

Somatic distress symptoms are associated with higher disease activity in Crohn's patients

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Background

Patients with Crohn's disease struggle with chronic somatic symptoms that may lead to emotional distress. Yet, previous psychological health studies in patients with Crohn's disease have mostly focused on symptoms of depression and anxiety as poor mental health indicators [1].

This study aimed to evaluate the role of somatic distress – distress due to perceived bodily sensations unrelated to the underlying illness– in disease activity among Crohn's patients.

Methods

Study design: A cross-sectional analysis was performed with 619 adult patients with Crohn's disease recruited from university-affiliated gastroenterology clinics across Israel and at the Crohn's and Colitis Association web-site.

Measures: Clinical disease activity was assessed by the Patient Harvey–Bradshaw index (P-HBI) [2], a self-report scale that consists of 5 self-report items assessing symptoms of Crohn's disease during preceding 24 hours (general well-being, abdominal pain, diarrhea and complications).

Somatization (somatic distress), anxiety and depression were measured using the Brief Symptom Inventory [3]. In this scale, patients rate the extent to which they have been distressed by psychological and physical symptoms in the past seven days on a five-point scale (0='not at all' to 4='extremely').

Statistical analysis: Structural equation modelling (SEM) was used to assess the differential relations of somatization, depression and anxiety to Crohn's disease activity. In addition, multi-group SEM was conducted to examine whether the path coefficients from somatic distress to disease activity differ across men and women, with economic status and patient's age added as control variables.

