



Cognitive behavioral mindfulness intervention with quotidian home practice for Crohn's disease patients: effect on physical and mental functioning, and disease-coping strategies

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INTRODUCTION

Crohn's Disease (CD) patients suffer chronically from physical symptoms and psychological distress and have poor disease-coping strategies [1]. Cognitive Behavioral and Mindfulness Intervention (CBMI) program improves mental health in patients with mild and moderate disease severity and increases their quality of life (QoL) [2].

AIMS

- (1) Determine if at least once-a-day exercise of CBMI techniques boost the symptomatic and psychological betterment
- (2) Evaluate the benefit on patients' disease-coping strategies

METHODS & DATA COLLECTION

Cohort: 99 Adults (≥18 years) with active CD (4<HBI<17).

- Stress reduction CBMI was taught by trained social workers in 8 on-line sessions, delivered one-on-one for 1 hour weekly over 3 months. Patients continued ongoing medical therapy.
- Home practice of CBMI techniques for minimum of 10 minutes, at least once-a-day.

Tools:

- Clinical and psychological data was completed at baseline (T1) and after 3 months (T2).
- Disease activity was measured by **Harvey-Bradshaw Index (HBI)**. Higher scores indicate more disease activity
- QoL was assessed by **Short-Form-12 (SF-12)** measuring physical and mental health. Higher scores indicate higher QoL.
- Psychological distress was measured by the **Brief Symptom Inventory (BSI)** that includes somatization, depression and anxiety parameters. A higher score indicates more stress.
- Personal coping resources were assessed by the **Brief COPE** questionnaire. Higher score indicates more use of resource mechanism.
- Social support was measured by the **Multidimensional Scale of Perceived Social Support**. Higher score indicates higher perceived support.
- Fatigue was assessed by the **FACIT-Fatigue** scale. Higher score indicates higher level of fatigue.
- **Exercise levels** were measured based on a self-report smartphone app. Patients reported on sessions (morning and/or evening) and which stress reduction techniques were used.

Statistics: Mann-Whitney, Kruskal-Wallis, Chi-Square and Spearman's rho.

REFERENCES

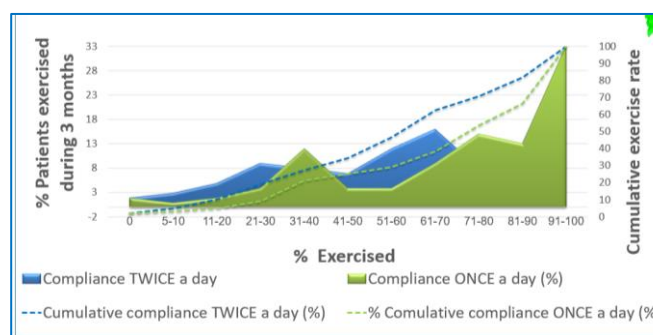
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RESULTS

Table 1: Baseline characteristics

Female (%)	65
Age, mean (SD) yrs	34 (11.4)
Disease duration, mean (SD) yrs	9.1 (8.5)
Smokers (%)	13
Higher education (%)	79
Working (%)	76
HBI (median)	8 (6-15)

Graph 1: Exercise rates (Once-a-day vs. twice a day, during 3 months of CBMI)



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Table 2: Significant correlations between physical & mental health parameters, personal and social resources and once-a-day exercise according to disease activity level (HBI) at baseline

Disease activity (HBI)	Physical health	Fatigue	Depression	Anxiety	Somatization	Emotion focused coping	Problem focused coping	Perceived social support
>16 Major								
8-16 Moderate		Higher Exercise -0.30 (.032) ↓ Lower Fatigue	Higher Exercise -0.34 (.018) ↓ Lower Anxiety	Higher Exercise -0.34 (.016) ↓ Lower Somatization	Higher Exercise 0.33 (.021) ↑ Higher Emotional Coping			
5-7 Mild	Higher Exercise 0.75 (.003) ↑ Higher Physical Health	Higher Exercise -0.37 (.024) ↓ Lower Depression	Higher Exercise -0.35 (.031) ↓ Lower Anxiety	Higher Exercise -0.36 (.026) ↓ Lower Somatization	Higher Exercise 0.48 (.002) ↑ Higher Emotional Coping	Higher Exercise 0.41 (.010) ↑ Higher Problem Coping	Higher Exercise 0.33 (.045) ↑ Higher Perceived social support	
0-4 Remission								

Physical & Mental health

Distress

Resources

CONCLUSIONS

- Exercising CBMI daily for at least 10 min was associated with better physical health, lessened anxiety, depression and somatic symptoms & more efficient coping strategies.
- The response was better in patients with mild disease.
- These findings indicate the important role of daily exercise
- The data support the integration of CBMI practiced daily into the life of CD patients.

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