150 - THE EFFECT OF PHYSICAL EDUCATION ACTIVITIES FOR HEMIPLEGIC PEOPLE CAUSED BY STROKE: THE REDISCOVERY AND THE UTILIZATION OF NEGLECTED HEMIBODY

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Introduction

According to Bobath (1978), most frequently cause of hemiplegia on adult is the stroke, defined as the sudden beginning of neurologic symptoms caused by an interruption on cerebral blood supply (OMS, 2003).

There are many factors that intervene in normal motor function on hemiplegic adult, which can been very painful and limit significantly the life quality (PINEDO, 2001; ZYLUK & ZYLUK, 1999), which Bogey (2004) cites the spasticity and the postural reflex mechanism disturb. Teixeira (2003) adds, yet, in this frame, sensitive alterations that can attack hemibody, or, most specifically, the superior limb, besides an outward oversight from hemispace, as if attacked limb don't exist more in that body. This disturb is defined as "neglect syndrome": a reduction of stimuli conscience showed for opposite side from a right hemisphere lesion, even thought it can ever have any sensorial loss (HEILMAN, 2004; PARTON,2004).

The Neglect Syndrome

Brown (1999) describes some symptoms manifested on daily activities like reading, painting, drawing, dressing, or grooming. For example, they can omit complete words at left side from a page when they read a newspaper.

Some studies, which we can cite Rode et al (1998), Brown (1999), Ishiai (1997) e Pierce (2002), report, with curiosity, a partial performance of some movements at attacked side and a pathology significantly reduction in patients during acute phase, when they used as methodology both sensorial stimulations and spatial attention treatment with self activation from attacked limb or both.

The Corporal Image

We know that cerebral hemispheres, although symmetrical in anatomy, are not identical regarding function. The left hemisphere controls the right body's side and the right hemisphere, the left side. Each one of this cerebral half perceives the reality and work the stimuli received in different way. When a local lesion affects seriously the hemisphere regions responsible by the processing of information, proceeding from afferent ways, the corporal image change deeply too, because a part of psychical life is cuts off (SCHILDER, 1999).

It's common for hemiplegic person use only the non-attacked side in any activity or self-care, because the change in corporal image resound in a dichotomized relation with their self body, which the affected side is seem like an useless thing, without function and that confuses any movement, while the non-attacked side is considered the good side, useful and beautiful. In terms of this ascertainment, we realized this study with the aim of t investigate the effect of activities of physical education, as strategy to reduce the symptoms of this disturb. We hope, so, not to generalize a cure for these people who suffer whith this kind of trouble, but to understand the context and the phenomenon which appear into the group, to, therefore, give him a more qualified assistance.

Methods

The main axes of this work was the development of physical education with three hemiplegic adult students, who had suffered stroke, independently of cerebral hemisphere affected, from Motor Activity Program for Disable (PROAMDE) of Amazon Federal University (UFAM), on august, 2004, to august, 2005. Whose activities had contemplated the intentional utilization of affected hemibody.

We choice the qualitative approach because this method makes possible a particular comprehension of that object, where the focus of the search is centered on specific, on peculiar, on individual, yearning always for the understanding and don't for the explication of phenomenon studied (MARTINS, 1989).

To understand more the perception of subjects in relation to their body we make use of two half-structured interviews - one on beginning and other on the end of data collects - recorded in K7 tape, with each participant, for further data transcription and interpretation, through analysis of contents technique, according to Bardin (1977). We makes use too of an motor assessment, didn't validated, created for us, to verify the effect of physical activities on pathology. This assessment was divided in two groups: locomotion and manipulation. On locomotion we develop five activities, whose aim was to verify the utilization of both inferior limbs in alternated ways, making use of EVA carpets and little obstacles in the soil. In manipulation we develop six activities that simulate situations where it should be more advantageous to use both superior limbs in same time, making use of balls with varied sizes, rings and pedagogic toys with pieces you incase.

