30 - VALUATION OF BODY WEIGHT ON THE BACKPACK SCHOOL IN A PRIVATE SCHOOL AND A PUBLIC SCHOOL ZONE NORTH PORTO ALEGRE

NATÁLIA MOREIRA;
FERNANDA PERLOT;
DÉBORA RIOS GARCIA
Instituição Educacional São Judas Tadeu, Porto Alegre, RS, Brasil.
nmo.moreira@gmail.com

INTRODUCTION

Children and adolescents have variations in posture constantly due to growth spurts and other factors, often the children's bodies are not prepared to carry weight, mostly backpacks to exceed the proper weight.

Considering that during school development velocity body is large and diverse factors can trigger changes in the musculoskeletal system, especially the spine, which can cause various deformities (Almeida 2006). So the school backpack has been of concern for parents, teachers, government representatives. Government representatives of Rio Grande do Sul drafted the Law No. 12,027 , 2003 , which provides for a maximum total weight of school supplies carried by students from kindergarten 5 % and 10 % by weight of elementary school students in public of the State of Rio Grande do Sul, backpacks, briefcases and similar.

As students sit for long hours throughout the school year and carry everyday school supplies in According to Hong et al. (2000 apud COSTA, 2010) reported that the backpack is the most universal and generic method used by students to organize and carry all the school supplies, sports equipment, supplements and other necessary utensils for holding classes, is also not used only be fashionable but to be a useful and advantageous way to carry the weight school backpacks.

We live in a prejudiced society, where everyone who does not have similar behaviors, modern materials and brands that the media itself imposes can be broken somehow . Individuals who do not use modern backpacks, school subjects from the cartoon of the moment, are often rejected, causing problems in socialization and self-esteem. The issue raised directly involves prevention of future postural problems that will in adulthood , knowing positively interfere in this respect , given that this is occurring at a speed growth generating numerous addictions posture, damaging the physical development of the student. Moreover, one should remember that the involvement of the whole school community: teachers, directing, staff, parents and family should be a goal to be achieved, so that students have the best possible education in the passage. Therefore, a healthy school environment is everything that parents expect their children to find the joining schooling.

By way of information , people , especially children , where the disease process is not yet installed , orient the proper posture for carrying weights , for example, school backpack , aiming for a future with less incidence of back pain , one since, according to the WHO (2004) 85 % of people have , will have , or had a day back pain due to postural problems with its genesis in childhood .Therefore the objective of the study was to evaluate body weight in relation to school backpack at a private school and a public school in the area north of Porto Alegre to know whether to use their backpacks within the maximum weight suggested by WHO and permitted by Law No. 2772 / 97.

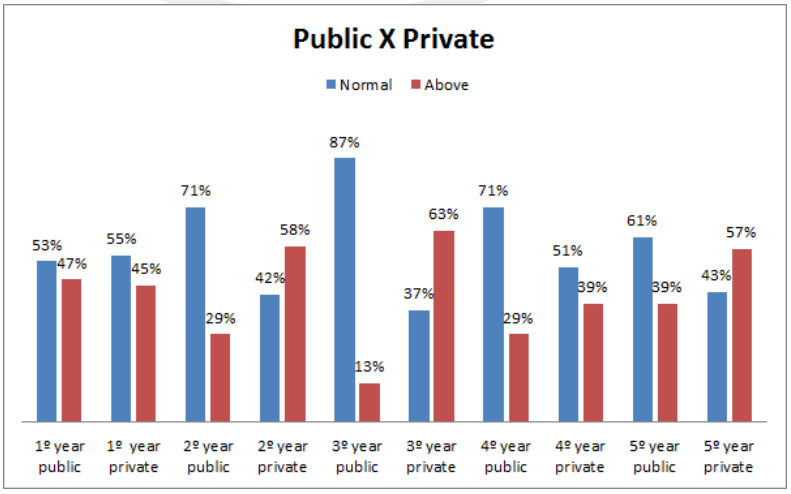
METHOLOGICAL DESIGN

This is an observational cross-sectional descriptive -analytic concerned with identifying backpack weight of primary school students. The weight of school material was obtained by taking two measurements. At first, the participants, as they reached the evaluation room with all your stuff will be heavy. Then they left out the material and will be weighed again. From this information you can check the proportional weight of the material in relation to body weight. For this procedure, will be using a digital scale Filizola with 100g precision.

