

# Using the Tools of Functional Medicine Improves the Multi-Disciplinary Model of Care of the IBD Patient

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## Background

Inflammatory Bowel Disease (IBD) is a chronic, multifaceted disease which often coexists with extra-intestinal manifestations (EIMs) and persistent GI symptoms despite remission. Functional medicine is a patient-centered, complementary approach to care that focuses on diet and modifiable lifestyle factors (MLF). An individualized functional medicine program was developed for IBD patients at a tertiary care IBD center with the goal of supporting traditional IBD care and improving symptoms and quality of life.

#### Methods

Between December 2020 and April 2022, clinically stable IBD patients with persistent GI symptoms or EIMs were offered access to our IBD functional medicine clinic (FMC), where they had individual appointments with a dietician, functional medicine provider, and social worker. They received education on nutrition and techniques to address stress, sleep quality, and other MLFs. Prior to each visit, the following patient-reported outcome (PRO) surveys were administered: the SIBDQ (Short Inflammatory Bowel Disease Questionnaire), FSS (Fatigue Severity Scale), PSQI (The Pittsburgh Sleep Quality Index), and MSQ (Medical Symptoms Questionnaire). Statistical analysis was performed with Wilcoxon matched pairs signed-rank test.

### Results

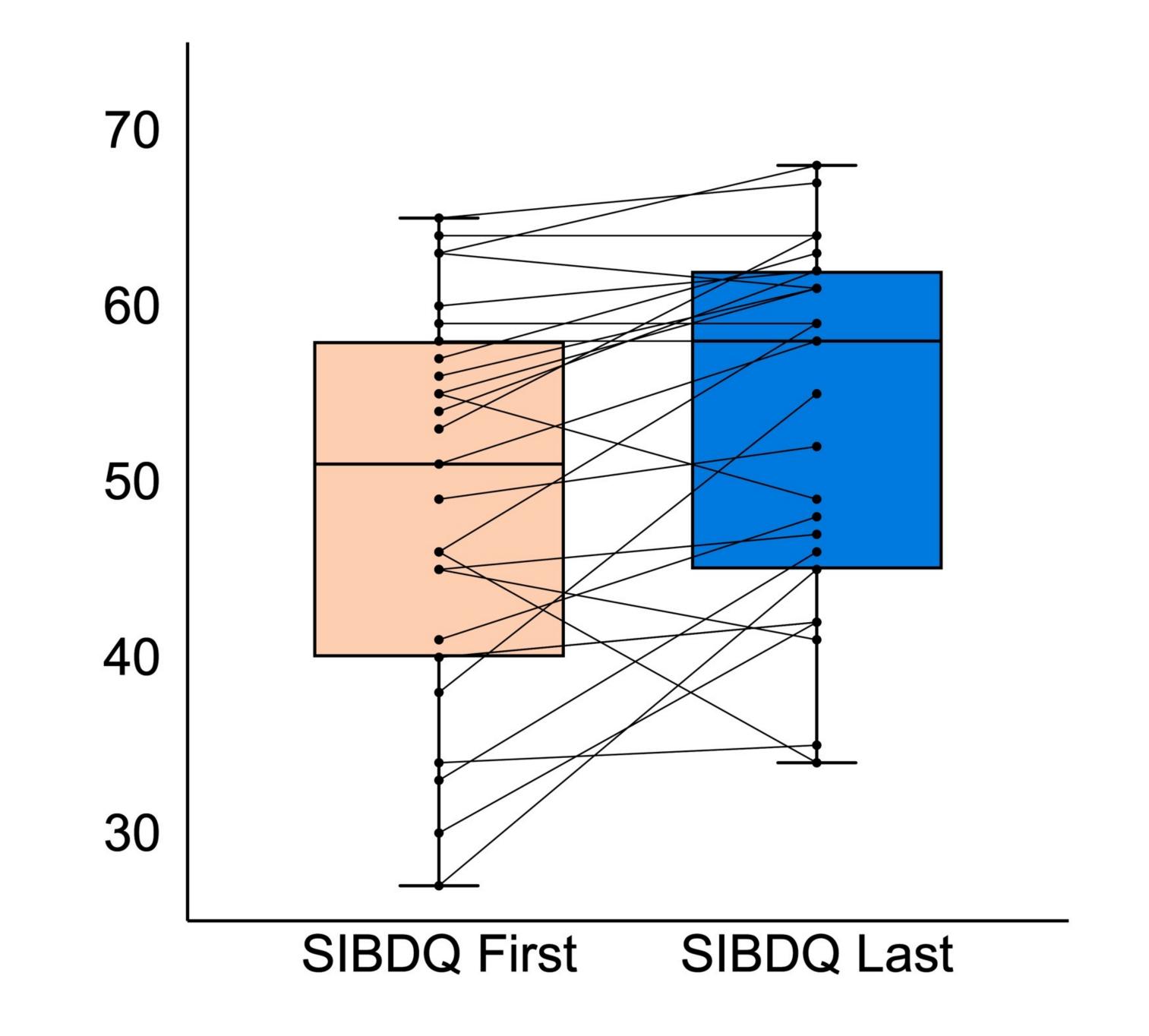
Table 1. Patient demographics

		n (%)
Disease type	Crohn's	21 (77)
	UC	5 (18)
	Indeterminate colitis	1 (3.7)
Sex	Male	9 (33)
Disease duration	Years	0-35
Surgical history	None	19 (70)
Patient reported factors	Ready for change	16 (59)

