MINDFULNESS-BASED INTERVENTION (MBI) IN CANCER: EFFICACY AND MAINTENANCE OF LONG TERM EFECTS

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RESUMEN

Las intervenciones basadas en el mindfulness (MBI) han demostrado ser efectivas en pacientes oncológicos con malestar psicológico. Focalizarse en el presente, reduce la rumiación y anticipación en la enfermedad. El presente estudio pretende evaluar el impacto de 8 sesiones de MBI en el distrés psicológico a corto y largo plazo, así como determinar la capacidad predictiva de las dimensiones de mindfulness en el bienestar psicológico. Se espera que la intervención reduzca el distrés y que estos resultados se mantengan en el seguimiento. También se hipotetiza que las puntuaciones en las dimensiones de mindfulness predecirán la mejoría alcanzada. Este estudio correlacional de grupo único estuvo formado inicialmente por 17 pacientes del Hospital Provincial de Castellón diagnosticados de cáncer y que sufrían síntomas ansioso-depresivos. La muestra final en 2022 estuvo formada por 7 de estos pacientes. La intervención consistió en 8 sesiones grupales de hora y media a la semana. Los participantes rellenaron el HADS, GHQ-28, IES, CWS y FFMQ el primer día de intervención, el último y cuatro años después. Los resultados sugieren que la MBI fue efectiva al reducir el malestar psicológico y que estos beneficios son a largo plazo. No es posible establecer relaciones causales, ya que no ha habido un seguimiento continuo, aunque la información cualitativa sugiere que el bienestar actual de los pacientes es en parte debido a la intervención. Aunque la atención plena fue mejorada en todos los pacientes, solo dos de las 5 subescalas del FFMQ fueron significativas. El pequeño tamaño de la muestra y la falta de grupo control son las principales limitaciones. Por otra parte, el experimento tuvo lugar en un ambiente natural y la muestra era diversa en síntomas y diagnósticos. Es necesario realizar investigación futura para confirmar los beneficios y determinar la capacidad predictiva diferencial de las facetas del mindfulness.

Palabras clave: cáncer; MBI; mindfulness; oncología; distrés

ABSTRACT

Mindfulness-based intervention (MBI) has been proved to be useful among cancer patients suffering from psychological distress. These interventions focus on the present moment, reducing rumination over the disease. The present study pretends to evaluate the impact of 8-session MBI on psychological distress at short and long term, as well as determining the predictive ability of mindfulness' dimensions on psychological well-being. It is expected that the intervention will reduce psychological discomfort and that these results will be maintained at the 4 years follow-up. It is also hypothesized that punctuations in dimensions of mindfulness will predict the improvements achieved. The sample of this single-group correlational study was initially formed by 17 patients from Hospital Provincial of Castellón diagnosed with cancer and experiencing anxious and/or depressive symptoms. The final sample in 2022 was formed by 7 of these patients. The MBI followed consisted of weekly group therapy sessions of one hour and a

half. Participants completed the Spanish validations of HADS, GHQ-28, IES, CWS, and FFMQ at baseline, last day of intervention and 4 years follow-up. Results suggest that the MBI was successful in reducing psychological distress and that these benefits were long-term effective. Cause-effect relationship cannot be established as no register has occurred during these years. Yet, qualitative information supports the idea of the MBI being one main reason of their well-being. Even mindfulness knowledge was improved, only two out of five subscales of FFMQ were significant, which does not go in line with expected. Limitations include small size sample and the lack of a control group. Within the strengths, it is found to be carried out in a natural clinic context and the sample was diverse in symptoms and diagnosis. Further research including control group and larger sample is needed to confirm overall benefits and determine differential prediction ability.

Keywords: cancer; MBI; mindfulness; oncology; psychological distress

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INTRODUCTION

The disease of cancer has a strong psychological impact on both patients and their caregivers. MBI has been proved to be useful among cancer patients suffering from psychological distress and poor quality of life. These interventions focus on the present moment, reducing rumination over the disease and fears for the future (Piet *et al.* 2012).

Aims

- To evaluate the impact of 8-session MBI on psychological distress and worry about cancer at short and long term.
- To determine the predictive ability of mindfulness' dimensions on psychological wellbeing.

Hypothesis

H1: The intervention will reduce the psychological discomfort.
H2: The improvements will be maintained at the 4 years-follow up.
H3: Punctuations in dimensions of mindfulness will predict the improvements achieved in psychological wellbeing after the intervention and at follow up.

METHOD

Participants: The initial sample was formed by 17 patients from 42 to 71 years old with different types of cancer, being breast cancer the most common. All participants were invited to participate in 2022 evaluation, ending with a 7-subjects sample. All patients came from Hospital Provincial of Castellón.

Inclusion criteria: To be an adult diagnosed with any type of cancer at that moment and suffering from anxious and/or depressive symptoms.
Exclusion criteria: To be diagnosed with a personality disorder.

