

## THE IMPACT OF PHYSICAL THERAPY IN THE PSYCHOSOCIAL REHABILITATION OF CARRIERS OF MENTAL DISORDERS<sup>1</sup>

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There are many body compromises from mental disorder and somatic treatments. This study had the objective of showing the contribution of physical therapy in the minimization of these compromises in the psychosocial rehabilitation of carriers of mental disorders. A total of 24 physical therapy sessions were made, with 15 carriers of mental disorders that offered statements. The results show that the physical therapy contributed minimizing the body compromises caused by the mental disorders, and by the somatic treatments, promoted physical and psychic benefits, favored the interaction and friendly relations, allowing the conclusion that it, the physical therapy, enabled relationships, and therefore, created more possibilities of psychosocial rehabilitation.

Descriptors: Physical Therapy (Specialty); Rehabilitation; Mental Health.

<sup>1</sup> Supported by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) process # 132911/2007-8.

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## **O IMPACTO DA FISIOTERAPIA NA REABILITAÇÃO PSICOSSOCIAL DE PORTADORES DE TRANSTORNOS MENTAIS**

São muitos os comprometimentos corporais provenientes dos transtornos mentais e dos tratamentos somáticos. Este estudo objetivou mostrar a contribuição da fisioterapia na minimização desses comprometimentos e na reabilitação psicossocial de portadores de transtornos mentais. Utilizaram-se 24 sessões de fisioterapia, com 15 portadores de transtornos mentais que ofereceram depoimentos. Os resultados mostraram que a fisioterapia contribuiu, minimizando os comprometimentos corporais causados pelos transtornos mentais e, pelos tratamentos somáticos, promoveu benefícios físicos e psíquicos, favoreceu a interação e as relações de amizade, permitindo a conclusão de que ela, a fisioterapia, facilitou os relacionamentos e, com isso, criou mais possibilidades de reabilitação psicossocial.

Descritores: Fisioterapia (Especialidade); Reabilitação; Saúde Mental.

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## **EL IMPACTO DE LA FISIOTERAPIA EN LA REHABILITACIÓN PSICOSOCIAL DE PORTADORES DE TRASTORNOS MENTALES**

Son muchos los comprometimientos corporales provenientes de los trastornos mentales y de los tratamientos somáticos. Este estudio objetivó mostrar la contribución de la fisioterapia en la minimización de esos comprometimientos y en la rehabilitación psicossocial de portadores de trastornos mentales. Se utilizaron 24 sesiones de fisioterapia, con 15 portadores de trastornos mentales que ofrecieron declaraciones. Los resultados mostraron que la fisioterapia aportó, minimizando los comprometimientos corporales causados por los trastornos mentales y, por los tratamientos somáticos, promovió beneficios físicos y psíquicos, favoreció la interacción y las relaciones de amistad, permitiendo la conclusión de que ella, la fisioterapia, facilitó las relaciones y, con eso, creó más posibilidades de rehabilitación psicossocial.

Descriptores: Terapia Física (Especialidad); Rehabilitación; Salud Mental.

### **Introduction**

The participation of body emplacement professionals, like the physical therapist, has become more and more necessary in mental healthcare teams, due to the search for therapies capable of minimizing the body alterations presented by carriers of mental disorders. However, the scientific literature regarding the issue is still restricted to a few studies<sup>(1-2)</sup>.

Among the set of manifestations that characterize the mental disorders, alterations in the body structure and

movements occur, such as difficulty in moving, tensions and chronic muscle rigidity, postural alterations, abnormal pattern of breathing and loss in body expression<sup>(3-4)</sup>.

The presence of these body alterations, which can happen due to the mental disorder itself or by the prolonged use of psychotropic medications<sup>(3-4)</sup>, interferes significantly in performing day-to-day activities and the interpersonal relations<sup>(1,5)</sup>.

