

85 - PHYSICAL EXERCISES TO CONTROL ANXIETY AND MOOD OF CHEMICAL DEPENDENTS ON REHABILITATION IN TERESINA-PI

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1-INTRODUCTION

To Neves; Segatto (2011), the abuse of drugs is a public health problem that affects people of all ages, in all societies, with biopsychosocial consequences. Carlini et al. (2001), sought to trace the approximate profile of drug consumption in Brazil, comparing these data with those from other places in the world. The survey showed that 9.109 million people in Brazil (19.4%) had used any drugs, excluding alcohol and tobacco. The lifetime use of alcohol was 68.7%, 35.5% higher than in Colombia, Chile with less than 70.8%, and USA with 81.0% percentage. As for alcohol dependence is higher for males (17.1%), and the female to 5.7% is a worrying factor.

Was also asked respondents to this survey on the use of tobacco, and it was found that 41.1% of the total dependent population, 46.2% are male and 36.3% female. These percentages are lower than those observed in Chile (70.1%) and US (70.5%), but more than double that of Colombia (18.5%). Thus, the alcohol has a more pronounced as the tobacco culture insert, which can be explained in view of the wide distribution that is made by the media, consequently leading to great social recovery of the drug, which reached 76% of respondents.

The chemical dependence is a condition that like any other can be treated. Among the major forms of drug treatment are psychotherapy, mutual self-help groups such as Narcotics Anonymous, inpatient treatment, outpatient treatment and drug treatment (Baltieri; STRAIN; DIAS, 2004).

In the rehabilitation of chemically dependent process, several symptoms arise, one of them is anxiety. However, physical activity can be a great way to unload or release tensions, emotions and frustrations (CONSENZA; CARVALHO, 1997). According to a study by Scully et al. (1998), the exercise demonstrated positive effects on levels of anxiety and depression, reducing them by improving self-esteem, self-concept and body image of individuals assessed as it releases endorphins in the brain, which provide well-being, pleasure and activates immune system.

2-THE PHYSICAL EXERCISE IN CONTROL OF ANXIETY AND STATE OF HUMOR IN CHEMICAL DEPENDENT

A long time, it is known that regular physical exercise brings many organic adaptations, given the metabolic demands during a state of increased body activity. Moreover, these adaptations together improve physical and mental health of the practitioner, and the people directly involved in the work, at home, in the club, on the beach, among other places it is inserted. (FERREIRA; TUFIK; Melo, 2001).

According to Ferreira; Tufik; Melo (2001), the Centers for Rehabilitation of Drug, mostly to promote physical activity; However, in most cases, the activities are not used methodological and specific way, but even if not well systematized, internal benefit is the ability of relaxation and socialization that physical activity provides.

The benefits of physical exercise on mental health has been the subject of study by several authors. These researchers concluded that increased aerobic exercise or strength training, have a positive response in acute anxiety and chronic form (Correia, 2010). According to Antunes et al. (2005), studies have shown that physical exercise is also capable of reducing the level of anxiety and depression in the elderly.

In a series of experiments, Morgan (1973 cited by de Mello et al., 2005, p.205) indicated levels of anxiety for Inventory scores of the State-Trait Anxiety (STAI) before and after strenuous exercise in adult men. The results showed that when 15 grown men ran for 15 minutes, the anxiety decreased below the baseline immediately after the race and remained decreased for 20 minutes. Six men and six normal neurotic anxiety were tested before and after complete test on a treadmill to exhaustion, and the results showed a reduction in anxiety scores.

In one of his studies Scully et. al (1998) also states that acute aerobic exercise significantly improves their mood, it brings pleasure. The author found the mood of individuals before and after regular exercise at moderate intensity sessions. According Giaccobi; Hausenblas; Frye (2005), a single exercise session can generate acutely reducing anxiety, depressive symptoms, negative mood and decreased gains on positive mood and well-being, reaching different age groups. Thus, individuals who does not exercise perceive more stress than those exercising.

