35 - EVALUATION OF QUALITY OF LIFE AFTER IF SPINAL CORD INJURY PATIENT AFER BASKETBALL ON WHEELS

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INTRODUCTION

The spinal cord injuries are more frequent in Brazil, mainly due to increased urban violence, such as traffic accidents and injuries by firearms. She is clear-cut by the American Spinal Injury Association (ASIA) as a decrease or loss of motor function and / or sensory impairments can be classified as complete or partial damage due to trauma of neuronal elements within the spinal canal (BARROS FILHO et a,1994l)

The spinal cord injury can result in changes in motor and sensory functions and autonomous, involving partial or total loss of voluntary movement or sensation (tactile, painful and deep) in upper / lower and changes in the functioning of the urinary, bowel , respiratory, circulatory, sexual and reproductive (Lianza S, et al, 2002). It is also known that the consequences arising from this trauma, such as social difficulties, can directly interfere with their quality of life.

The World Health Organization (WHO) believes that the quality of life is the individual's perception regarding their position in life, in the context of culture and value system in which they live and in relation to their goals, expectations, standards and concerns.

Among the instruments to assess quality of life, which are scientifically validated and have been translated into Portuguese, we highlight the generic SF-36. According Ciconelli et al. (1999), the SF-36, Medical Outcomes Study 36-Item Short-Form Health Survey, an instrument originally created in English, easy to administer and understand.

The beginning of the adapted sports occurred soon after World War I, due to the need for social reintegration of disabled people, for the most part, victims of war (ARAÚJO, 1998). In 1944, the German doctor Ludwig Guttamann, neurosurgeon, believed that sports was the key to motivating and lessen the sadness and boredom of a disabled person. but ended up being surprised. He showed the world that all people with a disability could perform physical activities and sports (ROSADAS, 1989)

In Brazil, the adapted sport athlete began with Sergio Seraphin del Grande, a paraplegic. This athlete ,after conducting rehabilitation treatment in the United States. He was responsible in 1958 for founding the first institution of its kind in Brazil, the Paraplegic Club of St. Paul (PBPC) (BRANUZA & CASTRO, 2002)

The practice of adapted motor activity increased significantly in Brazil in recent years due to social inclusion and greater popularity and dissemination of Paralympic sport, thus enabling individuals with any physical disability of character are able to do it.

This study analyzes the responses related to basketball adapted and its relationship to quality of life

MATERIALS AND METHODS

This is a case study of longitudinal, comparative type cause / effect. The study was approved by the Ethics Committee of Assisi School Gurgacz - Cascavel - PR. After approval by the Ethics Committee in Research of Assisi School Gurgacz, patients were selected as indicated by medical and release, they were informed about the objectives and procedures of the research. Therefore, signed a consent form and gave up early to study.

The activities took place once a week (Wednesday, 09:00 to 11:00). The team was composed of academics from different periods of the courses of physical therapy and supervised by the professor teaching the respective course, to prepare and train these individuals to practice basketball on wheels.

As evaluation criterion, we applied the generic questionnaire on quality of life SF-36 to each patient contact and after the first four months of service. This consists of 36 questions, which are evaluated eight components: physical functioning (10 items), Physical Appearance (04 items; Pain (02 items) General Health (05 items), Vitality (04 items), Social Aspect (02 items), emotional (03 items) and Mental Health (05 items). presents a final score from 0 to 100, where zero corresponds to the worst overall health status and 100 the best health

The activities lasted, an average of two hours, was held games, extra activities. and guidelines for past participants. The equipment used were adapted and wheelchair basketball, existing in the institution.

Before each activity, each participant guided by academic exercises held responsible for warming, global stretching, breathing training to improve performance during the game and prevent possible injury. Was also provided proper adjustment of the individual to chair adapted to the game with techniques transfer and training of the sports gesture. After the game the participants were asked to relaxation exercises to prevent pain due to physical activity.

We conducted twenty-five meetings, having started in May/2011 and ending in October/2011.

RESULTS AND DISCUSSION

We can say that for people who took part in this activity, basketball had a great role in the quality of life of each one. During this study it was observed that the practice of this sport has generated not only physical and emotional benefits to participants, but also motivated them along with their families, the recovery of their dignity in society.

Table 1 presents the differences obtained between the components of Quality of Life Questionnaire SF-36 before and after basketball practice.

Components	Average Before	Average After
Functional capacity	42	58,33
Physical Aspects	73,7	75,5
Vitality	51,33	65,2
Social Aspects	79	91
Emotional Aspects	65,3	77
Mental Health	65,5	65
Pain	59	59
General Health	75,6	81,33

Table 1: Comparison of quality of life in patients with spinal cord injuries before and after basketball: Source: Author/2011

Checking the table, we can say that improvement in functional capacity, physical appearance, vitality, emotional, social and general health. Since the components pain, and mental health remained the same.

