# HORTICULTURAL REHABILITATION PROGRAMME: EFFECTS ON SCHYZOPHRENIA

Martí-Bonany J, Macias Castellví C, Pérez Carré M, Martínez Casamitjana M.I, Carrió Díez E, Casals Arnau A, Vallvé Elias M, Pagerols Hernández J, Fortuny Olivé JR.

Centres Assistencials Emili Mira-Institut de Neuropsiquiatria i Addiccions. Parc de Salut Mar. Barcelona.

#### Introduction

When referring to the care provided to people with severe mental disorder, two fundamental perspectives are concentrated: pharmacological therapies and psychosocial therapies. The combination of pharmacological treatment and psychosocial treatment, prove to be more effective than the use of an exclusively pharmacological treatment. In recent years, many people have become aware of the positive benefits caused by human interaction with plants and gardens.

Horticultural therapy is a professional practice that is increasingly used in a lot of mental health rehabilitation programs. This therapy was introduced in the Comunitary Rehabilitation Service of INAD, considering its beneficial results in patients with severe mental disorder in combination with the usual rehabilitation program.

## **Objective**

We would like to study the benefits of this therapy compared to the usual in our patients.

## **Methods**

This is an explanatory study for the purpose of establishing the association between the application of a Therapeutic Horticulture Program and the Clinical Symptomatology of Schizophrenia.

The inclusion criteria used were that all participants had a diagnosis of schizophrenia spectrum disorder and attended at least three days a week at the Center to perform different activities as well as: cognitive rehabilitation, skills social, environmental adaptation programs and assistance to psychoeducational groups, among others. With the total of the sample, two groups of n = 11 were made each to form the Control Group and the Experimental Group, being the Control Group the one that received the traditional treatment of the Center and the Experimental Group the one that, in addition to the traditional treatment, he attended the orchard one or two days a week.

The general objectives of the sessions are to teach basic horticulture, establishing a knowledge and skills to develop interests in working with plants, sharing relaxing experiences and coping strategies through working in the garden, as well as promoting exchange social among the participants.

### **Results**

There are statistically significant differences between the scores obtained in the Pre and Post-Test measures by the control group in the category of Positive Symptomatology

The comparison of the Pre and Post-Test measures in the case of the experimental group reports the presence of statistically significant differences in the scale of positive symptomatology composite scale and general scale.

## **Conclusions**

This psychopathological improvement of those participants open a door to possible applications of this therapy as a psychosocial treatment.

Therapeutic horticulture is proving to be a very effective program in the treatment to improve psychological, emotional and social problems of people with schizophrenia.

#### References

Alston, L. Y. (2010). The Effectiveness of Horticultural Therapy Groups on Adults with a Diagnosis of Depression.

Clatworthy, J., Hinds, J., & M. Camic, P. (2013). Gardening as a mental health intervention: a review. *Mental Health Review Journal*, 18(4), 214-225.

Kam, M. C., & Siu, A. M. (2010). Evaluation of a horticultural activity programme for persons with psychiatric illness. Hong Kong Journal of Occupational Therapy, 20(2), 80-86.

Liu, Y., Bo, L., Sampson, S., Roberts, S., Zhang, G., Wu, W. (2014). Horticultural therapy for schizophrenia (Review). *The Cohrane Library* 5. 1-33.

Son, K.C., Um, S.J., Kim, S.Y. and Song, J.E. (2004), Effect of horticultural therapy on the changes of self-esteem and sociality of individuals with chronic schizophrenia. *Acta Horticulturae*, 639. 185-91.

Valencia M., Ortega H., Rascón M., Gómez L. (2002). Evaluación de la combinación de los tratamentos psicosocial y farmacológico en pacientes con ezquizofrenia. *Actas Españolas de Psiquiatría* 30(6). 358-369.



