# MUSIC THERAPY AS AN EFFECTIVE INTERVENTION IN THE TREATMENT OF DEPRESSION IN A PATIENT WITH KORSAKOFF'S SYNDROME

#### Stefano Navone

Health Mental Center Ulss 4 Alto Vicentino, Italy musicoterapia@istitutomusicaleveneto.it

#### **Abstract**

The main aim of this study is to demonstrate the efficacy of the Music Therapy intervention and the possibility of influencing positively on depressive symptoms of a patient with this Syndrome making significant improvements in the general condition and in particular on the "activation versus apathy". The Music Therapy approach is mainly based on a sonorous music relationship between the patient and music therapist. Active Music Therapy facilitates the expressive process, increasing communicative-relational abilities and modulation and regulation of emotions. This approach is based on intersubjective psychological theories and allows "affect attunement" moments. After 24 sessions of Music Therapy treatment, a significant decrease in depressive symptoms and an increase in the level of activation vs. apathy were observed in the patient; these results are confirmed by the analysis of the clinical tests and remain constant even after a follow-up to a month. Four independent observers analyzed the Music Therapy process from a quantitative point of view through videotapes of each session. The Music Therapy treatment showed its effects on areas involved in emotional processing and regulation, such as the limbic and paralimbic structures. Music Therapy can be an effective intervention for improving the quality of life and supporting caregivers in the management of Korsakoff Syndrome.

**Keywords:** non-verbal music therapy, Korsakoff's syndrome, depression

#### 1. The Music Therapy Approach

The Music Therapy approach is mainly based on a sonorous music relationship between the patient and music therapist. Active Music Therapy facilitates the expressive process, increasing communicative-relational abilities and modulation and regulation of emotions. This approach is based on intersubjective psychological theories and allows "affect attunement" moments (Stern, 2010). The proposed theoretical approach as the psychodynamicrelational music therapy provides an operational methodology based on the criteria of non-directivity towards the patient and an attitude of observation and listening, related to the concepts of neutrality and countertransference as in the traditional psychoanalytic work. From an operational view, in this methodological context, the music therapist implements all the strategies to promote the expression of the patient and his creativity, thereby facilitating a real expression of the self: a musical improvisation technical linked to non-verbal approach will be the peculiar style of this type of intervention (Navone,2009). Another important issue in Music Therapy is the definition of a temporal-spatial structure, along with the set of rules defining the therapeutic setting: these two elements, acting together, acquire a fundamental importance as facilitators of therapeutic actions, and as a consequence, of changes for better (Raglio, 2008).

The activities of Music Therapy in a relational view have to be structured in a suitable

place, called setting, a place sufficiently insulated and acoustically protected that allow the development of a defined and repeated relational process over the time with continuity and regularity. The elements of continuity and regularity allow the patient to that identification between physical and mental place, in other words, the perception of that safe and stable psychological basis, where are built all psychotherapeutic rehabilitation and support interventions.

Music Therapy's non-verbal approach in psychiatric disorders, in schizophrenia and in the dementias (as in other diseases with an impairment of the communicative functions), is a viable hypothesis for the possibility of reactivating and expanding the archaic expressive and relational nonverbal abilities that persist across the individual's life span as modes of interpersonal experience. The Music Therapy philosophy is mainly based on this assumption.

A non-verbal Music Therapy approach was chosen, using both rhythmical and melodic instruments to promote intersubjective communication (Benenzon, 1981).

Through nonverbal behavior and sound-music performances, the patient conveys his/her emotions and feelings, establishes an "affect attunement" with the music therapist and is stimulated to modify the global emotional and affective status (Stern, 1985; 2004).

## 2. A single case study

This research was conducted at the residential psychiatry of the Mental Health Center, ULSS 4 Alto Vicentino.

The single study has been carried out by the author in collaboration with the clinical staff and health care of the structure and all the videos of Music Therapy sessions were individually analyzed by independent observers at the Music Therapy Center in Thiene (Vicenza), Italv.

The type of research falls within in the studies "single case study".