Works of body interventions in the field of mental

healthcare has a main focus the return to the body's reality, so distant, for the carrier of a psychic disorder<sup>(2)</sup>.

The physical therapy provides many therapeutic possibilities capable of improving motor skills, aiding in the restructuring of the psychical and psychic aspects of the individual, therefore, promoting the rehabilitation process<sup>(2)</sup>.

The action of the physical therapist in the mental healthcare team is necessary, in ambulatory and hospital services as well as day hospitals, living centers and psychosocial care, and still, work co-ops, making physical therapy a therapeutic addition in Psychiatry<sup>(5)</sup>.

Studies made with 199 patients in psychiatric admittance, with severe symptoms of depression, anxiety and personality disorders, showed therapeutic effectiveness of two physiotherapy protocols, one of them personalized and based in psychomotor activities, strength training and exercises and relaxing. The comparative results between the two protocols showed, in both of them, significant improvement in the relation to self-esteem, body image, muscle strength, cardiovascular development and improvement in the symptoms of depression and anxiety<sup>(2,6-7)</sup>.

Sessions of physical therapy, including exercises of bioenergetics therapy, made with carriers of psychic suffering and chemical dependency in psychiatric admittance, produced favorable changes in the emotional aspect and verbal expression. There was also an improvement, in the symptoms of depersonalization, muscle pain, respiratory compromise and feeling of anguish<sup>(5)</sup>.

The contributions of the relaxation and stretching techniques, applied in carriers of mental disorders using an open service of psychiatric assistance, were verified, and the results showed improvement in the levels of anxiety, calmer thoughts and gain in the quality of sleep<sup>(8)</sup>.

We highlight the contribution of therapeutic body workshops, based on physiotherapy techniques and dance, in psychosocial rehabilitation and in the exercises of autonomy in carriers of severe and chronic mental disorders in a day hospital, emphasizing the promotion of health and not a cure<sup>(1)</sup>.

## Objective

The objective of this study was to show the contribution of physical therapy in the minimization of the body compromises from several psychiatric treatments, and the psychosocial rehabilitation of mental disorders carriers.

## Method

This was a descriptive-exploratory study with a qualitative approach that enables the study of relations, representations, beliefs, perceptions and opinions, product of the interpretations that the individuals make about their way of living, feeling and thinking. This approach is understood as the most adequate for group studies, where

the intent is to capture the view of subjects facing social experiences<sup>(9)</sup>.

The results were presented in a descriptive form and analyzed under the light of symbolic interactionism and the scientific knowledge produced in the area of Physical Therapy. The choice for symbolic interactionism as theoretical-methodological referential was due to the interest in deepen the study in the way subjects use their bodies to express themselves in social groups, and how these interactions happen among the participants during the proposed activity<sup>(10-11)</sup>.

## Subjects and Location

For the objectives of the present study, subjects were invited to participate, all of them carriers of mental disorders attending a center of psychosocial care (CAPS), on the days and times of the week the physical therapy took place, been that this activity offered conditions for it, in terms of number of participants and location for the development. From the acceptance of these possible subjects, the physical therapy sessions started to be counted for the research, 24 sessions were established for this mean, with a period of three months to complete them. Included in definite in the study, were the carriers of mental disorders who attended until the last session and had a presence of 20 or more sessions, therefore totaling 15 participants.

Among the subjects, 12 were female and 3 male, with the ages between 31 and 63 years old, large variation of marital status, education, predominance of Catholics; and regarding the diagnosis, we highlight squitsofrenia, in seven subjects, recurring depressive disorder in five subjects, and the others dissociative, personality and bipolar disorders, giving the sample a variation in the general characteristics, important for the means of the research, for allowing the amplitude in terms of possibilities to assess its objectives.