Results

a) The Motor Assessment:

Locomotion

The students 01 and 03 in initial assessment showed yet feet alternation during walk and realized all locomotion activities, but, in the end, they increased the amplitude of steps and walk velocity. The student 02 showed more motor impairment and didn't get a good performance in both initial and final assessment. The great difficulty on locomotion activities for three students was to go up and down degrees on a ramp alternating steps and crawl on mattress.

Manipulation

In manipulation activities, both on beginning and the end, there was less performance for three participants, because all them had transferred balls using only the non-affected hand, both making the transference from left side to right and vice versa. The same occur on activity of put the rubber rings on pine. Only student 03 gets to put the shoestring and makes knot, but using only the non-affected hand.

b) The interview:

After exhaustive reading of initials and finals interviews, we can to infer about the perception of subjects in relation to their body, showing three **"enter" indicators** and three **"exit" indicators**, which relates.

On enter indicator, the first we called "**perverse dichotomic vision"**. Dichotomic vision because they perceived their body as two different parts, where there are a good side and a bad side, a living side and a dead side, a useful side and a useless side. Perverse, because the relation between two hemibodies was extremely opposite, relating ever to affected side in negative form. The second indicator is the "**incapacity"**, where the participants recognize their disable, but do not know or deny their remaining ability, always affirming that do not get or can not.

The third indicator is what we called by "**oversight limb"**, because, given the functional limitation of affected side, the subjects forget or ignore the limb from this side and give up of its utilization, in a kind of, as it didn't belong that body.

The exit indicators are related with the first and glimpse, indeed, an alteration of enter indicators

We called the first exit indicator by **neutral dichotomic vision**, because the differentiated perception of body is present yet, but there isn't that dualist vision then before, neither the negative reference to affected side. They only refer to him by a negative form.

On second indicator we have the **possibilities**, that is to say, the conscience of that they still can do many activities with remaining movements and the hope of to surpass their own limitations given place for their capacities.

Finally, the **oversight limb** still has persisted during final interview and was the only indicator which we did not get to change and, for that reason, we deduce that it can to be related with dichotomic vision, indicating that they did not reached what we should call by body holistic vision.

Final considerations

This study did not have the intention to be conclusive. The information and data obtained until now led us to infer that the hemiplegic people, analyzed in this work, showed an dualist corporal image, which we called by pseudo-neglect because they slight the affected side all, not by a unaware way, as occur in the syndrome, but completely conscious, becoming thus an agent equally incapable. In our study, we modified the look that this people have of their self like an incapable being to being with many capacities and possibilities. We can't affirm that change of this image, simply, causes a completely utilization of affected limbs. But, the physical education can to create conditions, through physical exercises, for that hemiplegic people find their own possibilities.

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THE EFFECT OF PHYSICAL EDUCATION ACTIVITIES FOR HEMIPLEGIC PEOPLE CAUSED BY STROKE: THE REDISCOVERY AND THE UTILIZATION OF NEGLECTED HEMIBODY

Abstract

The purpose of this study was to investigate the outcome of Physical Education activities on reduction of Unilateral Neglect in hemiplegic students attacked by stroke, who participates on the Motor Activities Program for Disables (PROAMDE), moreover to watchful the subject's corporal perception. For that reason, it was realized an semi-structured interview on beginning of the search, recorded on K7 tape, who was repeated on the end of the program, to further transcription and interpretation of datas through analysis of contents technique. The outcome during physical education activities was verified By a motor assessment, not validated, criated by our own way, and analysed descriptively. From three students analyzed, no one manifests completely the Neglect Syndrome, however, all they show a segregated image of their self bodies, where one side, the affected, they reject wholly. Therefore, we believe this self negative body image can being changed through a most utilization of this side.

Key-Words: Hemiplegia; Stroke; Neglect Syndrome; Rehabilitation.

