65 - THE ROLE OF FISIOTERAPY IN PROMOTING HEALTH THROUGH UNIVERSITY EXTENSION

TELMA THAIS JONER[1],FABÍOLA HERMES CHESANI[2]
Universidade do Vale do Itajaí,Itajaí SC Brasil
fabiola.chesani@univali.br

INTRODUCTION

The university extension is seen as one of the basic functions of the University. It is the systematic interaction with this society, to contribute to the development of the community and seek knowledge and experiences for assessment and revitalization of teaching and research. As a way to further vitalize the characteristics of university extension, are the partnerships and interdisciplinarity. The complexity of today's world requires the development of interdisciplinary programs and partnerships for education in order to achieve a new kind of thinking, in addition to training more committed to society (MEDEIROS, SOUZA, TAVARES, SASSI et al 2005).

Projects to extend developed by the University of Vale de Itajaí (UNIVALI) are benefiting from a significant portion of the population Catarinense. The issue is important in academic and social integration with various sectors of society and that this occurs priority is the involvement interdisciplinary and integrated actions with greater social impact. This allows the exchange of experience and production on technical and practical knowledge based on the needs presented by the community itself.

The University has channeled efforts to achieve excellence on the profile of professionals in training and it formed. The perspective of the student in training believe that this activity promotes a significant refinement of his ability to listen, and an unparalleled experience in the assessment, diagnosis of situations and planning of actions and interventions in health, adult and elderly. At the same time that it provides a broad view and deep on the community in which will probably act after graduating, their characteristics, needs and demands (MORIN, 2002).

This relationship between university and society chose to promote the health and size of main guidance in the design of university extension "Attention to the health of children, adolescents and their caregivers." Promoting health search modify the conditions of life to be dignified and appropriate, pointing to the transformation of individual cases of making decisions that are favorable to the quality of life and health.

This is a category of integration between teaching and research, because it is an articulation of technical knowledge and popular. What enables the exchange of experiences and ideas and production in the technical and practical knowledge based on the needs presented by the community itself.

The social relationships among groups of health promotion are accompanied by dialogue and respect for differences, learning is a continuous, demanding rational attitudes.

It involves components that facilitates the modification of behavior directed at promoting the health, without however, reduced to the proposition simplistic and patronizing of changes in individual behavior.

The groups promoting the health potential of the capabilities of the subjects in the possibility of changes in attitudes and behaviors aimed to confront the conditions that create suffering that could be avoided. They seek the autonomy and independence of those who feel or are committed to their functional ability.

Develop awareness of citizenship and the right to dignified life, broadening its participation in the social and political construction.

In the same perspective of seeking the autonomy and independence to physiotherapy in the project directed to extend its actions to perform evaluations posture in children from 5 to 15 years of age and carry out guidelines posture according as the postures assessments.

The most common causes for bad posture adopted by the child are directly related to their physical characteristics. During the growth in the spine grows faster than the limbs, muscles and tendons and not always accompany bone growth, taking time to accommodate itself with its new body, for example, is common to see young people tend to bend - if in search of a better balance; of girls that (ashamed) crossing the floor shrink to hide their breasts in development; of obese youngsters that will endeavor to sustain their own weight. It is at that stage a lot of insight, sensitivity and even shame that is a common posture shrink, gangling walk a certain lack of movement by developing the various types of postural deviations (Goncalves et al, 2007; Steigleder, 2007).

However it is at school age who understands the ideal stage for the recovery of dysfunction in the column effectively, because the correction early this phase allows correct posture patterns in adulthood and this is the period of greatest importance to the development of individual musculo-skeletal But after that period, the prognosis becomes more difficult and more prolonged treatment or even those changes may become irreversible problems and without specific treatment (Martelli and Traebert, 2006).

Epidemiological data indicate a high prevalence of postural changes of spine in children and adolescents. A study involving school children from 6 to 17 years of age showed that the hyperkyphosis was present in 20.9%, with predominance in males (Townsend, 2002).

Another study also showed that schools with 84.9% of children aged 7 to 14 had the shoulders and hyperkyphosis protruding dorsal (Ferronatto, 1998).

Therefore, the purpose of this study was to identify the posture disorders in children 5 to 15 years and promote educational posture.

METHODOLOGY

The documentary analysis method was used to develop this study. It is a methodology of research that shows as an essential characteristic, work with data and documents pre-existing (Pimentel, 2001).

Although little explored in the area of education, documentary analysis is great technique for exploratory approach to data quality, are complementing the information obtained by other techniques, whether used alone to reveal new aspects of an issue or problem. They considered any documents written materials that could be used as a source of information about human behavior. These range from laws and regulations, standards, opinions, letters, memos, personal diaries, autobiographies, newspapers, magazines, speeches, scripts for television and radio program, school statistics and records (LÜDKE, ANDRÉ, 1986).

