

Study of the impact of non-pharmacological techniques (self-hypnosis/self-care) on cognitive complaints in cancer patients

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INTRODUCTION: Cancer diagnosis generates a number of physical, psychological and cognitive impairments such as memory, attentional and informational processing deficits that can undermine patients' quality of life (QoL). Self-hypnosis combined to self-care learning have been used in the past years to treat these symptoms, at the moment of diagnosis, during and/or after the cancer treatments. However, the impact of self-hypnosis/self-care upon cognitive difficulties has not been investigated yet. The aim of this study is to better understand the impact of self-hypnosis/self-care upon the cognitive functions by means of the Functional Assessment of Cancer Therapy-Cognitive Function¹ (FACT-COG). This questionnaire is divided into four subscales that assess (1) the functional implications of cognitive difficulties, (2) the perceived difficulties by others, (3) the change in cognitive function over time and (4) their impact on the QoL of the patient.

METHOD: 53 participants with cancer (all type of cancer) who had ended their treatment (surgery; chemotherapy; radiotherapy) were included in the study. Exclusion criteria are persons with psychiatric disorders, diagnosis of metastatic cancer, or relapse at time of inclusion. Patients were randomly assigned to two conditions: self-hypnosis/self-care and control group (waiting list). Each participant completed the FACT-COG before and after the self-hypnosis/self-care learning phase or the waiting list.

RESULTS: No significant difference was displayed for the age between the hypnosis and the control group ($p=0.33$). No significant difference was observed on the FACT-COG total score pre-self-hypnosis/self-care learning between the two groups ($p=0.36$). Significant difference was shown on FACT-COG total score post-self-hypnosis/self-care learning between the two groups ($p=0.01$) with the hypnosis group showing less total cognitive complaints ($\bar{X}=-13.25$, $SD=18.45$) than the control group ($\bar{X}=-0.2$, $SD=17.92$). Significant difference was observed for total score of the FACT-COG, post-self-hypnosis/self-care learning, in the hypnosis group ($p=0.001$) whereas no significant difference was shown for the control group ($p=0.95$). Significant differences were observed in the subscale "functional implications of cognitive difficulties" ($\bar{X}=-6.7$, $SD= 12.6$, $p=0.01$), "change in cognitive function over time" ($\bar{X}=-3.16$, $SD= 4.37$, $p=0.001$) and "impact on the QoL" ($\bar{X}=-2.83$, $SD= 3.55$, $p=0.001$), whereas no significant difference was observed in the subscale "perceived difficulties by others" ($p=0.09$). Furthermore, no significant difference was displayed in the four subscales for the control group.

CONCLUSION: The results indicate a beneficial effect of self-hypnosis/self-care learning upon cognitive complaints in cancer patients. Nevertheless, more studies are needed to generalize these results to the cancer patient population.

¹ Wagner, L.I., Sweet, J.J., Butt, Z., Lai, J.S., Cell, D. (2009). Measuring patient self-reported cognitive function : development of the functional assessment of cancer therapy-cognitive function instrument. *The Journal of Supportive Oncology*, 7, 32-39.