

MINDFULNESS-BASED COGNITIVE INTERVENTION IMPROVES WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT AMONG CROHN'S DISEASE PATIENTS. A RANDOMIZED CONTROLLED TRIAL

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INTRODUCTION:

Crohn's Disease (CD) affects patients' ability to work and perform everyday leisure activities.

AIM:

We assessed whether a specifically designed Cognitive Behavioral Mindfulness Intervention (CBMI) as an add-on treatment, could improve work productivity and leisure activities in CD patients.

METHODS AND DATA COLLECTION:

- **Cohort:** Adult patients with mild to moderate CD (4<HBI<16) were enrolled into a prospective randomized controlled study. Patients were randomized to CBMI (Intervention group IG) or wait-listed (Control group CG). All patients continued their ongoing medical therapy.
- **Intervention group:** CBMI was taught to Intervention group patients, using SKYPE™ in weekly 1-2 hour sessions over 3 months. Each technique was practiced with the therapist. Home self-exercise was mandatory for 10 minutes twice a day and patients reported on this.
- **Control group:** No CBMI was taught.
- **WPAI:** Patients completed the Work Productivity and Activity Impairment (WPAI) Questionnaire at entry and after 3 months, assessing their ability to work and perform leisure activities in the previous week. The WPAI has 4 scales:
 - Absenteeism - missed work d\l CD
 - Presenteesism - reduced on-the-job effectiveness
 - Work productivity loss - overall work impairment
 - Activity Impairment - degree CD affected regular leisure activities
- **Statistics:** t-test, linear regression.

| | Intervention Group (n=20) | Control Group (n=21) |
|------------------------------|---------------------------|----------------------|
| Female | 65% | 62% |
| Age - mean (SD) | 36(14.4) | 34(10.8) |
| Disease duration - mean (SD) | 9.7Y (10.1) | 9.7Y (8.9) |
| Smokers | 10% | 14.3% |
| HBI mean | 9.14 | 8.5 |
| Employment rates | 71.4% | 85.0% |

Table 1: Baseline characteristics

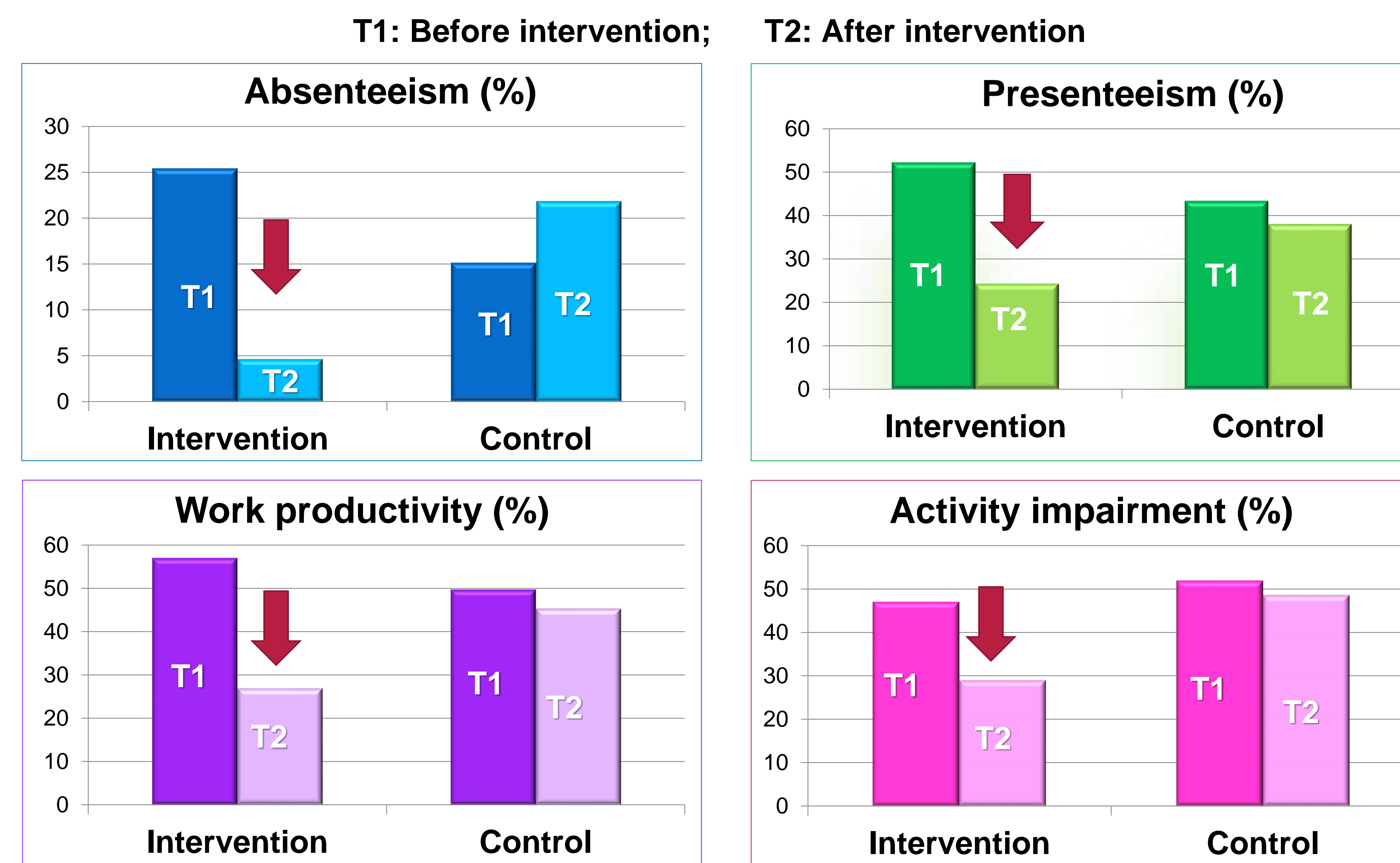


Figure 1: WPAI scales all improved after CBMI in the Intervention group but not in the Control group

