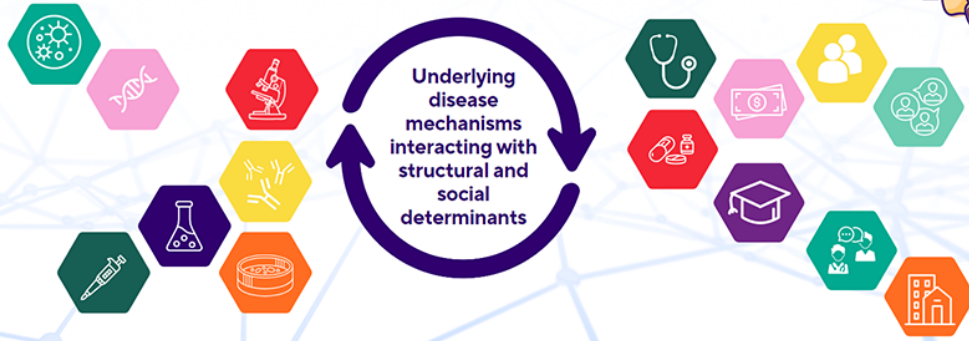




19TH ANNUAL CHILD HEALTH RESEARCH DAYS
Outcomes in Child Health



October 25 + 26, 2023 | RBC Convention Centre, Winnipeg, Manitoba

Abstract Submission Form

CHR D 2023: Abstract Submission Form

Submitter Name

Veronica Ka Wai Lai (2)

Presenter Name

Veronica Ka Wai Lai (2)

Presenter Status

Post-Doctoral Fellows

Research Category

Clinical

Role in the project

Analyze Data
Write Abstract

Title

Measuring the burden of symptoms that matter most to children and adolescents with chronic kidney disease (CKD) is essential to optimizing patient-centred care. We developed a novel CKD-specific Patient-Reported Outcome measure (PRO-Kid) for assessing both frequency and impact of symptoms in children with CKD.

Background

Measuring the burden of symptoms that matter most to children and adolescents with chronic kidney disease (CKD) is essential to optimizing patient-centred care. We developed a novel CKD-specific Patient-Reported Outcome measure (PRO-Kid) for assessing both frequency and impact of symptoms in children with CKD.

Objective

We aimed to validate the PRO-Kid tool in children with CKD.

Methods

In this multicenter study, respondents were age 8 to 18 years, diagnosed with CKD stages 3-5, including dialysis. Participants completed the 14-item PRO-Kid questionnaire and the Pediatric Quality of Life Inventory (PedsQL™). Construct validity was evaluated using Pearson correlations. Internal consistency was evaluated with Cronbach's alpha, α , which is proportional to the average correlation between items (higher values reflecting better consistency). Exploratory factor analysis was also performed.

Results

A total of 100 children were included. Median eGFR was 21 ml/min/1.73m² [3.78, 63.4], and 26 children (26%) were on dialysis. Pearson correlations between PRO-Kid and PedsQL™ scores were strong: -0.78

(95% confidence interval [CI] = -0.85 to -0.70) for the frequency score and -0.69 (95% CI = -0.78 to -0.56) for the impact score, reflecting poorer QOL with higher symptoms burden. α was also high for both the PRO-Kid frequency and impact, 0.83 (95% CI = 0.78 to 0.88) and 0.84 (95% CI = 0.80 to 0.89) respectively, showing strong internal consistency. Both the PRO-Kid frequency and the impact scales were uni-dimensional.

Conclusion

PRO-Kid is a novel, valid patient reported symptom burden tool for children and adolescents with CKD. Future work will focus on its prospective responsiveness to change in CKD stage and integrating the tool into clinical care.

Table/Figure File

PROKid_Validation_CHRD 2023 Abstract.pdf

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VALIDATION OF A NOVEL PATIENT-REPORTED OUTCOME MEASURE IN PEDIATRIC CHRONIC KIDNEY DISEASE (PRO-Kid)

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ABSTRACT (300 words)

Background: Measuring the burden of symptoms that matter most to children and adolescents with chronic kidney disease (CKD) is essential to optimizing patient-centred care. We developed a novel CKD-specific Patient-Reported Outcome measure (PRO-Kid) for assessing both frequency and impact of symptoms in children with CKD.

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Methods: In this multicenter study, respondents were age 8 to 18 years, diagnosed with CKD stages 3-5, including dialysis. Participants completed the 14-item PRO-Kid questionnaire and the Pediatric Quality of Life Inventory (PedsQL™). Construct validity was evaluated using Pearson correlations. Internal consistency was evaluated with Cronbach's alpha, $C\alpha$, which is proportional to the average correlation between items (higher values reflecting better consistency). Exploratory factor analysis was also performed.

