



Cognitive Rehabilitation in Psychiatric Disorders: A Recovery-Oriented Approach



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Abstract

The aim of this paper is to provide a general overview of the role of cognitive stimulation in psychiatric rehabilitation. Cognitive rehabilitation has gained an important role in the rehabilitation treatment of various pathologies. This type of intervention is based on the neuroplastic capabilities of the brain and its ability to reorganize functionally and structurally after some damage or as a result of cognitive deterioration. Through environmental stimuli the human brain is led to change to respond to external demands more efficiently. Of particular interest is the use of cognitive enhancement strategies in psychiatric patients, characterized by a complex symptomatology in which serious deficits in the cognitive sphere fall. Treating cognitive symptomatology allows to reduce the impact that the disease has on the life of patients returning autonomy and self-efficacy.

Keywords: Cognitive Remedation; Psychiatric Disorders; Recovery; Rehabilitation; Positive Sense of Self

Introduction

One of the main and permanent features of some diseases, including psychiatric ones, is cognitive deficits. The significant impact these have on the patient's autonomy and functioning makes it difficult to achieve the goals set forth in treatment pathways [1]. Cognitive rehabilitation aims to improve cognitive functioning without acting on the patient's thought content, beliefs, and emotions; it promotes the development of basic cognitive skills, using non-emotional material, to foster increasingly complex social behaviors appropriate for enacting the skills of daily living. To do this, cognitive science relies on the plastic capacities of our brain and its cognitive modifiability [2]. The human organism allows itself to be shaped and in turn shapes the environment around it [3]. This modeling trend is defined in the concept of brain plasticity: such adaptive abilities are mediated by a complex phenomenon called neuroplasticity [4]. To achieve this improvement, however, it is necessary that the patient is adequately stimulated and guided in the recovery process by actively contributing to his motivation [5]. Analyzing opportunities for reorganization of the damaged or compromised brain, cognitive recovery techniques create intervention programs to ensure that the resulting functional impairment

is minimized, and the individual can achieve the best possible degree of autonomy and independence [6]. It is important to emphasize the importance of designing and implementing interventions to increase cognitive modifiability in adulthood, to take advantage of the patient's residual abilities and to promote the development of new strategies, modify pre-existing ones, and promote the reuse (or retrieval) of information [7]. Cognitive rehabilitation enables a change in the person with disabilities, actively helping them acquire and enhance daily living skills by improving psycho-social and physical functioning, leading to improved quality of life [6]. Specifically, cognitive rehabilitation consists of performing exercises designed to reactivate and stimulate specific cognitive functions. It is a nonpharmacological treatment aimed at individuals with difficulties and aims to develop compensatory strategies and exploit residual abilities to counteract any continuation of cognitive decline [8]. Cognitive training involves the guided practice of exercises designed to develop cognitive functions such as memory, attention, language, or executive functions. Specific goals are defined according to the patient's needs and personal and environmental characteristics. Structured cognitive rehabilitation intervention leads to improve

me affection ferent aspects of the patient's life: cognitive, affective and autonomy [8].

Psychiatric Disorders and Cognitive Deficits

DSM 5 defines the main features of psychotic disorders according to five areas: delusions, hallucinations, disorganized thinking, abnormal motor behavior and negative symptoms. In general, cognitive impairment does not appear among the diagnostic criteria. Cognitive impairment is one of the first clinical signs to emerge. The incidence is estimated at 80% of psychotic subjects, a percentage that rises to 98% in subjects diagnosed with schizophrenia [9,10]. Kraepelin (1919) described behavioral disorganization and cognitive deficits in psychiatric disorders, particularly schizophrenia, as "an orchestra without a conductor," a definition suggesting that cognitive control is one of the keys altered processes in psychiatric disorders. Since cognitive performance is related to the subject's functional efficiency and effectiveness in many aspects of life, it would be appropriate to include the treatment of cognitive deficits among the main therapeutic goals in the treatment of psychotic disorders [11]. Cognitive disorders are often related to negative symptoms and disorganization that affect the patient's overall functioning [12]. Attention, processing speed and memory are often predictors of employment rate, while working memory has a greater influence on occupational functioning [13].