The proportional weight of school supplies will be categorized as less than 10 % and greater than 10 % , according to the values proposed by Hong and Brueggemann (2000 apud RITTER , 2009) and this variable will be called health criteria for the transportation of school supplies .

Participants were 308 students from a private school, 90 students from a public school in the area north of Porto Alegre, all students from 1st to 5th grade of elementary school. Participants were aged from 6 to 12 years. The participation of students in the survey agreed with the Resolution 196/96 (BRAZIL , 1996) of the National Health Council (CNS) , using the Term of Consent for which data collection was used " instrument for Knowledge Perception of Students on Environment Posture Adopted School - POSPER " (RITTER ; SOUZA , 2006 apud RITTER , 2009), adapted for this study .

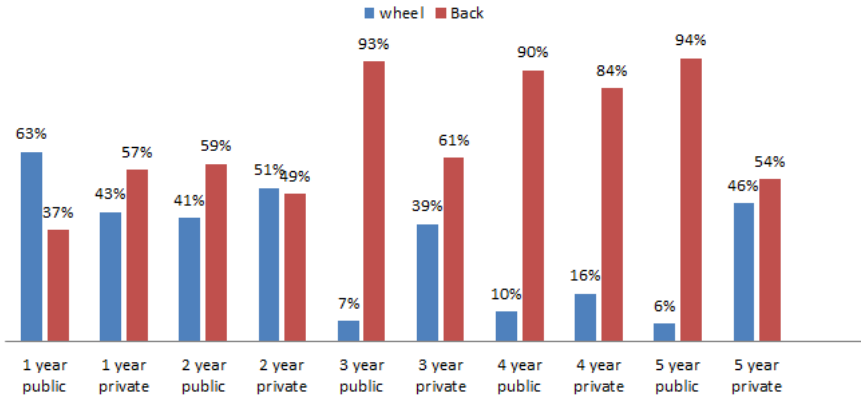
Results and Discussion



Graph 1 - Distribution which type of backpack is mostly used by students to carry school supplies.

According to Figure 1, the backpack to carry with the two straps on the back is the most used by students in 3rd, 4th and 5th year at both schools. Already the 1st year of public school (63 %) and 2nd year private school (51 %) use the backpack rollaway and 1st year private school (43 %) and 2nd year public school (59 %) uses more back both the load at hand , as the load on one shoulder were the least cited .

According Candotti et al. (2011), students of 2nd year (60 %) and 5 years (77.3 %), and Sheir - Neiss et al. (2003) 87.6 % carried the bags using the handles on both shoulders. In the study by Moura et al. (2009) 88 % of the 4th year of public school use the backpack causing hyperlordosis . Aparicio et al (2005) evaluated the mode of transportation of school bag 203 students from the city of Salamanca (Spain), found that virtually all of the assessed used the bag with two handles. It is observed that 45.8 % of the students in this study carried more than 10 %, of these, 8.3% were from public schools and 37.5 % were from private schools. However , the results show up smaller than the results obtained in the research Ferst (2004) and Grimmeret al (cited CARVALHO , 2004) After analyzing the questionnaires given to individuals in the sample , found that 15 students (68.2 %) carry the school supplies above the 10 % recommended by WHO . Gomes et al. (2011) says that in regards to transport the material, there was a predominance of the backpack with two straps (64.29 %). In the present study the majority of respondents use the backpack over both shoulders.



GRAPH 2: Comparison of the weight of the backpacks.

In the comparison chart we note that the class of 2nd year (58%), 3rd year (63%) and 5 years (57%) of private school, are with inadequate weight, exceeding 10% of body weight, as students private school 1st year (55%) and 4th year (51%) are within the 10% and all classes of public schools are within proper weight.

