A new integrative and preventive intervention program for patients undergoing hematopoietic stem cell transplant: first results of a pilot study with students

Maya Corman
Laboratory of Psychology Social and Cognitive, France

Background & Aim: People undergoing bone marrow transplantation may have some psychological symptoms such as depression and anxiety, and physical symptoms as pains all along the process, especially during hospitalization. An investigation about a new preventive intervention to help people to cope with this event has been led. This program is divided into three subtasks: the first one is a new attentional bias modification task, the second one is an optimizing emotional regulation task and the third one is a mindfulness intervention. Each task aims to facilitate the realization of the next one. The program would be implementable at home and during hospitalization with a digital platform. Before implantation in hospital, a pilot study was conducted in laboratory with the first subprogram.

Methodology & Theoretical Orientation: 38 students were recruited (Mage=22.6; SD=7.2, Nexperimental condition=19). This attentional bias modification task consisted in detecting a positive picture amongst three others (negatives and neutrals), moving it towards the screen's center and savoring the associated emotion. Before and after trainings they realized an eye tracker procedure in order to detect the presence of an attentional bias modification.

Findings: The increase of positivity bias (i.e. a longer fixation time on positive stimuli) was significantly greater in the experimental condition than in the control one. There is no significant decrease in negativity bias in the experimental condition as control. The effects of the task on positivity bias tend to be greater for subjects with depressive symptoms.

Conclusion & Significance: First result of this pilot study provides interesting elements to pursue our investigations. Next step is to test effectiveness of the second intervention (a positive psychology one) with completion of the first task. Finally, we will test the whole program before proposing it to patients before and during their hospitalization.

Recent Publications:


Biography

Maya Corman is currently a second year PhD student in psycho-oncology under the supervision of Professor Michâel Dambrun, Her thesis work focuses on a psychological approach of people with hemopathy and undergoing stem hematopoietic cell transplantation process. She has published many articles in reputed journals.

maya.corman@uca.fr