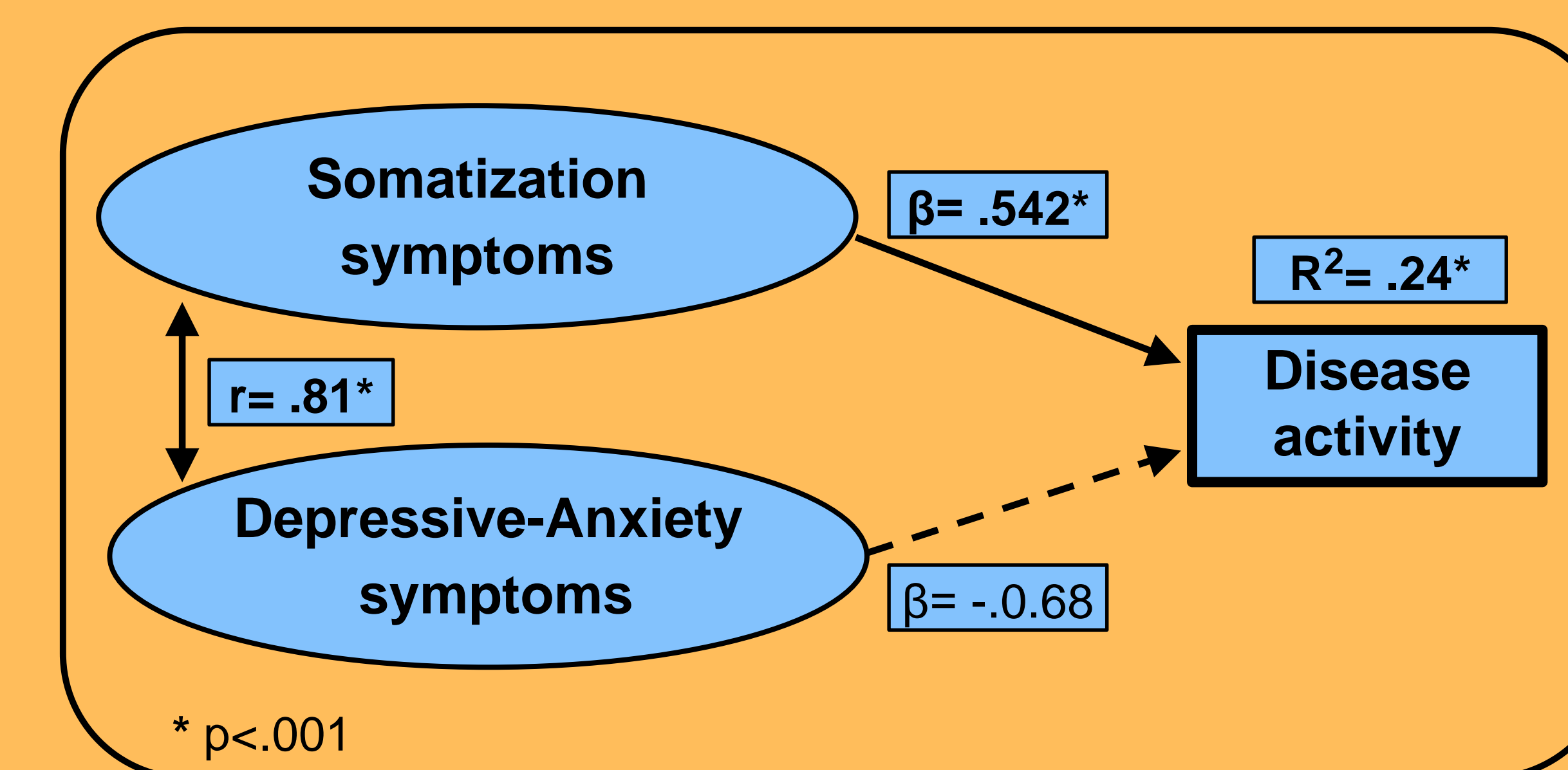
Results

Patients' characteristics: Mean age was 37.7 years (SD= 13.9, range 18–79), 58% women, 80% non-smokers, 43% of patients with active disease (P-HBI score >4).

Main findings: Somatization was positively correlated with disease activity ($\beta = .542$, $p < .001$), above and beyond the effect of depression-anxiety which was insignificant ($\beta = -.068$, $p = .410$). This model explained 24% of the variance in disease activity.

In the multi-group somatization model, the pathway coefficients from somatization to disease activity were significantly different between men ($\beta = .558$) and women ($\beta = .419$; critical ratios difference test: $Z = 2.524$).

Moreover, the path from somatic distress to disease activity remained significant, even after controlling for patient's age and economic status. The somatization model also showed that poorer economic status was associated with worse somatic distress for both women ($\beta = .42$, $p < .001$) and men ($\beta = .56$, $p < .001$). Overall, this model explained 18% and 35% of the variance disease activity for women and men, respectively.



References

[1] Mikocka-Walus et al. (2016). Controversies revisited: A systematic review of the comorbidity of depression and anxiety with inflammatory bowel diseases. *Inflammatory Bowel Diseases*, 22(3), 752-762.

[2] Evertsz et al. (2013). Development of the patient Harvey Bradshaw index and a comparison with a clinician-based Harvey Bradshaw index assessment of Crohn's disease activity. *Journal of Clinical Gastroenterology*, 47(10), 850-856.

[3] Derogatis, L. R., & Melisaratos, N. (1983). The brief symptom inventory: An introductory report. *Psychological Medicine*, 13(3), 595-605.

Conclusions

- ❑ Somatic distress was strongly correlated with increased Crohn's disease activity in a sample of patients with a wide range of ages and stages of illness.
- ❑ The relationship between somatic distress and diseases activity remained significant, even after controlling for depressive-anxiety symptoms, patient's age and economic status.
- ❑ In contrast, depressive-anxiety symptoms no longer retained a significant and unique relationship with disease activity, after controlling for somatic distress.
- ❑ The positive relationship between somatic distress and Crohn's disease activity was stronger for men compared with women.

Recommendations: Screening for somatic distress may be important for patient management. Gastroenterologists may wish to ask about non-gastrointestinal somatic symptoms and – depending on the level of distress caused by these symptoms – may be advised to refer patients to psychological support.