

# Importance of Physical Intervention in the Treatment of Patients Diagnosed with Schizophrenia

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## Abstract

Schizophrenia is a serious, complex mental disorder with a chronic and heterogeneous course. It is estimated that more than 21 million people worldwide are diagnosed with schizophrenia. Evidence suggests that schizophrenia is probably not related to a single biological factor, but to an interaction of different pathological mechanisms, including intrinsic and extrinsic risk factors. Patients have three major symptom dimensions, which can be described as positive symptoms (hallucinations and delusions), negative symptoms (affective flattening, avolition, and anhedonia), and cognitive symptoms (perception, memory, and attention).

**Keywords:** Schizophrenia; Physical activity; Exercise

**Received:** February 01, 2021; **Accepted:** February 15, 2021; **Published:** February 22, 2021

## Description

The complexity of the treatment of the patient with the diagnosis of schizophrenia is a great challenge for the professionals who work in its treatment [1,2]. Schizophrenia has a reduced life expectancy of approximately 10-20 years compared to the general population, and this reduction is due to physical illnesses, such as cardiovascular disease and diabetes [3]. A mental and physical functional impairment occurs due to unhealthy lifestyle habits, such as smoking, maintaining a poor diet and having low levels of physical activity.

Physical inactivity causes functional damage to the entire body, and the concern with global functioning is an important outcome indicator in schizophrenia. Recent studies in this population show important changes in motor functional capacity, posture, balance, gait and flexibility [4,5]. Therefore, only a minority (about 25%) of patients with schizophrenia do not meet the minimum public health recommendation of 150min of moderate-vigorous physical activity per week [6].

## Discussion

The increase in the practice of physical activity and the reduction of sedentary behavior are gaining more and more visibility in research and clinical attention due to the viability and effectiveness of exercise programs integrated with the set of therapeutic approaches to schizophrenia, due to their effects on mental health, cognition, respiratory capacity, obesity, psychotic symptoms and mortality [7]. Physical activity also has beneficial

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**Citation:** Szortyka FM, Cristiano BV, Belmonte-de-Abreu P (2021) Importance of Physical Intervention in the Treatment of Patients Diagnosed with Schizophrenia. *Clin Psychiatry* Vol.7 No. S2:82

effects on mental health, both directly, on musculature, circulation and posture, and indirectly, by reducing social isolation and improving well-being. Different exercise programs have shown promising effects to integrate the set of early intervention therapeutic approaches in the treatment of schizophrenia [8].

All types of exercise are effective in schizophrenia, but aerobic exercise is well documented about different outcomes in patients with schizophrenia: neuroplasticity (by the increase in BDNF levels); cognition (especially about working memory, social cognition, attention and surveillance); cardiorespiratory fitness (by assessed by physical fitness); obesity (by reduced BMI) and psychiatric symptoms [9-11]. The practice of yoga has an effect on long-term memory, whereas physical exercise with both modalities (mixed aerobic or strength training) can decrease depressive symptoms in patients with schizophrenia [7]. The quality of life has an important impact on the health of these patients in which evidence shows an improvement when performing physical exercises, yoga or dance.

## Conclusion

There is heterogeneity in the types, frequency and intensity of exercise programs, but there is a clear clinical effect on the patient's life with the diagnosis of schizophrenia. Despite current efforts, only a minority of patients achieve functional recovery. Thus, there is an evident need for research on treatments that promote sustained clinical and functional recovery. There is a clear need for clinical trials with programs specially designed for patients with schizophrenia that include technology for motivating change, associated with practical recommendations and physical exercise.

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