The documents reviewed were: postural assessments and guidance posture in each classroom.

The acquisition of clinical data was based on individual assessment posture in order to determine the prevalence of

postural changes in students through the criteria proposed by Kendall, MC. The variables in the front, rear and side postural deviations were the following: lateral inclination of the head, elevation, depression, protrusion and retraction of the shoulders, lateral inclination of the hip, knee valgus, varus, or flexo hiperextenso, feet valgus, varus. And the diseases of the spine were: hyperkyphosis, hyper cervical and lumbar lordosis, and scoliosis. It was also obtained height in meters and body weight in kilograms.

Were excluded from the study showed that school physical disability that makes it impossible to test and those who did not wish to participate. The examination was conducted in a large room with natural light, in addition to the artificial lighting with fluorescent lamps, in continuous flow organized. The school is positioned in front of the examiner, facing a wall. It adopted the posture of standing in previous positions, side and rear. The school used clothes appropriate for the examination, such as shorts and shirt for girls and shorts for boys.

The posture assessment of students in a class identifies the main anomalies identified and after this assessment planejávamos an educational intervention students. The educational intervention was performed in the classroom with the presence of the teacher and the teacher then develops daily exercises planned by the physiotherapist.

The assessment posture is very important to be detecting postural imbalances and be guided our students to the activities of greatest benefit to each offer without risks. It is believed that without the assessment can be accentuating the imbalance in the implementation of activities without guidance.

RESULTS

University extension of this project is part of the program "Learn To Live" and is dedicated to the care of children, adolescents and their caregivers regarding the issues of health promotion. The Center for Health Sciences has a long history in shares Itajaiense Extension in the community, specifically around the UNIVALI. Currently, the group operates in two institutions in this space, which are: House Rodolpho-Bosco Home Fabiano of Christ and Child Education Center Our Lady of Thanks. Among the actions undertaken by the group may be highlighted: health education for children, teens, teachers and officials of the institution and the family. For these activities the group works with the ideas of Paulo Freire. Also developed are more specific and targeted activities, to make a survey of the main difficulties and needs of the target population from the main problems encountered.

From March to September 2008 to physiotherapy assessed 78 students with the average age of 5 to 15 years. These were 38 male and 40 female.

Several changes were detected posture, but those that drew the most attention in the region earlier were: 19 (24%) students present inclination of the head to the right, 28 (35%) right shoulder higher, 38 (48%) students with knee valgus and 11 (14%) plans feet.

At the back the variable that had a higher incidence was to internal rotation of shoulder with 61 (78%) students, followed by 46 (58%) students with the shoulder blades away from the costal grid, 24 (30%) retificada dorsal kyphosis, 15 (19%) students with concavity of the thoracic spine to the left and 8 students (10%) hyperlordosis lumbar.

In the lateral region were identified the following changes posture: 39 (50%) with shoulder protusos, 27 (34%) students with head anterior, 17 (21%) with cervical spine retificada, 34 (43%) abdominal protusos, 28 (35 %) And lumbar hyperlordosis 8 (10%) of students with hiperxtensão knees.

A study by Penha et al (2005) evaluated 132 subjects were females aged between 07 and 10 and found the following deviations, knee valgus, medial rotation of the hip, antepulsão, pelvic anteversion, hyperextension of the knee, hyperlordosis lumbar, ankle valgus , The gap shoulder, lateral pelvic tilt, scoliosis, rotation of trunk, chest hyperkyphosis, winged scapula, protação of shoulders, abducted scapular, shoulder medial rotation and tilt of the head.

In addition to this, otherwise Sanches and performed by Rezende (1992) evaluated 2413 school children aged between 11 and 16 years for both sexes of state and private network revealed that for a single deviation revealed that 37.47% of the children had kyphosis postural deviation (45.74% meninos/31, 37% girls), 21.44% showed postural deviation lordosis (girls 30.59% / 9.04% boys), and scoliosis reached 10.84% of the children.

Bankoff et al (2002) studied the body posture of schoolchildren found that upper limbs were highlighted deviations in the shoulders and shoulder blades, and the deviations scapular highly related to the weight of school. In the lower limbs has been present for asymmetry also related to weight and height. Considering the cifótica and lordótica curvatures of the spine, it is a significant difference in the angle cifótico measured from the left profile of the students compared male and female.

The study by Correia (2005) based on random sample of 73 children between 5 and 10 years of age found that: the number of postural deviations and diseases of the spine are diversified in a certain amount, the prevalence of deviations are found raising the shoulder, adduction of the shoulder blades and asymmetry of the Triangle and Tales of the disease among the scoliosis is that shows more frequently.