L'EFFET DES ACTIVITÉS D'ÉDUCATION PHYSIQUE POUR LES PERSONNES HÉMIPLÉGIQUES PROVOQUÉES PAR STROKE : LA REDÉCOUVERTE ET L'UTILISATION DE HEMIBODY NÉGLIGÉ

Résumé

Le but de cette étude il était faire des recherches sur résultat des activités de l'éducation physique dans la réduction de la négligence unilatérale dans les étudiants hemiplegicos attaqués par la flaque qui prennent part le programme des activités canots à moteur pour ce qui est déficients (PROAMDE) d'autre part, dévoiler la perception corporelle du sujet. Cette raison, a été effectuée une entrevue semi- structurée dans le principe de la recherche enregistré dans le ruban K7, qui a été répété dans la fin du programme, à la transcription et à l'interprétation postérieure de l'information avec l'analyse de la technique du contenu. Le résultat pendant des activités de l'éducation physique a été vérifié par une évaluation canot à moteur, non validée, créée par notre manière propre, et analysait descriptivelmiente. À partir de trois étudiants analysés, aucune personne manifiestou totalement le syndrome de la négligence, mais, tous démontrent une image ségrégée de leurs corps, où un côté, celui touché, ils rejette complètement. Par conséquent, nous croyons que celle-ci autoimagen refus du corps peut être altérée avec une plus grande utilisation de ce côté touché

Mots clef : Hemiplegia ; flaque ; Syndrome de la Négligence ; Réadaptation.

EL EFECTO DE LAS ACTIVIDADES DE LA EDUCACIÓN FÍSICA PARA LA GENTE COM HEMIPLEJÍA CAUSADO POR DERRAME: EL REDESCUBRIMIENTO Y LA UTILIZACIÓN DE LO HEMICUERPO NEGLIGENCIADO.

Resumen

El propósito de este estudio era investigar el resultado de las actividades de la educación física en la reducción de la negligencia unilateral en los estudiantes hemiplegicos acometidos por el derrame que participan en el programa de las actividades motoras para los deficientes (PROAMDE), por otra parte, desvelar la percepción corporal del sujeto. Por esa razón, fue realizado una entrevista semi-estructurada en el principio de la búsqueda registrado en la cinta K7, que fue repetida en el final del programa, a la transcripción y a la interpretación posterior de la información con el análisis de la técnica del contenido. El resultado durante actividades de la educación física fue verificado por una evaluación motora, no validada, creada por nuestra propia manera, y analizaba descriptivelmiente. A partir de tres estudiantes analizados, ninguna persona manifiestou totalmente el síndrome de la negligencia, pero, todos demuestran una imagen segregada de sus cuerpos, donde un lado, el afectado, ellos rechaza enteramente. Por lo tanto, creemos que esta autoimagen negativa del cuerpo puede ser alterada con una mayor utilización de este lado afectado.

Palabras claves: Hemiplegia; derrame; Síndrome De la Negligencia; Rehabilitación.

O EFEITO DE ATIVIDADES DE EDUCAÇÃO FÍSICA PARA PESSOAS COM HEMIPLEGIA CAUSADAS POR AVE: A REDESCOBERTA E UTILIZAÇÃO DO HEMICORPO NEGLIGENCIADO

Resumo

Este trabalho teve como objetivo investigar o efeito das atividades de Educação Física na diminuição da síndrome da negligência em alunos hemiplégicos por AVE que participam do Programa de Atividade Motora para Deficientes (PROAMDE), além de desvelar a percepção corporal dos sujeitos. Por isso, foi realizada uma entrevista semi-estruturada, no início da pesquisa, gravada em fita cassete, a qual foi repetida no final do programa, para posterior transcrição e interpretação dos dados através da técnica de análise de conteúdo. O desempenho dos alunos, durante as atividades de Educação Física, foi verificado através de uma avaliação motora, não validada, criada por nós e analisada descritivamente. Dos três alunos analisados, nenhum manifestou a Síndrome da Negligência, entretanto todos apresentaram uma imagem segregada de seus próprios corpos, no qual um lado, o afetado, é inteiramente rejeitado por eles. Desse modo, podemos inferir que através da maior utilização deste lado, pode-se mudar a imagem corporal negativa que eles têm de si.

Palavras-chave: hemiplegia; Acidente Vascular Encefálico; Síndrome da Negligência; reabilitação.