

## ABSTRACT:

### Body Image Dissatisfaction in Pediatric Patients with Inflammatory Bowel Diseases

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**Background and Aims:** Pediatric patients with inflammatory bowel diseases (IBD) are at increased risk for poor psychosocial outcomes, including anxiety, depression, and body image dissatisfaction (BID). BID is associated with worsened clinical IBD outcomes in adults. We aimed to determine the prevalence of BID and investigate risk factors for BID in pediatric IBD patients enrolled in CCFA Partners Kids & Teens cohort.

**Methods:** We performed a cross-sectional study in CCFA Partners Kids & Teens. We included children age 5-18 with IBD. Participants completed surveys including information on demographics, disease characteristics, and the IMPACT-35. We classified BID as present if “I look awful” or “I look bad” was selected from the question “How do you feel about the way you look?” Disease activity was measured via the pediatric ulcerative colitis activity index (PUCAI) and the short Crohn’s disease activity index (sCDAI). We assessed depression and anxiety through patient reported outcome measurement information system (PROMIS) measures. We performed bivariate analyses to assess associations between BID and demographic, disease-related and psychosocial factors. We then used logistic regression models to evaluate the independent associations between selected risk factors and BID.

**Results:** A total of 664 pediatric patients completed the IMPACT-35, of whom 74 (3.3%) met criteria for BID. Patients with BID were significantly more likely to be female ( $p<0.001$ ), older (median age 15 [IQR 12-16] versus 13 [IQR 11-15] years,  $p<0.001$ ) and diagnosed with IBD at an older median age (12 [IQR 10-14] versus 10 [IQR 8-12] years,  $p<0.001$ ). Those with BID had higher body mass index percentile ( $p=0.02$ ), higher rates of active disease (57% versus 26%,  $p<0.001$ ), higher rates of current steroid use (18% versus 8%,  $p=0.004$ ), and higher rates of depression and anxiety ( $p<0.001$ ). Female gender (odds ratio [OR] 2.31; 95% confidence interval [CI] 1.22-4.39), depression (OR 4.73; 95% CI 2.41-9.26), and anxiety (OR 5.42; 95% CI 2.48-11.80) were independently associated with BID.

**Conclusions:** Among this sample of pediatric patients with IBD, risk factors for BID include female gender, older age at diagnosis, active disease, current steroid use, higher BMI, and comorbid mood disorder. Interventions to target modifiable risk factors for BID may improve quality of life in pediatric IBD.