In the study by Viry et al. (1999) it was found carrying backpacks weighing more than 20% of body weight corresponding to 49% of children in the study. According to the study by Silva sd, shows that 54.2% of 4th and 5th grade school have cargo within recommended levels, these being 41.6% of public schools and 12.6% of private schools. Ferst (2004) and Grimmeret al (cited CARVALHO, 2004) after analyzing the questionnaires applied to individuals in the sample, found that 15 students (68.2%) carrying school supplies above the 10% recommended by WHO. Almeida et al. (2006) analyzed the body weight and the weight of the school bag of 32 students from the 4th grade in a school, noted that 69.57% after carrying backpack weight above the law and that 30.43% carry the weight according to law. Araujo et al. (2012) noted that 45% of students assessed had excessive load greater than 10% as established by law. Negrini, Carabalona and Sibilla et al. (1999) found that Italian children aged around 11 years carrying an average of 22% of their body weight as school supplies, and 34.8% of the subjects studied carried more than 30% of body weight. Ries et al. (2012) analyzed that 18% of the children in their backpacks carrying loads greater than 10% of body weight. In the present study it was found that most of the children surveyed with appropriate weight is within the 10% allowed by the law of the pack.

CONCLUSION

The society's concern with the weight of the backpacks has been increasing over the past years. This problem could be solved by students, parents and the school itself, which could provide lockers where children could leave the heaviest materials.

The results suggest lack of knowledge about the existence of the Law of Backpacking, recommending its weight. We found that all public school students carry the school bag inside the proper weight allowed by Law Knapsack, N ° 2772/97, an amount recommended by WHO (2004). Already students from private over half carry weight above 10% of body weight.

Based on these data, we see the importance of this study, as well as awareness of these students, once certain information is not available for the population, and that schools have an obligation to the acquisition of such knowledge. Also found that private schools' being overweight was higher than in public.

REFERÊNCIAS

ARAÚJO, Danilo. O estudante e sua postura. 2007. Disponível em:
<http://www.nossadica.com/saude_o_estudante_e_sua_postura.php> Acesso em: 02 maio 2013.

BLOG da ACC. Mochila pesada. 05 mar. 2010. Disponível em: <http://accfisioterapia.com.br/blog/mochila-pesada/>. Acesso em: 15 mar. 2013.

CANDOTTI, Claúdia Tarragô; NOLL Maria; ROTH Eliane. Avaliação do peso e do modo de transporte do material escolar em alunos do ensino fundamental. Porto Alegre, 2011. Disponível em:
<http://webcache.googleusercontent.com/search?q=cache:jZ14alfw18YJ:www.scielo.br/pdf/rpp/v30n1/15.pdf+&cd=5&hl=pt-BR&ct=clnk&gl=br>. Acesso em 20 set. 2013.

CARVALHO, Priscila de; AUDI, Soraya Garcia. Verificação do peso das mochilas escolares utilizadas por estudantes universitários do curso de fisioterapia de uma instituição da rede privada do município de Osasco. São Paulo, 2009. Disponível em: <http://www.fiepbulletin.net/index.php/fiepbulletin/article/view/1117>. Acesso em: 21 ago. 2013

MOURA, Bruna Morais de; FONSECA Charlene de Oliveira; PAIXÃO Taynã Feliz. Relação quantitativa entre o peso da mochila escolar x o peso da criança e suas possíveis alterações posturais e algias. Belém, 2009. Disponível em:

<http://www.unama.br/novoportal/ensino/graduacao/cursos/fisioterapia/attachments/article/131/analise_quantitativa_peso_mochila_peso_crianca_algias.pdf>. Acesso em: 13 ago. 2013.

RÊGO, Joseany Soares; GOMES, Karla Sabrina Ribeiro; LIMA, Marcus Vinícius Viégas; LIMA, Fernando César Vilhena Moreira. Postura e ambiente escolar. 13 nov. 2006. Disponível em:

<http://www.jornalpequeno.com.br/2006/11/13/Pagina45554.htm>. Acesso em: 05 mar. 2013.

RITTER, Alexandre Luis da Silva. Postura corporal ao sentar e transportar material escolar. 2009. Tese (Doutorado) – Programa de Pós-Graduação em Ciências do Movimento Humano, Escola de Educação Física, Universidade Federal do Rio Grande do Sul, Porto Alegre, 2009. Disponível em:

<http://www.lume.ufrgs.br/bitstream/handle/10183/18525/000730414.pdf?sequence=1>. Acesso em: 19 mar. 2013.