The main objective of the study was to find a correlation between the clinical trials, the extrasetting behavioral observations carried out by staff and some intrasetting indicators of Music Therapy non-verbal treatment, potentially relevant for the achievement of results.

Mr. P. participated in 24 individual MT sessions (30 minutes each) twice a week, over 4 months. The NPI, NPI-D and CSDD were administered at baseline, before treatment, after 12 sessions, at the end of the treatment, and at 1-month follow-up after treatment to evaluate depression and activation-apathy. Pharmacological therapy was not modified during treatment.

## 3. Intrasetting observation

Four independent observers analyzed the MT process from a qualitative point of view through videotapes of each sessions. The intrasetting observations were conducted session by session, using the following indicators:

- 1) Visual contact patient-therapist with 3 subclasses:
  - 1 a: The patient arises in visual contact with the MT during the interaction and musical sound or immediately at the end of this.
  - 1b: The patient arises in visual contact with the MT during verbalizations without sound-musical interaction
  - 1c: The patient arises in visual contact with the MT without verbalizing and in the absence of sound and musical interaction.
- 2) Variation of the intensity expressiveness of the Patient.

The patient changes, even if minimally, the intensity of his production both in ascending or descending order, in immediate reaction to the MT's proposal sound.

3) Actual time of sonor-musical interaction between patient and therapist.

The actual time in which MT and patient are involved in a synchronous way in any kind of sound and musical production.

4) Activation and Diversification of the patient than the instrumental mediator.

The amount of episodes in which the patient, either during an interaction to be individually make a change in the choice of the tools and / or diversified his production by changing instrumental mediator.

The quantitative variations in all these indicators from the beginning to end of treatment leads to suppose that the nonverbal and sonormusical interaction, specific of Music Therapy intervention, can be particularly effective in the decreasing of depressive symptoms more correlated to Korsakoff's syndrome.

## 4. Summary of the results

In the patient were observed a significant decrease in depressive symptoms and an increase in the level of activation vs. apathy; these results are confirmed by the analysis of the clinical tests and remain constant even after a follow-up to a month.

The level of behavioral activation compared to the level of Apathy, characteristic of a depressive state, was monitored by administering (at the beginning and at the end of treatment) of the NPI NPI-D (Neuropsychiatric Inventory in Dementia; Cummings et al., 1994) with specific outcomes relevance to the areas 4-Depression, and 7-Apathy.

It was also observed a noticeable decrease of the score obtained by periodic administration of CSDD (Cornell Scale for Depression in Dementia, Alexopulos et al., 1988). This scale was administered at the base-line (p 16), at beginning of the treatment (p16), after 12 sessions (half-treatment p13), at the end of treatment 24 sessions (p 4) and after a follow-up of 30 days (p 2).

#### 5. Conclusion

The Music Therapy treatment showed its effects on areas involved in emotional processing and regulation, such as the limbic and paralimbic structures (Koelsch, 2009).

The most significant impact of music therapeutic treatment takes place, in this pathological conditions that produce an extreme im-

pairment of communication and of expressive processes of inside mental world (Navone, 2008); the music therapy intervention assumes a particular importance as rehabilitation tool for internal regulation of emotional states and for the redefinition of the patient's intersubjective through a process of co-regulation and affective attunement with the therapist.

Music Therapy can be an effective intervention for improving the quality of life and supporting caregivers in the management of Korsakoff's Syndrome.

# Afterword about Korsakoff's Syndrome

Korsakoff's Syndrome is a syndrome that is characterized by amnesic disorders of memory in the short and long term in the absence of consciousness disturbances. The syndrome is associated with neurological disorders and at a frequent occurrence of moderate-severe Depression. This syndrome is within the mental disorders induced by alcohol and sometimes is an clinical evolution of Wernicke's Encephalopathy (Kopelman et al., 2009).

Korsakoff's syndrome typically affects males of 45-65 years with a long history of alcoholism. The females, however, which have a greater vulnerability to alcohol, tend to develop Korsakoff's syndrome before.

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