3-METHODOLOGICAL STRATEGIES

The study proposed here is quantitative using descriptive method. According to Fonseca (2002), quantitative research uses mathematical language to describe the causes of a phenomenon, relationships between variables, and others. Already Mattos; Junior; Blecher (2004) say that the descriptive method seeks to find out for sure how often a phenomenon occurs using observation, recording and analysis.

The sample consisted of 35 drug addicts in rehabilitation at the Center for Psychosocial Care (CAPS-AD) in Teresina / PI, however were testing only 22 subjects, it was used as a criterion for inclusion users who correctly answered all questions and participated in physical activity. Of these 22 people, 3 are female and 19 male. The survey was conducted on days 9-10 and July 13, 2014.

In the survey was used as an instrument of data collection, a questionnaire to characterize the sample and two tests, for this article we will only consider the two tests. The first assesses the level of anxiety: Anxiety Inventory State-Trait (STAI) and the second to assess the mood of individuals: the Brunel Mood Scale (BRUMS). These tests were applied before and after exercise that was conducted by the Physical Educator of the CAPS-AD. The workout was 25 minutes on average; content of the exercises were of relaxation and body awareness activities.

IDATE -E Spielberg (1979) consists of a self-report scales, one for trait anxiety and state anxiety to another. We use only the second scale, which verifies the anxiety level of the subject at that moment. Each scale consists of 20 statements, each scored 1-4 (1 = not at all; 2 = a little, 3 = quite, 4 = very much). "The inventory is made up of a score from 0 to 80, which are classified according to the following criteria: 20 to 40 points - low anxiety; Average 40-60 points 40-80 points anxiety and high

anxiety. The higher value is the highest anxiety levels of the individual.

The Brunel mood scale (BRUMS) Terry; Lane; Forgaty (2003) contains 24 simple mood indicators as feelings of nervousness, dissatisfaction and disposal, which are perceived by the individual assessed. Individuals to self assess with the following question: "How am I feeling right now?," based on a scale of 4 points (from 0 = none to 4 = extremely). The 24 scale items comprising six subscales: anger, confusion, depression, fatigue, tension and force, each of these subscales consists of four items, with the sum of responses for each subscale produces a score that can range from 0 to 16 .

For data analysis descriptive statistics were used through frequency, mean and standard deviation. We used the test "t" of student (significance level of 5%) for paired (before and after) data. For the construction of specific tables BRUMS and STAI instrument, the Excel program, both in the organization of the data collected, as well as in measuring the mean and standard deviation was used as well as holding the "t" paired subscales related to testing.

4-RESULTS AND DISCUSSION

CHART 1 - CLASSIFICATION OF ANXIETY LEVEL OF CHEMICAL DEPENDENT BEFORE AND AFTER WORKOUT.

IDATE-E	PRÉ		PÓST	
AVERAGE AGE	36,36			
CLASSIFICATION	IND.	%	IND.	%
LOW ANXIETY	4	18,8	8	36,36
AVERAGE ANXIETY	18	81,82	14	63,64
HIGH ANXIETY	0	0	0	0
TOTAL	22	100	22	100

SOURCE: DIRECT SEARCH (MOTA, EVANGELISTA, 2014).

The chart below shows the level of anxiety of individuals studied before and after exercise according to the classification of the test state anxiety (STAI-E). Thus, among the 22 study participants, 4 (18.88%) subjects were classified as low level of anxiety; 18 (81.82%) were classified as average anxiety and none were found with high levels of anxiety before physical exercise. After physical exercise, 8 (36.36%) subjects were considered low anxiety, 14 (63.64%) subjects with mean anxiety and no one was found with high anxiety. It can be seen that changes in classification occur positive, because of the increase of individuals after exercise ranked in the low-anxiety and reduction in the number of subjects on average rating of anxiety.

Luwish (2007) conceptualizes the endorphins and neurotransmitters associated with feelings of well being and pleasure. To the author's exercise is effective in combating stress and anxiety, by virtue of being a potent releaser of endorphins. As a result, the exercise creates a good addiction when practiced regularly and bring sensations like any other substance associated with pleasure, such as drugs.