SILVA, Leilane de Aguiar. Análise da relação entre a massa corpórea e a massa das mochilas em escolares do 4º e 5º ano do ensino básico em Santarém-PA. 1999. Disponivel em: <http://www.portalbiocursos.com.br/artigos/ortopedia/99.pdf> Acesso em : 24 out. 2013.

Rua Augusto Porto Alegre, 105 – Sarandi
Porto Alegre, RS – CEP: 91110-250
nmo.moreira@gmail.com

VALUATION OF BODY WEIGHT ON THE BACKPACK SCHOOL IN A PRIVATE SCHOOL AND A PUBLIC SCHOOL ZONE NORTH PORTO ALEGRE

ABSTRACT

The backpack is the most common method used by students to carry all your school supplies. This method can promote poor posture, especially if carried above 10% of body weight. This study aimed to analyze the body weight in relation to school backpack at a private school and a public school, to know whether to use their backpacks within the maximum weight. Characterized by an observational method descriptive analytical cross-concerned with identifying backpack weight of primary school students. Those responsible for the research participants were in accordance with the Resolution 196/96. For data collection, we used the "Instrument for Knowledge Perception of Students on Environment Posture Adopted School - POSPER. Sample consisted of 398 students, students from 1st to 5th grade of elementary school. The results showed high level of ignorance about the existence of the Law of Backpacking, recommending its weight. We found that more than half of the students carry the school backpack with adequate weight, ie, within 10% of body mass allowed, a value recommended by WHO (2004). On the transport of school supplies, it was observed that the students of 1st year public and 2nd year private use backpack rollaway and students of the 1st, 3rd, 4th and 5th year of private school and the 2nd, 3rd, 4th and 5th year public school carrying their stuff in the back with straps over both shoulders. From the results, it is concluded that public school students and the 1st and 4th year of private school are normal, and the pupils of the 2nd, 3rd and 5th year of private school are transporting material over 10% of the weight body allowed by law.

VALUATION DE POIDS CORPOREL SUR L´ÉCOLE DE SAC À DOS DANS UNE ÉCOLE PRIVÉE ET UN ÉCOLE PUBLIQUE ZONE NORD PORTO ALEGRE

RÉSUMÉ

Le sac à dos est la méthode la plus couramment utilisée par les étudiants pour transporter toutes vos fournitures scolaires. Cette méthode peut favoriser une mauvaise posture , surtout si elle est effectuée au-dessus de 10% du poids du corps. Cette étude visait à analyser le poids du corps par rapport au sac d'école dans une école privée et une école publique, à savoir si vous souhaitez utiliser leurs sacs à dos dans le poids maximum. Caractérisé par une méthode observationnelle descriptive d'analyse croisée concerné à identifier poids de sac à dos des élèves des écoles primaires. Les responsables des participants à la recherche étaient en conformité avec la Résolution 196 /96. Pour la collecte des données, nous avons utilisé le " Instrument pour la perception de connaissances des élèves sur la posture de l'environnement adopté école - POSPER . Échantillon était composé de 398 élèves , les étudiants de la 1ère à la 5e année du primaire. Les résultats ont montré le niveau élevé de l'ignorance de l'existence de la loi de randonnée , en recommandant son poids. Nous avons constaté que plus de la moitié des étudiants portent le sac d'école avec un poids adéquat , à savoir moins de 10 % de la masse corporelle permis , une valeur recommandée par l'OMS (2004). Sur le transport des fournitures scolaires , il a été observé que les étudiants de 1ère année et 2ème année publiques usage privé sac à dos d'appoint et les étudiants du 1er, 3ème , 4ème et 5ème année de l'école privée et le 2ème, 3ème , 4ème et 5ème l'école publique de l'année portant leur truc dans le dos avec des sangles sur les deux épaules . D'après les résultats , on peut conclure que les élèves des écoles publiques et les 1er et 4e année de l'école privée sont normales, et les élèves de la 2ème , 3ème et 5ème année de l'école privée sont le transport des matières de plus de 10 % du poids organisme autorisé par la loi.

