

Effects of physical activity on the cardiovascular risk factors of patients admitted to a medium-long stay psychiatric unit

Maria Gema Hurtado Ruiz, Elisenda Carrió Díez, Irene Munuera Quirant, Lara Ortiz Sanz, Ana Manzano González, Montserrat Pérez Carré, Cristina Casamitjana Roderer, Juan Ramón Fortuny Olivé

Institut de Neuropsiquiatria i Addiccions. Parc de Salut Mar de Barcelona.

Introduction

Physical inactivity is the fourth factor of risk among all disfunctions at global scale. The 31% of the world population doesn't do any physical activity. The attention to schizophrenia patients and other severe mental disorders is still a main goal for mental health public services, which require different levels of attention and types of intervention. Habits and lifestyles of these patients leads to sedentary routines and inactivity. Regular and controlled sport activity provides a psychosocial balance that influences the perception of a general health. Through this proposition we aim at showing the effectivity of walking as a preventive way to reduce cardiovascular risk factors on patients from a medium and long psychiatric stay.

Objectives

To assess the effectivity of walking as a preventive way to reduce cardiovascular risk factors on patients with severe mental disorder admitted to a medium-long stay unit.

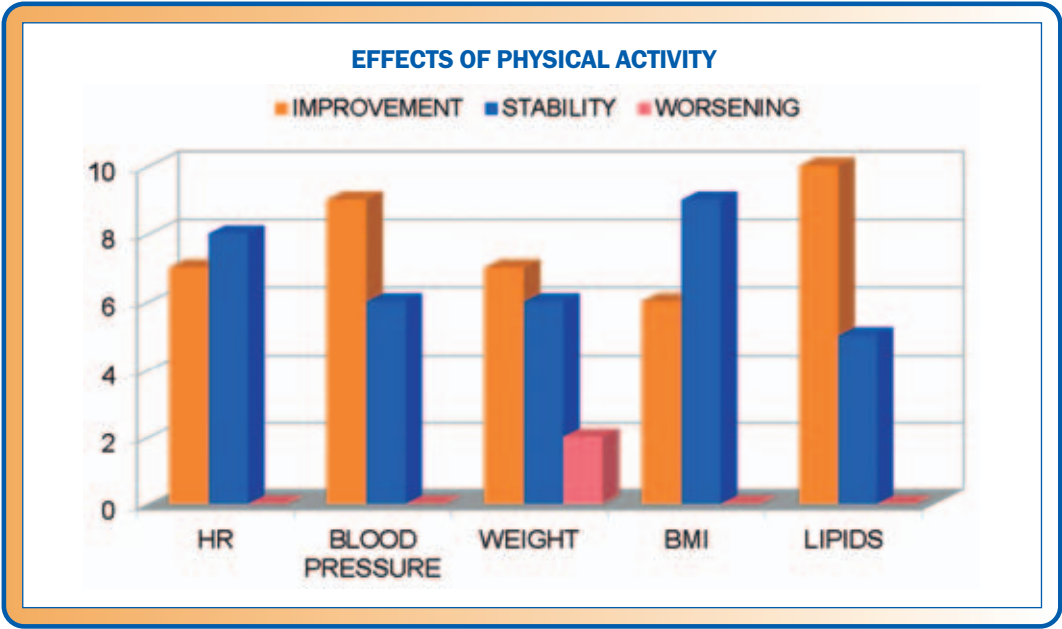
Methods

A clinical trial was performed during a year follow-up (2017-2018) with 15 patients with ages ranging from 20 to 63 years, that started a physical activity (walking) during 1.5 hours, twice a week. Two routes classified as high and low intensity (3km and 1.5 km long, respectively) where designed considering the personal profile of each patient (disorders, engagement and social interaction). Measures were taken at baseline and follow-up, checking for these variables: weight, blood pressure, BMI, heartbeat rate (HR) and blood lipid levels.

Results

Next, we describe the results on walking physical activity.

- Lipids: 66.7% (improvement), 33.3% (stability) y 0% (worsening).
- Blood Pressure: 60% (improvement), 40% (stability) y 0% (worsening).
- HR: 46.7% (improvement), 53.3% (stability) y 0% (worsening).
- BMI: 40% (improvement), 60% (stability) y 0% (worsening).
- Weight: 40% (improvement), 46.6% (stability) y 13.4% (worsening).



Conclusions

Relevant improvements on lipid blood values, arterial tension and heartbeat rate were observed in most patients after practising physical activity. Less than half of the patients improved their weight and BMI. Finally, no negative effect was observed related to this intervention, showing its effectiveness as a preventive tool to improve cardiovascular risk factors.

References

(1) Hernández-Gil K, Pérez-Morales M, Arias-Vázquez P. Log In - ProQuest [Internet]. La actividad física reduce el riesgo de muerte en pacientes con hipertensión. Search.proquest.com. 2017. (Jan-Jun 2017): 91-100.

(2) Maiques Galán A, Brotons Cuixart C, Banegas Banegas J, Martín Rioboó E, Lobos Bejarano J, Villar Álvarez F et al. Recomendaciones preventivas cardiovasculares. PAPPs 2016. Atención Primaria. 2016; 48:4-26.

(3) M^a Loreto Tárraga Marcos¹, Josefa María Panisello Royo², Nuria Rosich³, Juan Solera Albero⁴, Ángel Celada Rodríguez et al. Efecto de una intervención motivacional de Obesidad sobre factores de riesgo cardiovascular. Journal Negative & No Positive Results. 2016;1(2):56-64. 34.

(4) García-Ortiz L, Grandes G, Sánchez-Pérez A, Montoya I, Iglesias-Valiente JA, Recio-Rodríguez JI, et al. Efecto en el riesgo cardiovascular de una intervención para la promoción del ejercicio físico en sujetos sedentarios por el médico de familia. Rev Esp Cardiol. 2010;63:1244-52.

(5) Organización Mundial de la Salud. [Internet]. Actividad física. Disponible en: <http://www.who.int/mediacentre/factsheets/fs385/es>