Poster Abstract

Development of an online solution: a new strategy to treat the bipolar disorder

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Abstract

Introduction: Bipolar disorder is a disease that causes changes in the regulation of mood, varies from deep depression to more uncontrolled euphoria without external events that justify these variations.

Bipolar disorder affects 2-5% of the population, with similar prevalence among men and women without differences of race or social class, and usually arise between 20-30 years old. The cause are varied and can be genetic, and therefore inheritable, but enviromental factors (stress, drug use…) that make emerge the disorder are required.

Short description of practice change implemented: The usual treatment is based not only in drug therapy but also in educational programs such as psycho-education programs to provide information to patients and family about the disease and negative habits, help to know the symptoms of destabilization and establishing routines, teach to cope with the stress and the importance of taking proper medication. However, the therapies on line are becoming more frequent with the technological advances. These therapies offers advantages compared to the usual treatment as: facilitate access to therapy (not displacement and possibility to adjust schedules), the anonymity is guarantee…

A new approach for online treatment has been development, the Bipolar Patient Treatment Manager (BPTM) solution which provides telecare service based on advanced communication channels to treat, monitor and support people with mental disorders and their relatives. A rigorous analysis of various online treatments has been done in order to design an application which
satisfies all the relevant features: appropriate educational programs, environment friendliness, multi-channel interaction, security in the exchange of information…

**Targeted population and stakeholders:** The targeted population for the BPTM solution are patients with bipolar disorder, their carers and the professionals involved in their care and treatment (primary and specialized level).

**Timeline:** A clinical trial will be performed in May, 2015 with a duration of three months. The clinical trial will consist of a comparison of two patient and carer groups (intervention and control): 30 patients and their carers using the BPTM solution (intervention group) and 30 patients and their carers with usual treatment (control group). The professional teams involve agents from primary and specialized care of the Basque Health System (Osakidetza).

**Highlights:** (innovation, impact and outcomes)
The designed application (BPTM) has been development and consists on the following modules: psychoeducation, psychotherapy, health state monitoring, drug treatment adherence. The solution is being developed to allow secure multi-channel interaction between patients and health care professionals, to ensure safely information exchanged which allow to integrate the clinical relevant information within the existing electronic health record by interoperating with existing infrastructures trough standards.

**Conclusions:** The BPTM solution will offer ways to learn about how to manage the disease and how to identify symptoms and risk or unstable clinical situations; means to register, share, and access relevant quantitative and qualitative status information, drugs intake, and potentially unwanted side effects; feedback relevant for psychotherapy (i.e. information to the patient about the evolution of his/her disease, motivational messages, and comments of his/her therapist).

**Discussions:** The expected results of the online treatment are basically focused on improving health outcomes and efficiency, increasing the population treated and the adhesion to the treatment, avoiding readmissions and optimizing the resources used. The cost-effectiveness and the transferibility of the application will be evaluated.

**Lessons learned:** Some our lessons learned in the development of the online application are related to the need of adaptation of the application to the user requirement. These user requirements involved several areas as the content in the application depending on targeted population, an active and attractive application with an easy handling in order to assure the patients treatment adherence, but also confidentiality, security, privacity and traceability to be sure that the application has been used by the adequate person.

**Keywords**

- online treatment; online application; bipolar disorder; clinical trial

**PowerPoint presentation**

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