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Pediatric IBD-Specific Anxiety Scale: A Novel Measure for Identifying Disease Distress.

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Background: The distinct physical and medical challenges of IBD have been linked with psychosocial and academic disruptions, and pose a risk for developing anxiety disorders¹. Additionally, some youth may develop anxiety surrounding their illness. This IBD-specific anxiety is excessive emotional distress related to, and behavioral avoidance of, internal and external stimuli related to IBD. To assess this construct, the IBD-Specific Anxiety Scale (IBD-SAS)² was created. Earlier scientific use of this measure show that items differentiate IBD-specific anxiety from general psychiatric anxiety disorders and IBD-specific quality of life, and is responsive to psychological interventions. However, analyses of the psychometric properties and factor structure of the IBD-SAS have not previously been conducted and is the rationale for the present study.

Methods: Data was collected through the CCFA Partners Kids and Teen Registry, a national non-clinical internet-based cohort of children and adolescents diagnosed with IBD. A sample of participants age 12 to 17 years completed the IBD-SAS online, along with patient-reported outcomes (e.g., disease activity indices). To examine the factor structure of the IBD-SAS, we conducted an exploratory factor analysis using maximum likelihood estimation and geomin rotation. Cronbach's alpha was used to examine internal item consistency for each factor.

Results: A total of 133 adolescents, ages 12-17 ($M_{age}=14.24$, $SD=1.68$; 59.80% male) completed the IBD-SAS. Majority of participants were white (91%), diagnosed with Crohn's disease (82%), and were in remission (76%). Scores on the IBD-SAS ranged from 0-71 ($M=15.57$, $SD=16.60$). Exploratory factor analyses of the IBD-SAS support a two-factor solution. Factors exhibited a sufficient number of items to be interpretable and made theoretical sense, as well as an adequate fit to the data, $\chi^2(134) = 335.30$, $p < .001$, CFI = .89, RMSEA = .11, SRMR = .05. Fit was most negatively affected by a number of cross-loading items. The first factor includes 12 items ($\alpha=.92$) related to *Physical Symptoms and Medical Management* (e.g., having pain, medication side-effects). The second factor consisted of 7 items ($\alpha=.91$) that were related to *Psychosocial Implications* of disease (e.g., not being able to attend school, what friends may think). One item was dropped due to its ambiguous wording and poor loading on both factors.

Conclusion: This exploratory analysis suggested an interpretable two-factor solution to the IBD-SAS in a population-based sample. Once fully validated, the measure will provide a mechanism by which IBD-related anxiety can be identified (and subsequently treated) in clinical practice, and will allow for empirical testing of the impact of disease-specific anxiety on emotional, physical and functional outcomes.

References:

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