In regard to the emotional aspects, subjects scored significantly higher after basketball practice adapted, confirming studies Tomporowski (2003) demonstrated that the relationship of regular exercise with improved mood and psychological well-being. In another study GOBBITA and GUZZO (2002) show that self-esteem is the opinion, feelings, thoughts and behaviors in relation to himself. That is, the value judgments that the individual holds in the face of itself. It further states that people with high self-esteem are more confident in their overall capabilities, thus maintaining a positive image of themselves.

By analyzing the physical component, we can notice a small improvement in the medium compared to the beginning and completion of activities. Steinberg (1994). He believes that physical activity provides the physical well-being and psychological in all people, with and without disabilities. He also believes that the practice of physical exercises for people with any kind of disability, are beneficial to the physical of these people. The purpose of an adapted physical activity program aims to establish a direction and shall be consistent with defined objectives and is suitable for development as a whole, with a view to improving self-esteem and self-realization. WINNICK (2004).

The general health domain, characterized by the subjective perception of health shows a positive effect after basketball practice adapted, suggesting that basketball can provide a tailored wellness and improve the health of its practitioners. The World Health Organization (1978) defines health as a state of complete physical, mental and social, not simply the absence of disease or infirmity. Straub (2005) adds, this definition characterizes health as a positive state and multidimensional involving three domains: physical health, psychological health and social health.

The integration in social activities, as measured by area, social aspects, was another who got a positive effect. In a similar study, FREITAS, (1997), says that physical activity in rehabilitation sought a way to enable these people to interact with society, showing the residual capacities of people with physical disabilities through sports). ADAMS (1985), noted that thanks to recreational activities, the disabled find the motivation to participate in the larger community to produce, to work and to assume leadership roles in the community.

Observing Table 1.We can consider an improvement in the domain vitality, in this context, various researches, it has been shown that in acute bouts of physical activity, promote an improvement in mood, such as reduced stress / anxiety, depression and anger and increases in vigor that may last for hours after exercise, and that the repetition of these effects would bring long-term positive effects for health (WERNECK, 2006).

In the field of Mental Health, the questionnaire investigates depression, anxiety, psychological well-being and changes in behavior or lack of emotional evaluated (TEIXEIRA et al., 2002). In relation to this area was not significantly different after basketball, which contradicts McAuley and Rudolph (1995). In his research that studied the effects of physical activity in reducing stress, depression and anxiety, proving that the practice of physical activity may be positive for the improvement of mental health in individuals.

The functional capacity that corresponds to the physical limitations, presented in Table 1. Enables individuals to better implementation of activities of daily living. This result confirms data from the literature that found a higher level of functional capacity and smaller physical aspects limitation in individuals practicing regular exercise.

The pain component evaluates the presence of pain, its intensity and its interference in activities of daily living, the results in Table 1 suggest that the adapted physical activity, does not provide a reduced development of these pains. Unlike, SILVA (2010) who found that regular exercise can give the appearance of lower body pain practitioners.

Practice a physical activity with the goal of social inclusion, not only mitigates certain health problems, as are strategies that provide the practitioner with an attempt to overcome the difficulties caused by physical accidents (Levandoski & Cardoso 2007).

Ribeiro (2001) states that the sport through its social dimensions, can enable an inclusive action, considering that sports activities have made and are still part of the construction of man in his cultural milieu.

The benefits also provided by the adapted physical activity include: skills physical / motor skills such as balance, strength, agility, muscular endurance, and also the potential that involve physical movement, such as body awareness, the repertoire of movement and spatial orientation are stimulated by physical activity and become essential for a healthy life. (Diehl, 2006).

Is it true after analyzing the results, that this sport can contribute to the improvement of certain aspects of quality of life of these individuals.

CONCLUSION

The results of this study have revealed that the practice of basketball on wheels in this population, provided physical and functional benefits, helping to improve the emotional state and therefore the quality of life of individuals

REFERENCES

ADAMS, Ronald C. et al. Games, **sports and exercise for the physically disabled**.: 3. ed. New York: Manole,

(1985).

Ana Maria Fonseca Teixeira and Maria Sonia. **Wheelchair Basketball.** Available in <http://www.informacao.srv.br/cpb/pdf/basquete.pdf> Accessed on April 3, 2011.

ARAÚJO. Paulo Ferreira de. **Adapted sports in Brazil: origin, institutionalization and today.** Brasília: Ministry of Education and Sport / INDESP, 1998.