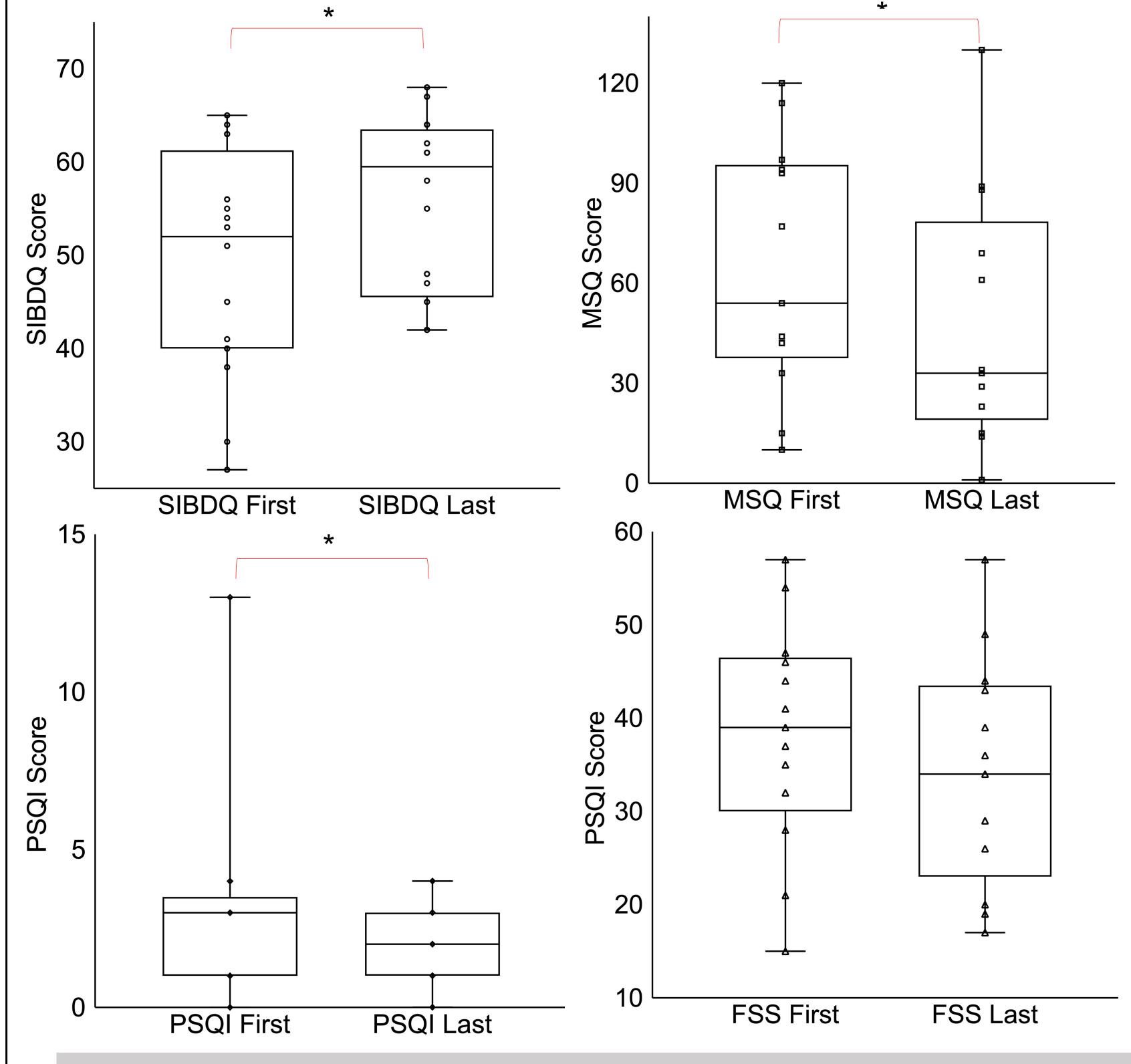
**Table 2.** Median PROs from first visit to most recent visit showed trends towards improvement, with significant improvement in SIBDQ

	First score median (range)	Last score median (range)	p-value
SIBDQ	52 (27-65)	58 (34-68)	< 0.05
MSQ	51 (10-120)	37 (1-130)	0.2
FSS	39 (15-57)	35 (17-63)	0.5
PSQI	3 (0-13)	2 (0-5)	0.15

**Figure 1.** SIBDQ significantly improved from first to last visit with 20/27 patients (74%) demonstrating improvement in individual scores



**Figure 2.** SIBDQ, MSQ, and PSQI significantly improved in patients who indicated readiness for change



#### Discussion

In patients with stable IBD, persistent symptoms may be related to dietary or psychosocial triggers which are the key targets of functional medicine care. A previous retrospective design looked at the functional medicine approach to care in a shared medical appointment standardized program, and found improvement in areas of sleep, fatigue, and medical symptoms. This prospective study of an individualized functional medicine IBD program showed that patients who were ready for change improved in MSQ and PSQI compared to the entire cohort, while the entire cohort significantly improved their SIBDQ regardless of readiness for change.