120 - STATISTICAL ANALYSIS OF PROBLEMS POSTURAIS IN SCHOOL STUDENTS OF MUNICIPAL KAZUKO INOUE-EDUCATION AND CHILD IN THE CITY OF EDUCATION KEY POINT GROSSA-PR

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01)INTRODUCTION

The body posture adopted by humans is a dynamic element of analysis, because it is changing in terms of position and efforts required during intervals of time very small, or even if a person remains seated for several hours, his body will be experimenting with a variety of postures, making it mainly spine to adapt concentrating and absorbing various efforts, they come from more diverse backgrounds, whether internal or external to the human body.

With the developments, the man fell from a bent position with four support, as the current monkeys, for a position or two upright supports. Passing to take that attitude changes in their bone and muscle structures. The position upright human was only possible by changes that have emerged in the spine, with the emergence of curves lordóticas in the cervical and lumbar (RESENDE and SANCHES, 1992).

According NETTER (2003), the backbone consists of five regions: with seven cervical vertebrae, with twelve thoracic vertebrae, with lumbar five, with five sacred coccygeal vertebrae fusionadas and with four vertebrae. This gives a total of 33 vertebrae, with 24 of them forming different regions: cervical, thoracic and lumbar, and present these discs intervertebrais, from the axis to the sacral which provides an elastic support. The increase in size of the vertebrae for cervical and lumbar decrease in the region sacred to the region coccygeal. The spinal column consists of four bends. The two curves with a convexity later (concavidade above) are called for curves cifóticas (regions chest and sacred).

The regions that have two concavidades later are the cervical and lumbar (convexity above) which are denominated curves lordóticas. Norkin and Lavangie (1983 apud ANDREWS et al. , 2000) believe that the curves lordóticas are formed by result of the accommodation of the skeleton by upright posture. It was also related to the curves cervical, thoracic and lumbar work to increase the capacity of the spine to support the axial compression. In addition, calculations determined that a spinal column with three curves and can support more forces compressivas a spine retificada. These bends, it is common to see some students, especially the fundamental teaching, a serious problem with respect to incorrect postures.

Whether in the classroom, in the path of their homes to the school and / or the return of the same due to their homes, to attack the spine occurs through the misuse of school materials, which range from the loading of excess weight in backpacks even in poor school regulation of the height of the handles and its placement on the back. For Amaral and Barros (2004), in Brazil the orthopedic pathologies of order postural occur, mostly among seven fourteen years of age, reaching about 70% of this quota and especially for being in that period that the child is more likely the changes in bone and articular system, which favors the emergence of deformities. The implementation of programs to prevent and postural correction during the period of growth is greater chances of success.

02)MAIN PATOLOGIAS IN SCHOOL

A childhood and adolescence represent two periods in the life of human beings in psychological changes that occur, social, affective and physical (DETSCH and CANDOTTI, 2001).

Having focused on the physical changes, the children of some public schools do not have the discipline of Physical Education in their teaching curriculum, or to have in quantity of classes far short of the necessary, and that the impossible to pursue physical activities regularly, in order to be viable the lengthening and strengthening of their musculaturas, because that way we could be preventing and correcting postural deviations.

In the specific case of the students sitting posture incorrect, comes to worse problems related and may still be potencializad by the large amount of hours which remains in that position.

During the static contraction of the muscle, mainly keeping incorrect postures, there is a decrease in the flow of blood in that muscle leading to a decrease in the intake of oxygen and nutrients. Furthermore, the decrease in the flow of blood hinders the removal of harmful substances that appear with the muscular work, particularly the acid lático, and factor of fatigue and irritation of the structures involved, as tendons and nerves. Poor posture, hysteria, irritation of nerve root, inflammation in the region of the spine, discrepancy in the length of the lower limbs or contracture in the hip can cause scoliosis not structural. (MAGEE, 2002).

The component sensory-perceptual is responsible for the control of posture and balance, is governed by information relating to three systems: the visual, vestibular and the proprioceptivo; Each is directed to a separate system of coordinates external and none of them perceive the center of gravity of the body directly. Already the central integrator of information makes the choices they are, correct or incorrect, to be done is necessary integrative action of the central nervous system. (GUCCIONE, 2002).