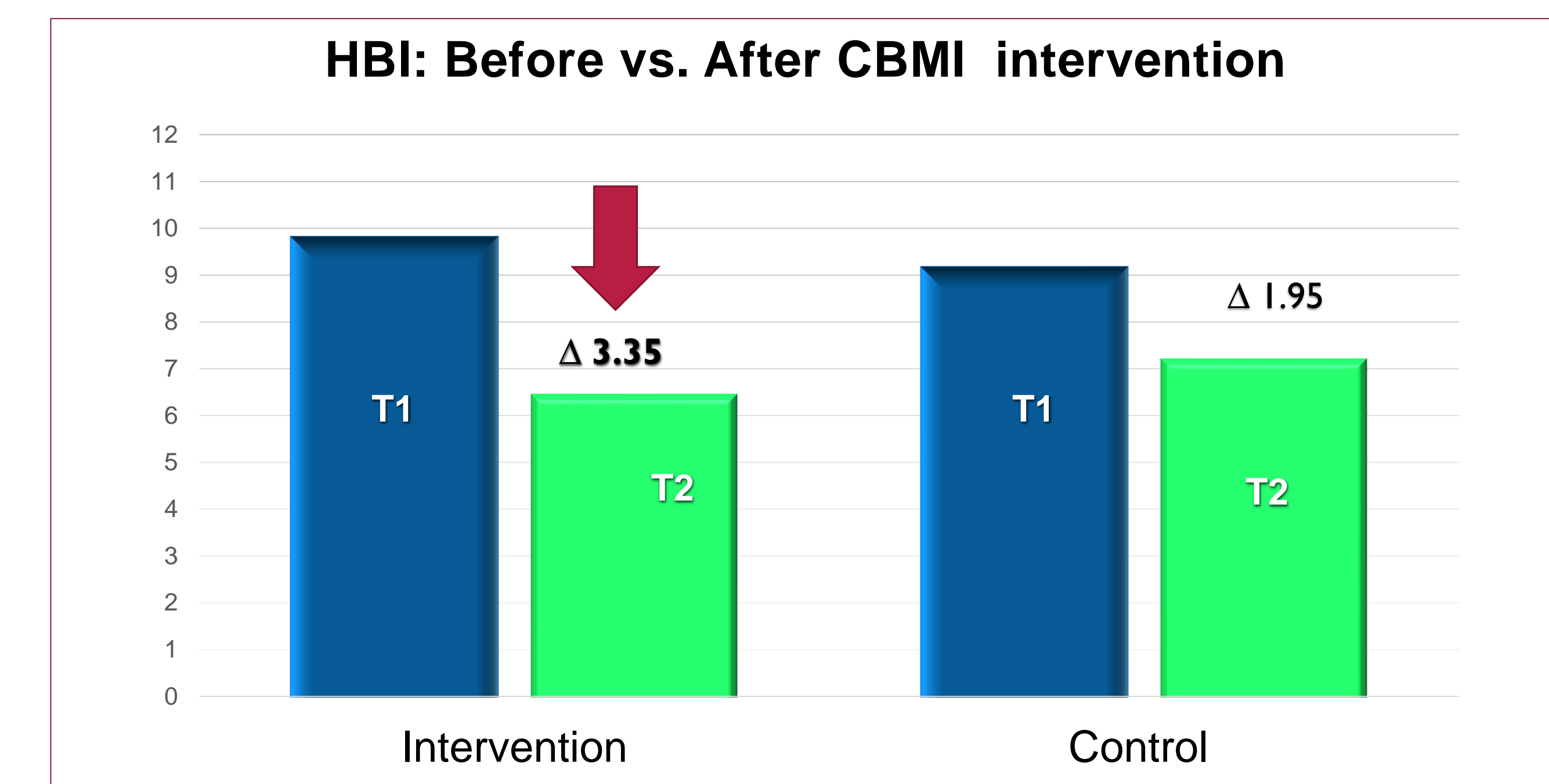


Figure 2: Higher improvement in HBI after CBMI for Intervention group vs. Control group

RESULTS:

The baseline characteristics of the cohort are presented in table 1. There were no statistically significant differences between the groups.

After the intervention at 3 months follow-up, HBI decreased by 3.35 IG vs 1.95 CG. WPAI scales all improved after CBMI in the Intervention group, but not in the Control group as shown in figure 1.

CONCLUSIONS:

- ✓ CBMI led to significant improvement in absenteeism, presenteesism, work productivity and activity impairment.
- ✓ Disease activity decreased more in patients who received CBMI than in the Controls.
- ✓ Despite the reduction in disease activity in the Controls, there was no improvement in absenteeism, presenteesism, work productivity and activity impairment.
- ✓ These preliminary data indicate that CBMI can be recommended as an adjunct to conventional treatment on Crohn's patients.
- ✓ Our patients will remain on follow-up to determine whether CBMI leads to a sustained effect.

Conflict of Interest: All authors and physician collaborators declare that they have no competing interests to report.