

Therapy and Physical Education; Capoeira Art and Art Education; and Physical Education and Art Education. These applications of planned games or play activities were used with 245 fourth grade children in two public schools in the city of Americana, Sao Paulo, Brazil in 2003. The study included 121 females and 124 males with ages ranging from nine to twelve years. Anthropometric measurements of height and weight were used to calculate the Body Mass Index (BMI) in order to evaluate overweight and obesity. The risk of developing psychopathology was assessed using the Achenbach Child Behavior Checklist (CBCL); the Nowicki-Strickland Locus of Control Scale for Children (NSLC); and the Susan Harter Self Perception Profile of Children (SPPC). These tests evaluated the factors of locus of control and self-esteem before and after the application of the activity. These elements are considered to be protective components in mental health.

The results obtained by application of these group activities of Physical Education and Art Education were not significant enough to reduce the risk of developing psychopathology or reducing overweight or obesity. On the other hand, the group of Art Therapy and Physical Education acted only as a form of psychotherapy, significantly decreasing the level of psychopathological symptoms (CBCL), 32% ($p < 0.05$). However, it did not significantly increase the protective mental health elements

which does not guarantee an effective prevention for this group. Nevertheless, the Capoeira Art and Art Education group achieved the objectives proposed. These students presented a significant reduction of externalization and internalization (CBCL), 58% ($p < 0.05$); as well as a significant increase in self-esteem and internal control, confirming a significant reduction in overweight or obesity (50%), ($p < 0.05$). This correlated with a significant reduction in the risk of developing psychopathology, thereby, establishing a correlation between mental health and obesity.

In this way, the game/playing activities are outstanding as a possible application for programs of primary prevention in public health. Even though an increase in resistance and a decrease in risk of developing psychopathology and obesity were obtained with the application of these game/playing activities, this is not enough to believe that these children will remain protected over the coming years or in adulthood. This fact is very important for calculating the time of application in the future preventive programs utilizing these game/playing activities. New prospective studies of longer duration are of fundamental importance for establishing the effects of these activities on the prevention of psychopathology and obesity over the long term.

KEY WORDS: child behavior, self-perception, locus of control, obesity, child, adolescent.

*Suporte social como prevenção em saúde mental e obesidade. intervenções através das atividades lúdicas no cenário escolar (Resumo). Tese de Doutorado, Universidade Estadual de Campinas (Área: Saúde da Criança e do Adolescente). Faculdade de Ciências Médicas. Orientador: Rubens Reimão.

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REPERCUSSION OF BRIEF HYPERVENTILATION MANUEVER ON THE CEREBRAL AND SYSTEMIC HEMODYNAMIC AND GASOMETRIC PARAMETERS IN MECHANICALLY VENTILATED PATIENTS (ABSTRACT)* **THESIS. ARACAJU, 2006.**

TELMA CRISTINA FONTES CERQUEIRA **

Measurements of respiratory mechanics, very important to conduct the patient with mechanical ventilation, are obtained with the relaxation of respiratory muscle in sedated or paralyzed patients or through a brief period of hyperventilation (HV), which is possible to decrease the drive ventilation of patient. However, it is known that the hyperventilation decreases the carbon dioxide arterial pressure (PaCO_2) and can induce changes in the cerebral blood flow.

This study proposes to verify the effects of this brief period of HV on the gasometric parameters, cerebral and systemic hemodynamic in 15 mechanically ventilated patients, with ventilation drive and different pathologies, except cerebral pathology, admitted in Intensive

Care Unit of Vita Hospital in Curitiba-PR, being 12 males (80%) and three females (20%), mean age 61.29 (± 18.97), eight clinical and seven surgical diagnosis.

The protocol consisted of a brief HV with increase by 50% from previous minute volume of patient for two minutes. The variables were recorded before, on the first minute of HV (HV1), on the second minute (HV2) and five minutes after the end of maneuver. The parameters recorded were mean blood flow velocity and pulsatility index through transcranial Doppler of the middle cerebral arteries, blood gas parameters (pH, PaCO_2 , EtCO_2 , HCO_3^- , BE, PaO_2 , SatO_2 e SpO_2), besides heart rate and mean arterial pressure. The data were averaged statistically by ANOVA, Newman-Keuls and Wilcoxon tests.

The normality condition of data were averaged by Kolmogorov-Smirnov. Values of $p < 0.05$ indicate statistically significant.

The results show a decrease of mean blood flow velocity of the right ($p=0.18888$) and left ($p=0.0071$) middle cerebral arteries, mainly on the first minute of HV, estimating a decrease of cerebral blood flow (4.12% and 6.51%, of the right and left middle cerebral arteries, respectively). Five minutes after HV, there was a return to baseline values. In relation to gasometric parameters, there were a significant variation of EtCO_2 and PaCO_2

during the HV, with smaller changes of PaCO_2 in relation to EtCO_2 . The pulsatility index, another gasometric parameters, heart rate and mean arterial pressure remained stable during HV.

Concluding, based on results of this study, that the maneuver of HV may be security applied and does not promote cerebral and systemic repercussion in studied patients.

KEY WORDS: hyperventilation, cerebral blood flow, transcranial Doppler.

* Repercussão da manobra de hiperventilação breve sobre a hemodinâmica cerebral, sistêmica e alterações gasométricas em pacientes sob assistência ventilatória mecânica (Resumo). Tese de Mestrado, Universidade Federal de Sergipe, UFS (Área: Ciências da Saúde). Orientador : Carlos Umberto Pereira.

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PHYSICAL EXERCISE INDUCES FUNCTIONAL RECOVERY AFTER SCIATIC NERVE TRAUMA IN RATS (ABSTRACT)*. **THESIS. ARACAJU , 2006**

CARLOS MICHELL TÔRRES SANTOS **

Recent studies show a probable relationship between physical training and functional recovery after a peripheral nerve lesion. Meanwhile, there is not an agreement about what kind of physical training should be elected to obtain best results.

The present research verifies influence of predominant aerobic and anaerobic physical exercises on functional recovery process on days 5, 10, 15 and 20 after rat's sciatic nerve crush, by a non-invasive method called sciatic static index. Statistical analysis was made with 0.05 significance level.

With variance analysis application it was observed an increment on functional recovery by the tests accom-

plished in days 15 and 20 after lesion to groups submitted to physical exercises. Latterly, it was employed Turkey test, which made possible to conclude that predominant aerobic and anaerobic exercises are not different on benefits offered in functional recovery process after peripheral nerve lesion.

Finally, two-way variance analysis demonstrated any influence in a significant manner the functional recovery process to analyzed groups, evidencing that physical exercises increase recuperation of nerve function.

KEY WORDS: sciatic trauma, physical exercise, functional recovery.

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ATTENTION-DEFICIT HYPERACTIVITY DISORDER SYMPTOMS AND SLEEP DISORDERS (ABSTRACT)*. **DISSERTATION. CAMPINAS, 2006.**

SÉRGIO NOLASCO HORA DAS NEVES**

Objective: This study examined the relationship between Attention-Deficit Hyperactivity Disorder (ADHD) and sleep disorders to characterize clinical features and associated problems.

Method: In the first paper we review the researches literature about sleep disorders in children with ADHD

with and without psychostimulant treatment. In the second paper we performed a record review of 50 consecutive children and adolescents aged 4 to 17 years with ADHD who do not have mental retardation or pervasive developmental disorders.

Results: Infants with sleep disorders were associat-