
CONFERENCE ABSTRACT

On line psycho-education: a complementary approach to the treatment of bipolar disorder

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Ana María González-Pinto Arrillaga¹, Amaia Ugarte Ugarte¹, Itxaso González Ortega¹, Sara Ponce Márquez², Angel Faria Rodríguez³, Josu Xabier Llano Hernaiz⁴

1: Hospital Universitario de Álava-Osakidetza, Spain;

2: Centro de Investigación en Cronicidad-Kronikgune, Spain;

3: Subdirección de Informática y Sistemas de Información-Osakidetza, Spain;

4: Osatek, S.A., Spain.

Introduction: Bipolar disorder causes changes in the patients' mood that goes from deep depression to more uncontrolled euphoria without external events that justify these variations. It affects to 2-5% of the population. Prevalence among men and women is similar, with no differences because of race or social class. The first symptoms of the disease usually appear between 20 and 30 years. The causes are varied, including those of genetic origin, and therefore inheritable, but environmental factors, such as stress or drug abuse, that make the disorder breaks out, are required.

Treatment of bipolar disorder is based not only in drug therapy but also in educational programs such as psycho-education programs, which aim to provide information to patients and their families about the disease and the importance of avoiding negative habits. These programs also help to increase awareness of the symptoms of destabilization, to establish routines to cope with the stress and to show the importance of taking medication properly.

On line psycho-education is becoming more common due to technological advances. This method offers advantages compared to the usual treatment based on face to face consultations: it facilitates access to psycho-education (avoids displacement of patients and offers the possibility for the patients to choose the best time to do the activity), and the anonymity is guaranteed, which is an important issue in mental disorders.

We have designed a functional platform for online psycho-education within the Fi-Star European project. The different modules of the platform provide advanced communication channels and interaction tools to treat, monitor and support patients with mental disorders and their families.

Method: We performed a review and analysis of other similar experiences in order to design an application which fulfills all the relevant needs. Among others, appropriate educational programs, user-friendly features, multi-channel interaction, data security and data privacy.

Following the result of the analysis and in subsequent multidisciplinary discussions with clinicians and IT professionals, the application was developed including the following modules: psycho-education, psycho-therapy, health state monitoring, and treatment adherence. The solution has been developed to allow secure multi-channel interaction between patients and health care professionals, to ensure secure information exchange and to provide integration features with existing infrastructures through standards.

The targeted population is patients with bipolar disorder, their families and the professionals involved in their care: psychiatrists, psychologists and nurses.

The technical solution has been evaluated in a clinical trial with 11 patients using the platform and 30 patients with usual treatment. The clinical trial was performed from July to September, we are now gathering all the information from patients and professionals and we will get final results by December 2015.

Discussion: The solution offers patients and their families a new way to learn about how to manage the disease and how to identify symptoms, risk situations or unstable clinical conditions; It also provides health professionals with means to register, share, and access relevant quantitative and qualitative status information, treatment adherence, and potentially unwanted side effects and finally it gives relevant feedback for psychotherapy (i.e. information to the patient about the evolution of his/her disease, motivational messages, and comments from his/her therapist).

The expected results are basically focused on two main objectives: health outcomes improvement and efficiency improvement. We will also evaluate the transferability of the application to different target groups within the mental health spectrum or to different diseases that can benefit from the use of the tool.

Conclusion: From a clinical point of view, we have piloted a model of non-face to face service, based on the combination of traditional consultations, self-training and on-line monitoring of information send by the patient. This new model is expected to result in benefits such as cost savings, efficiency of resources and improvement of the quality of care. If the final results confirm our expectations, we intend to continue to experience the model with a greater number of patients in order to achieve stronger evidence on the validity of on-line psycho-education and psycho-therapy.

From a technological perspective, we have obtained the first version of an on-line care platform for patients with mental illness, which can be useful in other diseases. This application has been analyzed to be the starting point of a corporate application that incorporates virtual educational therapy for patients, associated with a streaming video server using all the capabilities and scalability provided by a cloud platform approach.

Keywords: bipolar disorder; online psycho-education; online psycho-therapy; application; clinical trial