## Procedures

The research Project was initially examined and approved by the Ethics Committee in Human Research of the School of Nursing of Riberão Preto at the University of São Paulo, Of. CEP-EERP/USP-119/2008. The subjects were informed of the procedures and the therapeutic proposal in which they were participating, been communicated that they were taking part of a research. After the information, and their acceptance in participating, the subjects and their responsible parties signed a consent form. After the end of this first stage, the therapeutic intervention began, based on kinesiotherapeutic techniques, which use movement as a therapeutic resource and is based in the theoretical domain of Physical Therapy, structured into 24 physical therapy sessions, twice a week, translating into a period of three months. The sessions had an average duration of two hours each and were developed in the appropriate space at the center for psychosocial care. At the end of each session, a verbal dynamic was made and we recorded the statements of the participants

The physiotherapy resources used in the sessions were

the kinesiotherapeutic exercises, consciousness techniques and body expression, postural exercises, therapeutic massage, relaxation and interaction dynamics.

The verbal dynamic was lead by the researcher and guided by a set of questions, with the objective of motivating the subjects to speak about their perceptions regarding body activities: 1) what are your body sensations right now? 2) Which feelings were brought up during the session? 3) How was your body when you arrived, and how is it now? 4) Did you discover something new about your body and your feelings today? 5) Did you have trouble with any of the activities?

The planning and compilation of the therapeutic strategies, for the intervention part of this study, are based on bibliographic research on the therapeutic resources considered adequate for the study's proposal.

The objectives of the physical therapy sessions were established according to the bibliographical research on the most frequent body compromises, in carriers of mental disorders attending the centers for psychosocial care, and in unison with the needs of the group indentified by the multi-professional team of the center where the present study took place.

Therefore, we established the following objective for the sessions: soften the symptoms of the disorders from the movements caused by the adverse effect of the medication, improve motor functions, promote relaxation, develop body consciousness and expression, stimulate body contact and the interaction among the participants.

Since this research has the objective of investigating a therapeutic intervention in the context of psychosocial rehabilitation and that prioritized the psychosocial rehabilitation of the users, we opted to have the group sessions, and for that, the physiotherapy techniques applied in the research were adapted for the group work.

According to the symbolic interactionism, each individual is deeply modified by the group, from social interaction, they create meanings for the objects of their personal world<sup>(10-11)</sup>.

Therefore, the therapeutic groups or therapeutic workshops modify the world view of the mental disorder Carrier, helping them to leave the restrictive view and the social isolation caused by the physio-pathological conditions.

The body activities of the sessions were structured basically in six moments, which were: interiorization, warm-up, therapeutic touch, body image work, body expression and relaxation.

1. Interiorization: aid the individual to reestablish the contact with in, lead the participants to the habit of knowing and feeling their bodies<sup>(12-13)</sup>.

2. Warm-up: prepared the body for physical exercises, activating the body's functions and preventing injuries<sup>(14)</sup>. Developed through kinesiotherapeutic exercises for motor skills, balance, stretching and muscle strengthening. In this stage exercises for postural correction were also made, spontaneous movement dynamics and group interaction dynamics.

3. Therapeutic touch: minimize the difficulty to

establish physical contact, promote bodies free from blockage and more prepared for social interaction<sup>(15)</sup>. We used massage techniques in pairs, group massages, self-massage and dynamics of body contact.

4. Body Image: the body image of carriers of mental disorders reflect an entire world marked by the predominance of psyches, accentuated affective and intellectual indifference<sup>(16-17)</sup>. The body image was worked in all of the workshop's activities, through movement, postural correction, group interaction, expressivity and interiorization.

5. Body Expression: enables waking-up the body in three levels: a) it teaches how to take possession of your own body – recognize it, the possibilities and the limitations; b) teaches to expand the feeling through movement; c) Teaches and promotes the meeting with another, enabling verbal communication and social interaction<sup>(18)</sup>.

6. Relaxation: decrease physical tensions, trigger feelings of mental quietude and body lightness, promote self-worth, stimulate serenity, inner peace, trust others and self<sup>(19)</sup>. It also allows the reinforcements of the contents worked during the session. The techniques used were Jacobson's relaxation and mental imaging technique.