CHART 2 - STATE OF HUMOR OF DEPENDENT CHEMICAL BEFORE AND AFTER WORKOUT													
	CONFUSION		TENSION		DEPRESSION		ANGER		FATIGUE		ENERGY		
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
MÉDIA	3,00	2,14	4,23	2,59	3,64	2,00	1,73	0,86	3,14	2,18	8,55	9,68	
SD	3,06	2,25	3,52	2,38	4,01	2,00	2,78	1,52	3,54	2,15	3,97	4,43	
TEST T	1,062		1,81		1,72		1,29		1,09		0,89		

SOURCE: DIRECT SEARCH (MOTA, EVANGELISTA, 2014).
SD=standard deviation.

From the data analyzed, it was observed that all subscale means tested positive after exercise. Therefore, there was a decrease in numbers of mental confusion (3.0 ± 3.06 before exercise to 2.14 ± 2.25 after exercise), tension (4.23 ± 3.52 before and 2.59 ± 2.38 after), depression (3.64 ± 4.01 and 2.0 ± 2.0 before then), anger (1.73 ± 2.78 and 0.86 ± 1.52 after), fatigue (3, 14 ± 3.54 2.18 ± 2.15 before and after) .E, finally, an increase in force variable, (8.55 ± 3.97 9.68 ± 4.43 before and after). Despite the differences, these results were not considered statistically significant, according to analysis by test T

The positive results found in subscale means that can be explained by the hypothesis of endorphins Cruz; Alberto son; Hakamada et. al (2013) where the author says that in addition to pain relief, feelings of pleasure and well-being, endorphins improve mood and decrease the stress state of the body.

5-FINALS CONSIDERATIONS

As was seen, one can infer that exercise can be considered an additional way for the process of treating drug addicts. Therefore compared the anxiety practice exercise has had a positive effect on reducing the number of individuals with anxiety. In the mood positive results were also observed in all media from subscales. However, when analyzing the data in a statistical way it was perceived that there was no significant results, which may be associated with the type of physical activity performed by the research subjects and the low exercise intensity applied by the physical educator during the data collection which was only 25 minutes of stretching exercises.

Given all that has been discussed, we noticed that understanding the function of exercise on chemical dependent requires further investigation. It is recommended for future studies, increasing the intensity and the use of games and recreational activities in order to obtain better results, after all, it was found that under the general conditions shown in this study was not sufficient to obtain values significant in mood and anxiety level of the participants of the research.

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ABSTRACT

The drug abuse is a public health problem that affects people of all ages, in all societies, with biopsychosocial consequences that need to be discussed nationally and internationally. In Brazil, it is estimated that 9% of the population is chemically dependent. In this context, the present study has as main objective to analyze the acute effects of exercise in controlling the level of anxiety and mood among a group of people participating in a Rehabilitation Center Drug in the city of Teresina, PI. The research is quantitative using the comparative method. The study population consisted of 35 recovering addicts at the center for psychosocial care Alcohol and other drugs (CAPS-AD), but only 22 people had their data analyzed. In the survey, was used as an instrument of data collection, a questionnaire to characterize the sample and two tests, one to measure the level of anxiety (STAI-E) and the second to assess the mood of individuals (Scale of humor of BRUMS). The tests were administered before and after exercise on days 9, 10 and July 13, 2014. The test results when compared before and after demonstrated that there was a decrease in the number of individuals with anxiety. In the mood were observed positive results in all subscale means. However, when analyzing the data in a statistical way it was perceived that there was no significant results on mood state. It is concluded that exercise has had a positive effect on anxiety and mood of drug addicts. Therefore, the exercise can be considered an additional tool in the treatment of drug addicts.

KEYWORDS: Chemical Dependent. Anxiety. Exercise.