Results: A total of 100 children were included. Median eGFR was 21 ml/min/1.73m² [3.78, 63.4], and 26 children (26%) were on dialysis. Pearson correlations between PRO-Kid and PedsQL™ scores were strong: -0.78 (95% confidence interval [CI] = -0.85 to -0.70) for the frequency score and -0.69 (95% CI = -0.78 to -0.56) for the impact score, reflecting poorer QOL with higher symptoms burden. $C\alpha$ was also high for both the PRO-Kid frequency and impact, 0.83 (95% CI = 0.78 to 0.88) and 0.84 (95% CI = 0.80 to 0.89) respectively, showing strong internal consistency. Both the PRO-Kid frequency and the impact scales were uni-dimensional.

Conclusions: PRO-Kid is a novel, valid patient reported symptom burden tool for children and adolescents with CKD. Future work will focus on its prospective responsiveness to change in CKD stage and integrating the tool into clinical care.

Figures

Figure 1. Pearson correlation between PRO-Kid Frequency Score and PedsQL

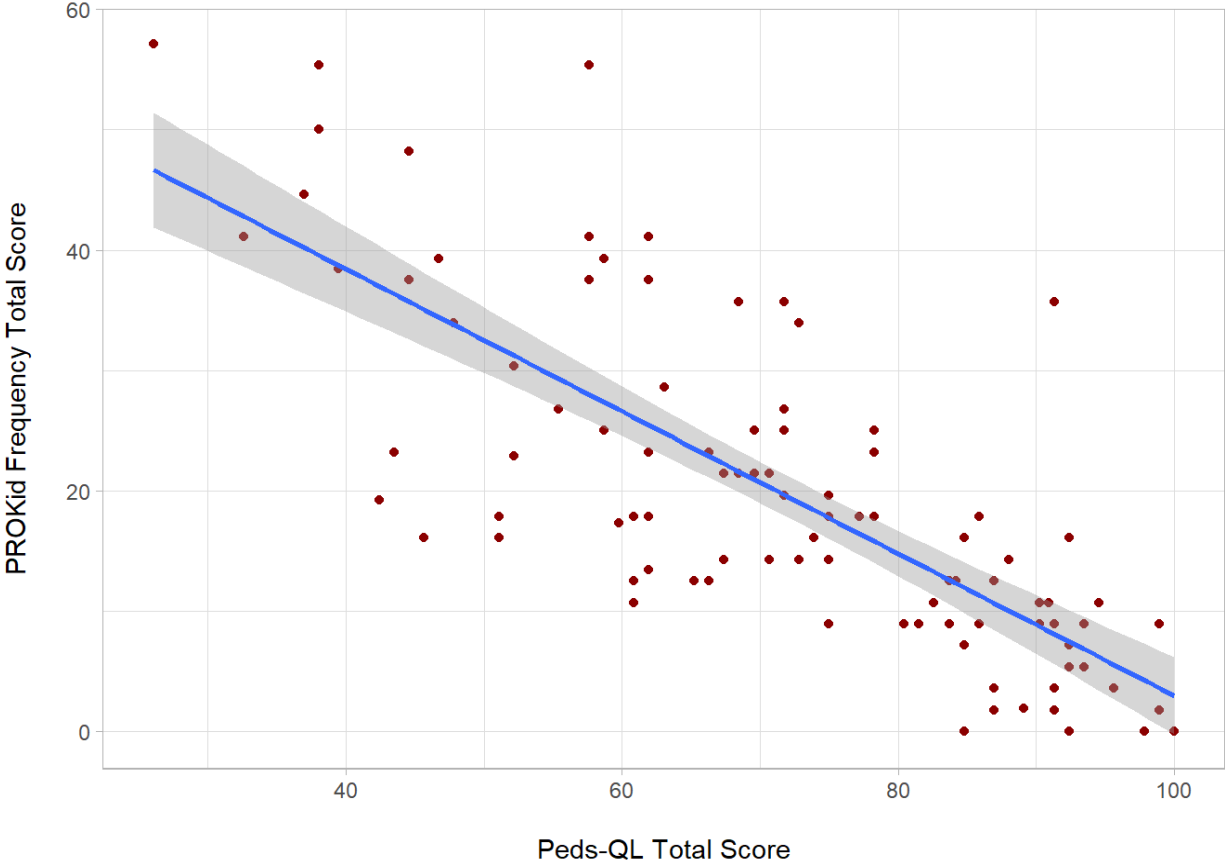


Figure 1. Pearson correlation between PRO-Kid Impact Score and PedsQL

