the PeNAT.

## ACKNOWLEDGEMENTS

*We acknowledge with thanks the pediatric patients and their parents who generously participated in this work. We also thank the healthcare professionals at the Children's Hospital of Eastern Ontario for reviewing the French-language document drafts, Daryl Moczygamba for his guidance, Ana Olteanu and Ashlee Vennettilli for their assistance with study procedures and Navpreet Kaur for administrative assistance.*

## FUNDING

*This study was supported by the Pediatric Oncology Group of Ontario Research Unit.*

## CONFLICT OF INTEREST

*The authors have no conflicts of interest to disclose.*

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