EJERCICIOS FISICOS PARA EL CONTROL DE LA ANSIEDAD Y EL ESTADO DE HUMOR ENTRE LOS DEPENDIENTES QUÍMICOS EN LA CIUDAD DE TERESINA-PI

RESUMEN

El abuso de drogas es un problema de salud pública que afecta a personas de todas las edades, en todas las sociedades, con consecuencias biopsicosociales que necesitan ser discutido a nivel nacional e internacional. En Brasil, se estima que el 9% de la población es químicamente dependiente. En este contexto, el presente estudio tiene como principal objetivo analizar los efectos agudos del ejercicio en el control del nivel de ansiedad y estado de ánimo de un grupo de personas que participan en un Centro de Rehabilitación de Drogas en la ciudad de Teresina, PI. La investigación es cuantitativa usando el método comparativo. La población de estudio consistió en 35 adictos en recuperación en el centro de la atención psicosocial de alcohol y otras drogas (CAPS-AD), pero sólo 22 personas han tenido sus datos analizados. En la encuesta, se utilizó como instrumento de recolección de datos, un cuestionario para caracterizar la muestra y dos ensayos, uno para medir el nivel de ansiedad (IDATE-E) y la segunda para evaluar el estado de ánimo de las personas físicas (Escala de humor de BRUMS). Las pruebas se administraron antes y después del ejercicio en días 9, 10 y 13 de julio de 2014. Los resultados de las pruebas comparan el antes y el después, mostraron que hubo una disminución en el número de individuos con ansiedad. En el estado de ánimo se observaron resultados positivos en todos los medios de la subescala. Sin embargo, al analizar los datos de una manera estadística se percibió que no había resultados significativos en el estado de ánimo. Se concluye que el ejercicio ha tenido un efecto positivo sobre la ansiedad y el estado de ánimo de los adictos a las drogas. Por lo tanto, el ejercicio puede ser considerada como una herramienta adicional en el tratamiento de adictos a las drogas.

PALABRAS CLAVE: Dependientes Químicos. Ansiedad. Ejercicio

EXERCÍCIOS FÍSICOS NO CONTROLE DA ANSIEDADE E NO ESTADO DE HUMOR ENTRE DEPENDENTES QUÍMICOS EM REABILITAÇÃO NA CIDADE DE TERESINA-PI**RESUMO**

O uso abusivo de drogas é um problema de saúde pública que afeta pessoas de todas as faixas etárias, em todas as sociedades, com consequências biopsicossociais que precisam ser discutidas nacional e internacionalmente. No Brasil, estima-se que 9% da população seja dependente químico. Neste contexto, o presente estudo tem como objetivo geral analisar os efeitos agudos do exercício físico no controle do nível de ansiedade e no estado de humor junto a um grupo de pessoas participantes de um Centro de Reabilitação de Dependentes Químicos na cidade de Teresina-PI. A pesquisa é de natureza quantitativa com uso do método comparativo. A população desse estudo foi constituída por 35 dependentes químicos em recuperação no centro de atenção psicossocial álcool e outras drogas (CAPS-AD), porém apenas 22 pessoas tiveram seus dados analisados. Na pesquisa, utilizou-se como instrumento de coleta de dados, um questionário para caracterizar a amostra e dois testes, um para avaliar o nível de ansiedade (IDATE-E) e o segundo para avaliar o estado de humor dos indivíduos (Escala de humor de BRUMS). Os testes foram aplicados antes e depois do exercício, nos dias 9, 10 e 13 de julho de 2014. Os resultados dos testes quando comparados o antes e o depois, demonstraram que houve a diminuição do número de indivíduos com ansiedade. No estado de humor foram observados resultados positivos em todas as médias das subescalas. Porém, ao analisar os dados de forma estatística percebeu-se que não houve resultados significativos no estado de humor. Conclui-se, que o exercício físico surtiu efeito positivo na ansiedade e no estado de humor dos dependentes químicos. Por isso, os exercícios físicos podem ser considerados uma ferramenta adicional no tratamento de dependentes químicos.

PALAVRAS-CHAVE: Dependente químico. Ansiedade. Exercício físico.