To Bankoff (2002), in a study of postural problems in children in the public school system, caused by malnutrition and heavy work has been verified that nutritional deficiency, malnutrition and child labor are directly related to the incidence of postural deviations , specifically hipercifose and scoliosis, associated with previous chest bulge, the deficit musculature developed, escápulas haul trees and shoulders, chest depressed making it difficult to breath, lower limbs in genu valgum and genu varum. The most frequent postural deviations are: the shoulder (elevation, depression, protusão and retraction), in escápulas (abduction or adduction), pelvic belt (pitch, roll, and anteversion retroversion), knee (valgus, varus, medial rotation, rotation side, hiperextenso and fletidos) and feet (cavo, plan on eversion in inversaõ and foot eqüino), in column (hiperordose cervical and / or lumbar, hipercifose, rectification of curvature (lumbar, cifótica or cervical) and scoliosis in "S" or "C").

According Magee (2002), the escolioses are structural changes that appear in the form of curves lateral thoracic and lumbar column, and are deformities, in which one or more lateral bends of the thoracic or lumbar spine, and the escolioses can occur only in the region in lumbar or thoracic - lumbar area.

It is not uncommon repair the large number of students who suffer with bad posture in the classroom, usually to sit this becomes apparent, as they will be supported under the cóccix or in a position hipercifótica (corcunda) and / or with the trunk tilted forward and sometimes even sitting on top of one of the legs.

Another factor causing discomfort of a bad attitude (usually in adults and older) is a disc herniation, because it comes as a result of several minor trauma in the column that will, over time, harming the structures of the intervertebral disk, or can happen as a result of a severe trauma on the column. The disc herniation occurs when the core of the intervertebral disc migrates from his place in the center of the disk to the periphery, towards the medullary canal or in the spaces they leave the nerve roots, leading to compression of nerve roots. (SAMARA, 1985).

03)PROCEDURES METODOLÓGICOS

This work was developed at the School Hall Kazuko Inoue-Child Education and Education Foundation, which is located in Vila Colonel Claudius, District of Uvaranas, in the municipality of Ponta Grossa / State of Parana, where prior to contact with direction and teachers, was - in informed that the pain are among the main lack of concentration and lower income students in the classroom.

Our problem was to assess the possible diseases postural and see to what extent they are present in the daily life of those schools.

In order to alert parents, teachers and society about the consequences of the negative effects of these diversions for children in older age, this work has been done in the institution of school education in the period August 2006 to August 2007 (approximately for 09 months), which was carried out an assessment postural with 210 students of both sexes of teaching basic (1 st to 3 rd cycle), with ages ranging from 08 to 10 years.

The schools were evaluated individually, and that when called adentravam the room for evaluation in groups of five students of the same sex, so be avoided constraints and natural tension, because this fact could influence the evaluation muscle.

The evaluation consisted of a series of procedures that characterize postural assessment in school. The procedures performed were linked below:

-Measurement and Comparison of the segments in their respective angulações of members and bony structures;

-Analysis Palpatória in previous plans, and subsequent lateral;

-Implementation of tests as previous inclination trunk for detection of scoliosis;

-Comparative visual analysis-on the symmetry of segments of different hemispheres;

-Anamnesis-in the form of interviews with parents, students and teachers, enabling thus a thorough review through the history of disease pregressa (HMP) and current history of the disease (HMA).

The latter procedure is intended to facilitate the monitoring of the development of the child during the school stage.

04) FOUND RESULTS AND CONCLUSIONS

Among the most common physical disorders found in the sample of 210 students evaluated aged 8 and 10 years, we find the following values:

Pathology Postural Found	Index Percent	Frequency of Medical Plants
Escápulas Abduzidas	88,0 %	185 pupíls
Ombros Rodados To Front	79,0 %	166 pupíls
Abdômen Protuso	56,0 %	118 pupíls
Hiperlordose Lumbar	49,0 %	103 pupíls
Hipercifose	28,0 %	59 pupíls
Escoliose	28,0 %	59 pupíls
Previous inclination of the head	16,0 %	34 pupíls
Head Protusa	16,0 %	34 pupíls
Ombros Depressivos	12,0 %	25 pupíls
Inclination Side of the Head	11,0 %	23 pupíls

Source: Subjects of Biostatistics and Biomechanical Course of Physiotherapy of the Center for Higher Education dos Campos General-CESCAGE.

More the results found noticed that many children have two or more simultaneous postural

disorders, and found that most were escápulas abduzidas and shoulders run forward (see table)

which shows that the use of backpacks and suitcases with excessive load than it can serve as a cause, also contributes to the deterioration of these conditions or postural deviations.

In the statistical processing, in the calculation of the four diseases postural deviations greater percentage index (escápulas abduzidas - 88.0%; Run shoulders forward-79.0%; Abdomen protuso - 56.0% and hiperlordose lumbar - 49.0%) were above average percentage obtained in 38.3%, it shows what was quoted in the previous paragraph about the fact that many children have two or more simultaneous postural disorders.