Measures: it was always face-to-face. Spanish validations of:
- Hospital Anxiety and Depressions Scale (**HADS;** Zigmond & Snaith, 1983)
- General Health Questionnaire, 28 items version (**GHQ-28;** Goldberg, 1972)
- Impact of Event Scale (**IES;** Horowith, Wilner & Alvarez, 1979)
- Cancer Worry Scale (**CWS;** Lerman, 1991)
- Five Facet Mindfulness Questionnaire (**FFMQ;** Baer, 2006)
- Satisfaction scale with the program (*ad hoc*)

Initial sample (2018)

Final sample (2022)

3
14

1
6

☐ Women ■ Men

Procedure: In 2018, participants followed an MBI, consisting of 8 weekly group sessions of one hour and a half. A pre-post evaluation was carried out at first and last session. In addition, a follow-up evaluation took place in 2022.

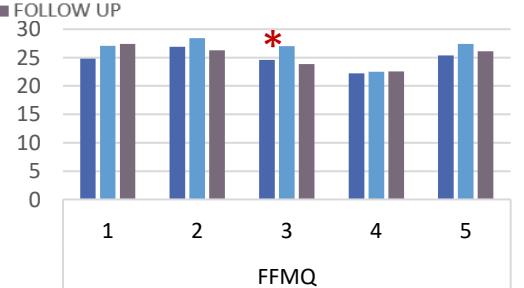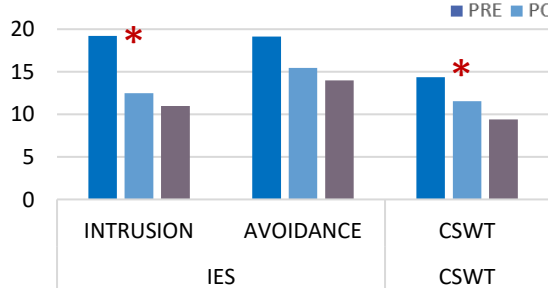**Design:** Single-group correlational study.
Statistical analysis:
- Descriptives
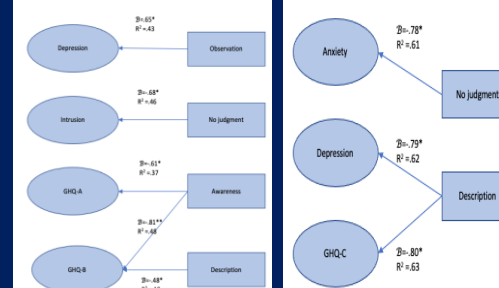- Friedman (non parametric test)
- Correlation
- Regression

RESULTS

* < .05; ** < .01
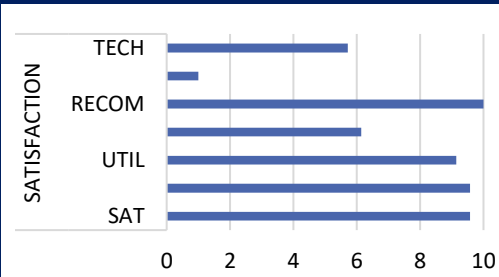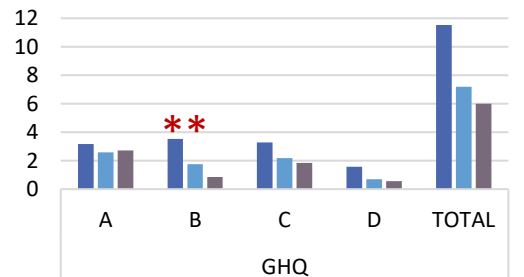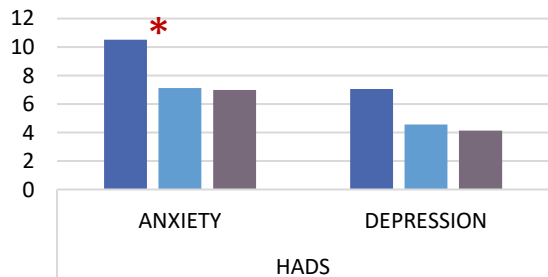
Graphics (1-4): Repeated measures analysis (Friedman)

■ PRE ■ POST ■ FOLLOW UP

Graphic 5. Satisfaction results

Graphics 6-7. Regression analysis (Post & Follow Up)

DISCUSSION

These results suggest that the MBI carried out in 2018 was successful in reducing psychological distress among the patients.

Even mindfulness knowledge and full attention was improved in every patient, only one out of five subscales of FFMQ was significant when looked at repeated measures, which does not go in line with what was expected.

Finally, the fact that punctuations remained stable four years after, proves this intervention to be long-term effective. Though there has been no register during these years and cause-effect relationships cannot be established, qualitative information gathered from the patients suggests that their actual well-being is, in part, due to the MBI. One of the main limitations of this study is the small size sample. Control group was not included either.

Within the strengths of the research, it is found to be carried out in a natural clinic context. The rapport psychologists-patients was already established. Also, there was a great variety of cancer diagnosis as well as psychological distress symptoms, which made the sample richer.

Further research including control group and larger sample is needed to confirm overall benefits and determine differential prediction ability.

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