

## **Craving-Manager application designed to manage craving and individual predictors of substance use / addictive behavior among individuals with addictive disorders: study protocol for a randomized controlled trial**

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**Context:** Craving, the irrepensible and involuntary desire to use, is a strong predictor of relapse and a key-target for addiction treatments. Studies using Ecological Momentary Assessment method (EMA) have revealed that person-specific cues could precipitate craving, that in turn, is associated with a higher probability to report substance use and relapse in the following hours. Assessment and management of these specific situations in daily life are important to decrease use and avoid relapse. Moreover, rate of individuals with addiction in treatment is low (<10%). Barriers such as stigma, desire to cope alone, lack of knowledge about treatments, could be overcome by mobile technologies. EMI (Ecological Momentary Intervention) is treatment procedure characterized by the delivery of interventions (messages on smartphones) to people in their daily lives. EMI presents opportunities for treatments to be available to people during times and in situations when they are most needed. *Craving-Manager* app has been developed to assess and manage craving and individual predictors of use. App delivers specific and personalized interventions (counseling messages), based on traditional addiction treatment. Craving-Manager can be used for any addiction, evaluates all concurrent substances use and addictive behaviors to identify and prevent risk of addiction transfers.

**Objective:** To evaluate the efficacy of using Craving-Manager app to initiate decrease of use of main problematic substance /addictive behavior over 4 weeks, among subjects requesting treatment for addiction and waiting for starting a treatment program in addiction treatment centers.

**Method:** This randomized controlled trial will compare two parallel groups: experimental group (full interventional version of the application, 4 weeks, EMA + EMI), versus control group (restricted version of the application, 4 weeks, only EMA).

**Discussion:** This new therapeutic tool will offer the possibility of an easy to-use and personalized intervention accessible to the greatest number of subjects.

**Funding:** PHRC Centre Hospitalier Charles Perrens, Bordeaux, France

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**Declarations of competing interest:** No author reports conflicts of interest related to this work. This work has no connection with the pharmaceutical, tobacco, alcohol, e-cigarettes, and gaming companies.