The SD found was 26.8, a figure considered very expressive, especially if we take into account the coefficient of variation obtained and equal to 69.97%, which can be classified as a high coefficient.

From these results we concluded that the postural disorders can be in a serious problem for students of basic education. This problem can only be reversed from educational measures on the part of professional education, promotion of physical education classes, where students can effectively through physical activities geared to improve its standard postural and educational measures in order to avoid that these students have no need to carry excessive loads on the ride home-school-house.

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STATISTICAL ANALYSIS OF PROBLEMS POSTURAIS IN SCHOOL STUDENTS OF MUNICIPAL KAZUKO INOUE-EDUCATION AND CHILD IN THE CITY OF EDUCATION KEY POINT GROSSA-PR

ABSTRACT:

This article is a result of a survey of about nine months of pathologies postural students in the School Hall Kazuko Inoue-Child Education and Education Foundation, which is located in Vila Colonel Claudius, District of Uvaranas, in the municipality of Ponta Grossa / State of Parana. They were assessed 210 students in the age group of 08 to 10 years of both sexes. The primary purpose beyond the lifting of postural disorders, also was the realization that some children have two or more disorders at the same time, as evidenced by this coefficient of variation found in 69.97%, considered by the statistical literature as a high value.

KEYWORDS: Deviations, posture, Students, Statistics.

ANALYSE STATISTIQUE DES PROBLEMES POSTURAIS A L'ECOLE DES ELEVES MUNICIPALES KAZUKO INOUE - L'EDUCATION DES ENFANTS ET DANS LA VILLE DE L'EDUCATION POINT CLE GROSSA - PR

RÉSUMÉ:

Cet article est le résultat d'un sondage d'environ neuf mois de pathologies posturales élèves de l'école Hall Kazuko Inoue - Child Education Foundation et de l'éducation, qui est situé à Vila Colonel Claudius, le district de Uvaranas, dans la municipalité de Ponta Grossa / État de Parana. Ils ont évalué 210 élèves dans le groupe d'âge des 08 à 10 ans de deux sexes. Le premier objectif au-delà de la levée des troubles posturaux, était aussi de se rendre compte que certains enfants ont deux ou plusieurs troubles en même temps, comme en témoigne ce coefficient de variation trouvé dans 69,97%, considéré par les statistiques comme une littérature de grande valeur.

MOTS CLES: Écarts, la posture, étudiants, les statistiques.

ANÁLISIS ESTADÍSTICO DE LOS PROBLEMAS POSTURAIS EN LOS ESTUDIANTES DE LAS ESCUELAS MUNICIPALES KAZUKO INOUE, LA EDUCACIÓN Y LOS NIÑOS EN LA CIUDAD DE LA EDUCACIÓN PUNTO CLAVE GROSSA - PR

RESUMEN:

Este artículo es el resultado de una encuesta de alrededor de nueve meses de patologías posturales estudiantes en la Escuela Hall Kazuko Inoue - Educación Infantil y Educación, que se encuentra en Coronel Claudio Vila, Distrito de Uvaranas, en el municipio de Ponta Grossa / Estado de Paraná. Fueron evaluadas 210 estudiantes en el grupo de edad de 08 a 10 años de ambos sexos. El objetivo principal más allá de la supresión de los trastornos posturales, también fue la toma de conciencia de que algunos niños tienen dos o más trastornos a la vez, como lo demuestra este coeficiente de variación se encuentra en 69,97%, considerado por la literatura como una estadística de gran valor.

PALABRAS CLAVE: desviaciones, la postura, los estudiantes, las Estadísticas.

ANÁLISE ESTATÍSTICA DOS PROBLEMAS POSTURAIS EM ALUNOS DA ESCOLA MUNICIPAL KAZUKO INOUE - EDUCAÇÃO INFANTIL E ENSINO FUNDAMENTAL NA CIDADE DE PONTA GROSSA - PR

RESUMO:

O presente artigo é resultado de um levantamento de cerca de nove meses das patologias posturais em alunos da Escola Municipal Kazuko Inoue - Educação Infantil e Ensino Fundamental, que fica localizada na Vila Coronel Cláudio, Bairro de Uvaranas, no município de Ponta Grossa/Estado do Paraná. Foram avaliados 210 alunos na faixa etária de 08 a 10 anos de ambos os sexos. O objetivo principal além do levantamento das patologias posturais, também foi a constatação de que algumas crianças possuem duas ou mais patologias de forma simultânea, sendo isso evidenciado pelo coeficiente de variação encontrado de 69,97%, considerado pela literatura estatística como um valor alto.

PALAVRAS-CHAVE: Desvios, Postura, Alunos, Estatística.