In addition, cognitive deficits, particularly working memory and long-term verbal memory, have been observed to adversely affect therapeutic adherence [14] and that low cognitive performance causes impaired social functioning and increased hospitalizations, increasing the direct and indirect costs of psychiatric disorder [15]. It is important to emphasize that pharmacological interventions are unable to bring about improvements in this dysfunction. Conversely, the use of antipsychotics has often been associated with a decline in psychomotor performance with a negative impact on the entire rehabilitation pathway [16]. The Cognitive Remediation Experts Workshop (Florence, 2010) defined how cognitive remediation techniques aim to improve cognitive processes (attention, memory, executive functions, social cognition and metacognition) with the goal of persistence and generalization of effects [17]. Change in cognitive performance is thus a primary goal of cognitive recovery techniques; however, the focus is on improving the patient's overall functioning and quality of life. Most interventions, in fact, consider the functions that most relate to the patient's disabilities and are important indicators of functional outcome [18].

Recovery in Psychiatry

Cognitive remediation interventions are based on the concept of recovery, a holistic vision of man that does not dwell on the deficits of illness but on the possibility of overcoming the limitations associated with it to lead a self-determined and meaningful life [19]. The individual is not his or her pathology.

This idea has led to a change in rehabilitation interventions in the psychiatric previously focused only on the difficulties caused by the illness and the inability to see the individual separate from it [20]. The recovery process involves several elements: the resumption of expectations about the future, overcoming denial of the illness and acceptance of the condition, a more active attitude, and the claiming of a positive sense of self. Existence of life plans, confidence in one's own abilities, reduction of internal stigma, and increased self-esteem are elements that lead to increased commitment to rehabilitation and consequently increased goals achieved [21]. A recovery-oriented approach makes it possible to overcome the passive phase, promoting acceptance of the diagnosis and greater empowerment [20]. In the recovery process, the therapist does not begin and end the intervention but, alongside the patient, helps him or her find useful strategies to achieve the goal [22]. Recovery bases its ideology on three main pillars: personal resources, knowledge and social network [20]. Personal resources can be seen as the tools patients need to gain a greater sense of control over their lives. For example: life purpose and meaning, sense of belonging, positive sense of self, and practical knowledge of illness [22].

The knowledge dimension is characterized by the relationship between skills, the patient's knowledge about mental illness and the resulting experiences, and the support provided by health professionals [22]. Social factors include elements external to the individual that interact with him. For example: family, friends, mental health services, and help communities. Also of particular importance are aspects of work, education, and achievement that interact with the individual's perception of himself or herself. There is no clear definition of recovery. But there are guiding principles that highlight the hope and strong belief that it is possible, for people with mental illness, to regain a meaningful life, despite the symptoms. Recovery is often referred to as a process, perspective, vision or guiding principle [23]. In cognitive rehabilitation based on this approach, it is the patient who wants to overcome limitations by actively engaging with a more cooperative attitude [24].

Conclusion

Cognitive rehabilitation interventions, exploiting the plastic capacities of the brain, have proven to be effective in the rehabilitation of psychiatric disorders. A cognitive intervention based on recovery-oriented interventions makes it possible to improve one's personal and social functioning, encourages better self-perception and a greater sense of self-efficacy that is useful for managing one's daily life despite the illness.

References

1. Kim HS, Lim KB, Yoo J, Kim YW, Lee SW, et al. (2021) The efficacy of computerized cognitive rehabilitation in improving attention and executive functions in acquired brain injury patients, in acute and postacute phase. *Eur J Phys Rehabil Med* 57(4): 551-559.