BARROS FILHO, T E P et al. **Standardized assessment in spinal cord injuries.** Rev. Bras. Ortop. Sao Paulo. v.29.n.3 P. 99-106: March, 1994

BRAZUNA, M. R., CASTRO, E. M. **The trajectory of the physically disabled athlete in the sport adapted from income: a literature review.** Available at: <http://www.rc.unesp.br>. Accessed 28 May 2011

DIEHL, R. M. **Playing with the differences**. New York: Phorte, (2006)

FREITAS, Patricia Silvestrini. **Initiation to basketball on wheels.** Uberlandia: Graphics Breda (1997).

LEVANDOSKI, G. Cardoso, A. S. **Basketball players in wheelchairs in the city of Florianópolis: a descriptive analysis of injuries to practitioners.** In: 6th International Forum on Sport. Proceedings on CD, Florianópolis, jun. 2007.

LIANZA S, Casalis ME, Greve JMD, Eichberg: **The spinal cord injury. In Lianza S, rehabilitation medicine**. Ed Rio de Janeiro: Guanabara Koogan, (2001, p. 299-322);

RIBEIRO, MS. **Inclusion and sport: a way to go. In: Brazilian Society of motor activity and adaptation: Adapted Theme in** (SI) Sobama, 2001

SAMPAIO, I., Palma, H.; Nascimento, R., Saito, E., Lawrence, C., Battistella, L. Sports rehabilitation. In: Greve, J., Casali, M., Barros, T. **Diagnosis and treatment of spinal cord injury**. 1st ed. New York: Rocas, 2001

SILVA, ALMEIDA Patricia, JUNIOR Carlos Alberto, **Comparative study of perceived quality of life of women and practitioners not practicing physical exercises, EFDeportes.com Digital Magazine.** No. 148: Buenos Aires: 2001.

WERNECK, Zacaron Francisco, SON, Mauricio Galt bar, Ribeiro, Luiz Carlos Scipio. **Effects of physical exercise on mood states. Journal of Psychology of Sport and Exercise.** 2006, Vol 0, p. 22-58

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EVALUATION OF QUALITY OF LIFE IF SPINAL CORD INJURY PATIENT AFER BASKETBALL ON WHEELS

ABSTRACT

The practice of adapted motor activity increased significantly in recent years in Brazil, thus enabling individuals with any physical disability of character are able to do it. The spinal cord injuries are more frequent in Brazil, mainly due to increased urban violence This study aims to assess the effects of practice on quality of life of this population. This is a case study of longitudinal, comparative type cause / effect. The study was approved by the Ethics Committee of Assisi School Gurgacz - Cascavel - PR. The activities took place in the gym Gurgacz Assisi Foundation, the team was composed of academics and physical therapy physical education. Study participants were individuals diagnosed with spinal cord injury treated at the rehabilitation center of FAG in Cascavel - PR. As evaluation criterion we applied the generic questionnaire on quality of life SF-36. Comprised of 36 questions, which are evaluated eight components: physical functioning Physical Appearance Pain General Health,Vitality, Social Aspect, emotional and Mental Health presents a final score from 0 to 100, where zero corresponds to the worst overall health status and 100 the best health After analyzing the results, it is correct say that this sport can contribute to the improvement of certain aspects of quality of life of these individuals. The results of this study have revealed that the practice of basketball on wheels in this population, provided physical and functional benefits, helping to improve the emotional state and therefore the quality of life of individuals

KEYWORDS: Motor Activity. adapted-cord injury. Quality of life.

ANALYSE DE LA QUALITÉ DE LA VIE DU PATIENT AVEC LÉSION MOELLE ÉPINIÈRE APRÉS BASKET ADAPTÉ

SOMMAIRE

La pratique de l'activité motrice adaptée considérablement augmenté ces dernières années au Brésil, permettant ainsi aux personnes ayant un handicap physique de caractère sont capables de le faire. Les lésions de la moelle épinière sont plus fréquentes au Brésil, principalement en raison de la violence urbaine a augmenté Cette étude vise à évaluer les effets de la pratique sur la qualité de vie de cette population. Ceci est une étude de cas longitudinale, la cause type comparatif / effet. L'étude a été approuvée par le comité d'éthique d'Assise Ecole Gurgacz - Cascavel - activités PR.As eu lieu dans le gymnase de la Fondation Gurgacz Assise, l'équipe était composée d'universitaires et de l'éducation physique thérapie physique. Participants à l'étude étaient des personnes diagnostiquées avec une lésion médullaire traités au centre de réhabilitation des FAG à Cascavel. Comme critère d'évaluation, nous avons appliqué le questionnaire générique sur la qualité de vie SF-36. Composé de 36 questions, qui sont évalués huit composantes: fonctionnement physique l'apparence physique Douleur Santé générale Vitalité aspect sociale émotionnel et la santé mentale présente un score fin de 0 à 100, où zéro correspond à l'état de santé pire globale et 100 le meilleur de la santé Après analyse des résultats, il est exact dire que ce sport peut contribuer à l'amélioration de certains aspects de la qualité de vie de ces personnes. Les résultats de cette étude ont révélé que la pratique du basket-ball sur roues dans cette population, à condition bienfaits physiques et fonctionnelles, contribuant à améliorer l'état émotionnel et donc la qualité de vie des individus

