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 disorders. 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) 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: