

## **A Mindfulness-Based Intervention for adolescents and young adults after cancer treatment: a pilot study**

Katleen Van der Gucht<sup>1</sup>, Inge De Leeuw<sup>1</sup>, Ineke Van Mulders<sup>2, 1</sup>, Peter Kuppens<sup>1</sup>, Filip Raes<sup>1</sup>, Nady Van Broeck<sup>1</sup>

<sup>1</sup>*Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium*

<sup>2</sup>*Department of Clinical Psychology, UZ Brussel, Brussel, Belgium*

### Background and objectives:

Adolescent and young adult cancer (AYAC) survivors show an elevated risk of emotional distress both during and after treatment. Because of the empirically-established benefits of Mindfulness-Based Interventions (MBI) for adult cancer survivors, we developed an MBI adapted for AYAs. This study examined the feasibility and potential efficacy of an MBI for AYAC survivors in reducing emotional distress and improving quality of life.

### Methods:

Participants were 16 AYAC survivors, aged 14-24, who had completed acute medical treatment. A two-baseline (8 weeks and 1 week before the start of the MBI), post (1 week after MBI) and 3 months follow-up, within-subjects design was used. Participants completed 2 baseline assessments, followed by an 8-week MBI. The primary outcome variables were emotional distress and QoL. Secondary outcomes were cognitive vulnerability factors and mindfulness skills.

### Results:

Multilevel model data-analysis showed (1) a significant improvement in overall QoL and reduction in emotional distress post intervention and at 3 months follow-up, (2) a significant decrease in negative attitudes toward self (a cognitive vulnerability factor), and (3) a significant improvement in mindfulness skills. The other cognitive vulnerability factors (cognitive reactivity and dampening of positive affect) showed a (non-significant) shift in the expected direction after the intervention.

### Discussion and conclusion:

MBI appears to be a promising approach to alleviate emotional distress and improve QoL in AYAC survivors. This study offers a contribution in the development of much needed adapted psychological interventions for AYAC survivors, who can be described as a distinct group within the cancer population, with an elevated risk of distress, depression and anxiety. However, these findings must be interpreted cautiously considering our small sample size, the self-selection to participate, and the lack of a comparison group. Further research is needed to validate these results.