MOTS-CLÉS: Activité motrice adapté. Lésions de la moelle. La qualité de vie.

EVALUACIÓN DE LA CALIDAD DE LA VIDA DE PERSONAS CON LESION DE LA MÉDULA ESPINAL DESPUÉS DE BALONCESTO SOBRE RUEDAS

RESUMEN

La práctica de la actividad motora adaptada en Brasil ha aumentado en los últimos años, permitiendo así que las personas con alguna discapacidad física de carácter son capaces de hacerlo. Este estudio tiene como objetivo evaluar los efectos de la práctica en la calidad de vida de esta población. . El estudio fue aprobado por el Comité de Ética de la Escuela de Asís Gurgacz - serpiente de cascabel - PR.As actividades se llevó a cabo en el gimnasio Gurgacz Fundación Asís, el equipo estaba compuesto por académicos y de educación física de terapia física. Los participantes del estudio eran personas con diagnóstico de lesión medular, en el centro de rehabilitación de FAG en Cascavel Como criterio de evaluación se les aplicó el

cuestionario de calidad de vida SF-36. Compuesto por 36 preguntas, que se evalúan ocho componientes: la capacidad funcional apariencia física, el dolor salud general, vitalidad, salud social, emocional y mental. Presenta una puntuación final de 0 a 100, donde cero corresponde al peor estado de salud general y 100 el mejor estado de salud después de analizar los resultados, es justo decir que este deporte puede contribuir a la mejora de ciertos aspectos de la calidad de la vida de estas personas. Los resultados de este estudio han puesto de manifiesto que la práctica del baloncesto sobre ruedas en esta población, siempre y cuando los beneficios físicos y funcionales, ayudando a mejorar el estado emocional y por lo tanto la calidad de vida de las personas.

PALABRAS CLAVE: Actividad adaptada del motor.Lesión de la medula. La calidad de vida

AVALIAÇÃO DA QUALIDADE DE VIDA DE PACIENTES COM LESÃO MEDULAR APÓS BASQUETE SOBRE RODAS

RESUMO

A prática de atividade motora adaptada aumentou significativamente no Brasil nos últimos anos, possibilitando assim que indivíduos com qualquer deficiência de caráter físico estejam aptos a praticá-la. As lesões medulares são cada vez mais freqüentes no Brasil devido, principalmente, ao aumento da violência urbana Esse estudo visa analisar os efeitos dessa prática na qualidade de vida dessa população. Trata-se de um estudo de caso de corte longitudinal, comparativo do tipo causa/efeito. O estudo foi aprovado pelo Comitê de Ética em Pesquisa da Faculdade Assis Gurgacz – Cascavel - PR.As atividades aconteceram no ginásio de esportes da Fundação Assis Gurgacz, a equipe foi composta por acadêmicos de fisioterapia e educação física,. Participaram do estudo indivíduos com diagnóstico de lesão medular atendidos no centro de reabilitação da FAG, em Cascavel Como critério de avaliação aplicou-se o questionário genérico de qualidade de vida SF-36. Composto por 36 questões, onde são avaliados 8 componentes: Capacidade Funcional Aspecto Físico; Dor Estado Geral de Saúde, Vitalidade; Aspecto Social, Aspecto Emocional e Saúde Mental. Apresenta um escore final de 0 a 100, no qual zero corresponde ao pior estado geral de saúde e 100 ao melhor estado de saúde Após a análise dos resultados, é correto afirmar que essa modalidade esportiva pode contribuir para a melhora de determinados aspectos da qualidade de vida destes indivíduos. Os resultados obtidos neste estudo permitem afirmar que a prática do basquete sobre rodas, nesta população, proporcionou benefícios físicos e funcionais, auxiliou na melhora do estado emocional e consequentemente na qualidade de vida dos indivíduos

PALAVRAS CHAVES: Atividade motora adaptada. Lesão medular. Qualidade de vida