EVALUACIÓN DE PESO CORPORAL EN LA MOCHILA ESCOLAR EN UNA ESCUELA PRIVADA Y UNA ESCUELA PÚBLICA ZONA NORTE DE PORTO ALEGRE

RESUMEN

La mochila es el método más común utilizado por los estudiantes para llevar todos sus útiles escolares. Este método puede promover la mala postura, sobre todo si se lleva por encima de 10 % del peso corporal. Este estudio tuvo como objetivo analizar el peso corporal en relación con la mochila de la escuela en una escuela privada y una escuela pública, para saber si va a utilizar sus mochilas en el peso máximo. Caracterizado por un método analítico observacional descriptivo transversal que se trate con la identificación de peso de la mochila de los estudiantes de primaria. Los responsables de los participantes en la investigación fueron de acuerdo con la Resolución 196 /96. Para la recolección de los datos, se utilizó el " Instrumento de Conocimiento Percepción de Estudiantes de Postura Medio Ambiente aprobadas School - POSPER. Muestra consistió en 398 estudiantes, estudiantes de 1 º a 5 º grado de primaria. Los resultados mostraron un alto nivel de ignorancia sobre la existencia de la Ley de mochilero, recomendando su peso. Se encontró que más de la mitad de los estudiantes llevan la mochila de la escuela con el peso adecuado, es decir, dentro del 10% de la masa corporal permitido, un valor recomendado por la OMS (2004) . En el transporte de material escolar, se observó que los alumnos de 1 º año 2 º año pública y uso privado mochila con ruedas y los estudiantes del primero, tercero, cuarto y quinto año de la escuela privada y el segundo, tercero, cuarto y quinto la escuela pública el año que lleva sus cosas en la espalda con tirantes sobre los hombros. De los resultados, se concluye que los estudiantes de escuelas públicas y el primero y cuarto año de la escuela privada son normales, y los alumnos del segundo, tercero y quinto año de la escuela privada se transportaba material de más del 10 % del peso cuerpo lo permita la ley.

AVALIAÇÃO DO PESO CORPORAL EM RELAÇÃO À MOCHILA ESCOLAR EM UMA ESCOLA PRIVADA E UMA ESCOLA PÚBLICA DA ZONA NORTE DE PORTO ALEGRE

RESUMO

A mochila é o método mais utilizado pelos alunos para transportar todo o seu material escolar. Esse método pode favorecer uma postura inadequada, principalmente se for transportado acima dos 10% do peso corporal. Este estudo teve como objetivo analisar o peso corporal em relação à mochila escolar em uma escola privada e uma escola pública, para saber se utilizam suas mochilas dentro do peso máximo. Caracterizou-se por uma metodologia observacional transversal analítico-descritivo preocupado em identificar o peso da mochila dos escolares do Ensino Fundamental. Os responsáveis pelos participantes da pesquisa estiveram de acordo com a resolução 196/96. Para a coleta de dados utilizou-se o "Instrumento para Conhecimento da Percepção de Alunos sobre a Postura Adotada no Ambiente Escolar – POSPER. Amostra foi composta por 398 alunos, estudantes do 1º ao 5º ano do Ensino Fundamental. Os resultados obtidos mostraram elevado nível de desconhecimento em relação à existência da Lei da Mochila, preconizando o peso da mesma. Verificamos que mais da metade dos alunos transportam a mochila escolar com peso adequado, ou seja, dentro dos 10% da massa corporal permitida, valor este preconizado pela OMS (2004). Sobre o transporte do material escolar, observou-se que os alunos do 1º ano público e 2º ano privado utilizam a mochila de rodinha e os alunos do 1º, 3º, 4º e 5º ano da escola privada e do 2º, 3º, 4º e 5º ano da escola pública transportam seu material nas costas com alças sobre os dois ombros. A partir dos resultados, conclui-se que os alunos da escola pública e o 1º e 4º ano da escola privada estão dentro da normalidade, e os alunos do 2º, 3º e 5º ano da escola privada estão transportando o material acima dos 10% do peso corporal permitido por lei.