2. Han K, Chapman SB, Krawczyk DC (2020) Cognitive training reorganizes network modularity in traumatic brain injury. *Neurorehabilitation Neural repair* 34(1): 26-38.
3. Bowie CR, Bell MD, Fiszdon JM, Johannesen JK, Lindenmayer JP, et al. (2020) Cognitive remediation for schizophrenia: an expert working group white paper on core techniques. *Schizophr Res* 215: 49-53.
4. May A (2011) Experience-dependent structural plasticity in the adult human brain. *Trends Cogn Sci* 15(10): 475-482.
5. Bowie CR, Bell MD, Fiszdon JM, Johannesen JK, Lindenmayer JP, et al. (2020) Cognitive remediation for schizophrenia: an expert working group white paper on core techniques. *Schizophr Res* 215: 49-53.
6. Vita A (Ed.) (2013) *La riabilitazione cognitiva della schizofrenia*. Springer Milan.
7. Tsapekos D, Strawbridge R, Wykes T, Young AH, Cella M (2022) Cognitive remediation for people with bipolar disorder: The contribution of session attendance and therapy components to cognitive and functional outcomes. *J Psychiatric Res* 152: 144-151.
8. Barlati S, Deste G, De Peri L, Ariu C, Vita A (2013) Cognitive remediation in schizophrenia: Current Status and future Perspectives. *Schizophr Res Treatment* 2013: 156084.
9. Mihaljević-Peleš A, Bajs Janović M, Šagud M, Živković M, Janović Š, et al. (2019) Cognitive deficit in schizophrenia: an overview. *Psychiatri Danub* 31(suppl 2): 139-142.
10. Keefe RS, Eesley CE, Poe MP (2005) Defining a cognitive function decrement in schizophrenia. *Biol Psychiatry* 57(6): 688-691.
11. Haas GL, Sweeney JA (1992) Premorbid and onset features of first-episode schizophrenia. *Schizophr Bull* 18(3): 373-386.
12. Schuepbach WMM, Rau J, Knudsen K, Volkmann J, Krack P, et al. (2013) Neurostimulation for Parkinson's disease with early motor complications. *N Eng J Med* 368(7): 610-622.
13. Shamsi S, Lau A, Lencz T, Burdick KE, DeRosse P, et al. (2011) Cognitive and symptomatic predictors of functional disability in schizophrenia. *Schizophr Res* 126(1-3): 257-264.
14. Sendt KV, Tracy DK, Bhattacharyya S (2015) A systematic review of factors influencing adherence to antipsychotic medication in schizophrenia-spectrum disorders. *Psychiatry Res* 225(1-2): 14-30.
15. Keefe RS, Harvey PD (2012) Cognitive impairment in schizophrenia. *Novel Antischizophrenia Treatments* 11-37.
16. Davidson M, Galderisi S, Weiser M, Werbeloff N, Fleischhacker WW, et al. (2009) Cognitive effects of antipsychotic drugs in first-episode schizophrenia and schizophreniform disorder: a randomized, open-label clinical trial (EUFEST). *Am J Psychiatry* 166(6): 675-682.
17. Wykes T, Spaulding WD (2011) Thinking about the future cognitive remediation therapy—what works and could we do better? *Schizophrenia Bull* 37(suppl 2): S80-S90.
18. Wykes T (2008) Cognition rehabilitation in schizophrenia, ii: cognition rehabilitation, costs and effectiveness. *Schizophr Res* 1(102): 25.
19. Amering M, Schmolke M (2009) Recovery in mental health: reshaping scientific and clinical responsibilities. *John Wiley Sons* pp. 280.
20. Bonney S, Stickley T (2008) Recovery and mental health: a review of the British literature. *J Psychiatr Ment Health Nurs* 15(2):140-153.
21. Taylor DM, Barnes TR, Young AH (2021) Maudsley prescribing guidelines in psychiatry. *John Wiley Sons* pp. 872.
22. D'Avanzo B (2015) L'idea di recovery: spunti per proseguire nella riflessione 167-181.
23. Jacob KS (2015) Recovery model of mental illness: A complementary approach to psychiatric care. *Indian J Psychol Med* 37(2): 117-119.
24. Trapp W, Heid A, Röder S, Wimmer F, Hajak G (2022) Cognitive remediation in psychiatric disorders: State of the evidence, future perspectives, and some bold ideas. *Brain Sci* 12(6): 683.



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