## Results and Discussion

Physical therapy contributed to the psychosocial rehabilitation of the subjects in this study, minimizing the body compromises caused by mental disorders, promoting physical and psychic benefits. Favored interaction and living among users, stimulated the interpersonal relations and expressiveness.

The physical benefits were related to pain relief, improvement of motor functions, motivation, physical disposition and daily activity started to be easier. The speech of the subjects, called *S*, illustrates these aspects. *Now I have more speed in my body's movements and my body is more conditioned, my pain and posture improved. I became a more agile person, stronger, fearless (S13). Contributed for my body to be lighter, more relaxed and ready for other activities. I'm feeling more motivated to come to CAPS (S3). Improved my physical condition and balance, the exercises have also helped me to be more relaxed before bed, I was even able to reduce my sleeping medication (S15). I am more upbeat, before I was always upset and couldn't get better. Now I started to be upbeat, clean the house, make food, before I didn't do those things (S5). After doing the exercises here, I back to doing my shores at home, before I was too prostrated and with pain, now it has improved a lot (S7). I became more flexible, lighter, more upbeat, disposition, feeling of well-being, enthusiasm. And this made my body feel young...Woman (S13).*

The body therapeutics promote self-awareness, allowing the individual to re-dimension their attitudes, recognize the needs and transform the quality of their own lives<sup>(12)</sup>.

The functional independence represents another fundamental aspect of rehabilitation in carriers of mental disorders, according to the speech below. *To walk on the street, at night, was difficult, I felt very dizzy and fell down a lot. Today I go out alone, even at night (S1).*

The psychic benefits attained were related to

motivation, relief of anxiety and mental agitation, improvement in self-esteem and relaxation, according to the statements below. *The physical exercise generates physical and mental health, the head is clearer, more prepared for thought and helps us to do other activities* (S3). *Triggered hope for good things, hope to improve and go back to work* (S4). *Got rid of some of my shyness. I feel much more upbeat, more communicative* (S5). *My thoughts improved a lot, I wanted to commit suicide and go wandering around, now I don't have these feelings anymore, I have more positive thoughts* (S11). *It changes; I have a better mind, better memory. I think life is good, don't have the will to die anymore, I have the will to live and to live well* (S13). *It helped a lot not to over think things. When I go to bed I remember to do the relaxation and when I realize it is morning. It also helped in the personal relationship, to talk. I didn't even like to talk* (S15). *It helped to control my mind, relieve my hot and heavy head. It got lighter; it was as if I'd taken a pill. It improved head and body at the same time* (S6).

We observed that when paying attention to the body, the individual opens the possibility for communication between mind and body, making it possible to experience the moments and give new meaning to body consciousness, and the way of thinking, acting and feeling<sup>(1)</sup>.

It favored the interaction and living among the users and stimulated the friendships, making them more receptive to relate and express themselves, according to the statements below. *The best part was spending time with others, it was very nice to be amongst many people, we open-up more, have more confidence to speak* (S1). *Meeting others help us find ourselves too* (S3). *The friendship and affection remains because before we were resistant to have a caring gesture with people, it made my life more pleasant* (S13). *Together with our colleagues, one supports the other, one needs the other to become stronger* (S7).

In this study, the group interactions were improved among the participants during the sessions and favored social interaction, expressiveness and communication; self-esteem, affection, brotherhood, solidarity, receptiveness and trust in other people. For some of the subjects, the experience of this knowledge was extended to family life, according to the statements from S15, S11 and S13. *Things changes with my daughter, she became more affectionate, I changed* (S15). *I rarely spoke to my daughter and now we talk* (S11). *I am getting along better with my daughter* (S13).

