

The adherence and response of a combined approach of online self-help cognitive behavioral therapy and phone-based psychological guidance among French patients with cancer with insomnia.

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Background: Insomnia affects 30–60% of patients with cancer. Cognitive behavioral therapy for insomnia (CBT-I) is the gold-standard treatment for insomnia. However, the uptake of CBT-I in routine care remains low. Technology can be leveraged to facilitate the access and delivery of CBT-I. Nevertheless, adherence rates to online self-help interventions seem low (50–60%), and is associated with reduced intervention efficacy. The Sleep-4-All-2.0 is a prospective multicentric single arm study that evaluated an approach that combined a validated online self-help CBT-I program (Insomnet, 6 modules) to a phone-based guidance with a psychologist (3 orientation meetings). This study assessed: 1) how this combined approach performed in terms of adherence, behavior change and insomnia remission rates compared to prior literature investigating self-help CBT-I, and 2) the patients' characteristics that are associated with a better or a poorer response. **Methods:** Data were collected with online questionnaires to compare outcomes: adherence (5 to 6 modules completed), behavior change (ad hoc questionnaire), insomnia remission (Insomnia Severity Index, ISI < 8), sleep perception (ad hoc questionnaire), response to the program (changes in ISI score) at post intervention (week 6, 12 and 24). A descriptive analysis of patient characteristics at each time point was performed. Then, multivariate analyses were conducted: mixed models with a random effect at patient level (repeated measures) and fixed effects for the other variables. The following variables at baseline were used in the adjusted models: socio-demographic and clinical variables, ISI score, symptoms (ESAS), digital skills, barriers to change, motivation, social support and the referring professional. **Results:** Among the 348 patients included: 79% were women, 59% had breast cancer and 68% were undergoing treatment. A total of 310 patients (89%) initiated Insomnet. The adherence rate was 74% and 79% have changed their behavior. Insomnia remission rates were 34%, 46% and 50% at week 6, 12 and 24, respectively. Insomnia was no longer a problem for 48%, 63% and 66% at week 6, 12 and 24, respectively. Female gender ($\beta = -1.22$; $p = 0.05$) and unemployed patients ($\beta = -1.77$; $p < 0.01$) were associated with a decrease in ISI scores. Sleep medication ($\beta = 1.58$; $p < 0.01$), patients with a high sleepiness score (ESAS) ($\beta = 0.25$; $p = 0.02$) and patients with less digital skills ($\beta = 1.85$; $p < 0.01$) were associated with an increase in ISI scores. **Conclusions:** A combination of online self-help CBT-I with phone-based guidance showed satisfactory rates of program adherence, change behavior and insomnia remission. However, some patient profiles such as the ones with lower digital skills and severe insomnia at baseline seemed to benefit less from this approach, and may require further care intensification. Clinical trial information: CONVENTION DE RECHERCHE no. 2020-1-PL SHS-03-IGR-1. Research Sponsor: Institut National du Cancer; 237 192.12 EUR.