The subjects became more receptive to physical contact, there were important experiences related to affection and spending time with other people, they developed trust and deepen friendships. The statements below show these aspects. *The foot massage was what caught my attention. I felt contact with another human that I couldn't feel before because I didn't let anyone touch me. At that moment I managed to deliver myself* (S8). *Those touch exercises, massage, relaxation, were good because we feel lonely, then we touch people and emotions run high* (S6). *I felt that I was caressing people. I miss that, I feel lonely. I felt like dating, it was affectionate, good feeling* (S5). *The group time brings peace, health, hope of life, warmth, solidarity, and feeling of safety* (S6). *It made us feel the contact with the person, feeling that we are been understood without saying a word, only contact* (S7).

To know the importance of physical contact is a fundamental aspect for the Carrier of physical pain, to minimize the distancing that, with frequency, they put themselves through<sup>(18)</sup>.

The therapeutic touch triggered a feeling of belonging to a group and brought to mind relevant contents to the restructuring of the affectionate and emotional aspects in the rehabilitation process, illustrate by the statement below. *It changed our confidence, before I was scared and embarrassed to touch someone, to say hello, to hug... then it was changing and it opened my mind, it became easier. Now, anyone that come and goes I start a conversation* (S1).

There was improvement in the aspects regarding body image, self-esteem and acceptance of their own bodies, confirmed by the statements below. *Gave me more self-esteem, I felt ugly now it has improved a lot. I started to see that I was not as ugly as I thought. I looked in the mirror and admired myself a little, did not feel bad as I used too* (S7). *The body acceptance improved* (S15). *I even thought I looked like people, prettier* (S10). *I felt like buying a colored dress, wanted to feel like a woman* (S3).

The body work is capable of trigger alterations in the psychological state, for developing a new body image perception, promoting changes in behavior, self-esteem and mood<sup>(20)</sup>.

The limitations in the capacity of body expression in the carriers of mental disorders, limited gestures and restricted movement impede them from expressing efficiently to have a good social communication<sup>(1,18)</sup>.

The expressiveness was compromise due to a number of factors: distancing from body, uninterested in grooming, low self-esteem, rejection to their own image and body alterations due to the mental disorder. To promote body expression it was fundamental to increase the body alterations, from the several adverse effects of the medication.

The most mentioned body alterations were: slow movements, body rigidity, difficulty relaxing, indisposition, despondency, weakness, fatigue, body ache, difficulty walking, dizziness, tremor, falls, difficulty in performing daily tasks and movement robotization, these alterations were present in the statements of S1, S3, S7 e S11. *I feel pain in my body, pain in my bones and fatigue. I feel bad in my head, very dizzy, I can hardly stand* (S1). *I have tremors and my writing is horrible, can't grip the pen* (S3). *I am very still* (S7). *I am Just like a robot* (S11).

Symptoms that compromise the body and the movement appear frequently after the use of antipsychotic drugs, medications inhibitors of psychomotor functions that can cause adverse effects, specially related to movement disorders<sup>(4)</sup>, as described by the statement of S15. *My movements are slow, my leg is stiff, it became rigid, like a little robot. It is so hard and so heavy that I can't walk straight. I can't relax, I become tense. The muscles ache and they are all tense. For doing everything slow, I gets in the way of getting a job, a boyfriend, it makes leaving the house difficult* (S15).

The difficulties of social insertion of the carrier of mental disorder are related to these body compromises<sup>(1,18)</sup>. The physical therapy showed that this process can be interrupted, helping the carrier of mental disorder to create a more functional and expressive body, capable of enabling social interaction.

The subjects acquired more proximity to their bodies and improved their capacity of free expression, according to the statements below. *How nice it is to let loose! It triggered*

*this laughing bag that was kept hidden for a long time. It is the child inside us coming out, happy, playing. Having exercise, playing (S3). I as never able to let loose near other people, and I managed that with you. It helps me loosen up more (S8).*

Body expression gives them autonomy and freedom, providing the possibility to effectively project themselves in the world around them<sup>(13)</sup>. This meeting with self and the reconstruction of individuality baffles the Carrier of mental disorder to a possibility of a real insertion in society. The statements below describe that. *I didn't know that physical therapy had this purpose also...I thought it was a mechanical thing, a bunch of exercises. Then I saw that it was a combination of it all: the exercises, the music and imagination. It worked on everything, the body as a whole (S3).*

The experiments investigated in this study had the objective of causing the Carrier of mental disorder to awaken their own bodies to the possibility of free body expression, using the physiotherapy techniques as resources. It had the goal of showing the subjects a new look towards their bodies, to the other and to the world, making these discoveries a facilitator of their rehabilitation.

The symbolic interactionism, uses as theoretical basis in this study, allowed us to understand how the group affected each individual in aspects related to psychosocial rehabilitation, how was the interaction between the participants, which were the repercussions of these factors for their psychosocial rehabilitation, and showed that the understanding that the carriers of mental disorders have of themselves and their bodies is heightened by the group factor.

According to the subjects' statements, having group activities favored the interaction among the participants, promoting the feeling of group, the feeling of receptiveness and trusting other people, making them more receptive to relations.

The group interaction also favored the development of expressivity and communication of the participants, showing that, when the individuals feel that they belong to a group, their self-esteem becomes stronger and they become more confident to get involved in new social relations, configuring in a relevant factor of psychosocial rehabilitation.

## Conclusion

The participation of the multi-professional team of the Center of psychosocial care, where the present study was developed, in indicating the subjects was extremely important, since they selected users with diverse general characteristics, it enabled the physical therapy intervention in a broader spectrum, reaching people with different behaviors when facing their mental disorders, and a varied possibilities of answers. The choice of location was also extremely important, the fact that it is a center of psychosocial care, it is understood that it must be inserted in the context of psychiatric reform, and thus, seeking mainly the psychosocial rehabilitation of their patients. Therefore, it is the ideal scenario for the objectives of this study.

In the physical therapy sessions, the subjects

discovered their capacities of expression and movement, it favorably modified their self-esteem and, as a result, they learned how to value themselves as people.

The physiotherapy resources promoted mental health because it alleviated the feeling of mental agitation, decelerated their thoughts, improved their disposition, the feeling of physical and mental lightness, concentration, promoted motivation to participate in other activities, to interact socially and to relate with other people, bringing joy and improving self-esteem.

Therefore, the study showed that physical therapy was capable of minimizing the body compromises caused by mental disorders. It contributed to psychosocial rehabilitation, because it helped the carriers of mental disorders promoting physical and physical benefits related to pain and anxiety relief. It also promoted the improvement in motor function, self-esteem, disposition and mood, favoring the interaction and relations among users, stimulating friendships, making them more receptive to relate and express themselves.

The physical therapy sessions also represented a space for the subjects to perceive and elaborate, through verbal dynamics, the advances attained in the rehabilitation process, giving them the possibility to dream with new things and give new meaning to life.

The insertion of the physical therapist in the promotion of mental health and psychosocial rehabilitation, it is still a perspective, and in others an isolated reality. We expect that the work of the physical therapist in this field, becomes even more frequent and rooted, and that the curricular structure of the Physical Therapy courses prioritize the disciplines related to mental health, so that the professional physical therapists can become more capacitated to work in this area, as shown in this study, their work in mental health teams seeking psychosocial rehabilitation of the carrier of mental disorder is extremely important.

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Received: Oct. 26<sup>th</sup> 2010  
Accepted: June 9<sup>th</sup> 2011

### *How to cite this article:*

Silva SB, Pedrão LJ, Miasso AI. The impact of physical therapy in the psychosocial rehabilitation of carriers of mental disorders. *SMAD, Rev. Eletrônica Saúde Mental Álcool Drog. (Ed. port.)*. Jan.-Apr. 2012 [cited: \_\_\_\_\_];8(1):[07 screens]. Available from: \_\_\_\_\_

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