Desch et al (2007) estimated the prevalence of postural changes and side later in antero-adolescent female and there are certain socioeconomic factors, demographic, anthropometric and behavioral changes are associated with this posture. There was a prevalence of 66% for the changes side and 70% for the changes anterior-posterior. Changes side were more prevalent in females with normal body mass index (ratio of prevalence, or PR = 1.32, 95% CI: 1.09 to 1.59) and those who watched the television for more than 10 hours per week (PR = 1.16, 95% CI: 1.02 to 1.32).

In the state of Santa Catarina, students of both sexes, aged between 10 and 16 years were evaluated with the help of posturography and the perpendicular. The study found a prevalence of 28.2% of changes between the anterior-posterior evaluated (MARTELLI, 2006).

In another study, with assessments using the test of Adams, was identified a prevalence of 48.4% of lateral postural changes in students from 10 to 12 years of age, and 49.5% of lateral changes in students from 13 to 15 years (PEREIRA, 2005).

Education is the main axis in the disclosure and guidance to the population regarding the health and quality of life. With education, we have the opportunity to help communities to develop healthy habits and thereby, prevent various diseases. Caring posture These have gradually awakened interest in both academic and technical means and in different media. Receiving special attention when related àabordagem posture in children of school age (and ELISABETEl Guazzelli, 2005; VERDIRI, 2003).

Groups of health promotion, according to Santos, Da Ros; Crepaldi and Ramos (2006, p.03) can be defined as "an interdisciplinary collective intervention of health, consisting of a group of its participants to the limit of ethical disposal of unnecessary and avoidable differences between human groups.

CONCLUSION

The study based on the sample concludes that in the previous 48% of students had knee valgus. In the back 78% of students had internal rotation of shoulder, then 58% students with the shoulder blades away from the coast grid. Already in the side we show 50% of students with shoulder protusos, 43% and 35% abdomen protusos hyperlordosis lumbar.

These results are cause for concern because they are children, where the skeleton is now being formed and are more susceptible to distortion and musculoskeletal structures, presenting smaller bear the burden. Moreover, this is an age conducive to the establishment of healthy habits. This reinforces the idea that the school is responsible for the area of health promotion formalizing of the teaching-learning process, when the child is in the phase of growth.

So no use make only a posture assessment and does not provide an educational activity for the students.

REFERÊNCIAS

BANKOFF, A.D.P. et al. **Estudo dos problemas posturais em crianças da rede pública escolar causados por má nutrição e trabalho pesado,** 2002.

CORREA, A.L, PEREIRA, J.S, SILVA, M.A.G. **Fisioterapia Brasil.** Avaliação dos desvios posturais em escolares: estudo preliminar. 6(3):p.8- 175, 2005.

DETSCH, C; ANNA M. H. L; CLÁUDIA T.C **Rev. Panam Salud *Publica/*** *Pan Am J Public Health* 21(4), 2007.

FERRONATTO, A; LANDOTTI, C.T; SILVEIRA, R.P. **Rev. Movimento.** A incidência de alterações do equilíbrio estático da cintura escapular em crianças entre 7 a 14 anos. 9: p.25-30.1998.

GONÇALVES, J; BRUM, LM; SOUZA, W; LIMA C.N.C. **Coluna vertebral: O que nossos alunos estão fazendo com ela.** Tese (Saúde Pública)- Colégio Estadual Professor Murilo Braga, São João de Meriti/RJ. 2007.104f.

GUAZZELLI, E. M. **O universo contraditório dos cuidados posturais em crianças: representações sociais de profissionais de saúde, professores, funcionários, familiares e alunos em torno das posturas humanas**. Tese (Saúde Pública)- Faculdade de Saúde Pública, São Paulo. 2005. 522f

LÜDKE, M.; ANDRÉ, M. E. D. A. **Pesquisa em *educação*: abordagens qualitativas**. São Paulo: EPU, 1986.186p.

MARTELLI, R.C, TRAEBERT, J**. Rev. Bras Epidemiologia.** Estudo descritivo das alterações posturais de coluna vertebral em escolares de 10 a 16 anos de idade. 9 : 2006. p.87-93.

MARTELLI, R.C, TAREBERT, J. **Rev. Bras Epidemiol**. Estudo descritivo das alterações posturais da coluna vertebral em escolares de 10 a 16 anos de idade. Tangará- SC, 2004. 9(1): 2006. p.8793.

MEDEIROS, V.L.C.A et al. . **Revista Brasileira de Extensão Universitária** /Fórum de Pró-Reitores de Extensão das Universidades Públicas Brasileiras. A interdisciplinaridade na prática da extensão universitária: uma formação universitária mais comprometida com a realidade social. Vol.3, n.2(2005). Rio de Janeiro: UFRJ: UNIRIO, 2005.

MORIN, E. **Os sete saberes necessários à educação do futuro.** São Paulo: Cortez; Brasília, DF: UNESCO, 2002.

PENHA, P.J .et al **Revista Clínica**. Avaliação Postural em meninas de 7 a 10 anos. Vol. 60 nº1/ São Paulo jan/fev 2005. Disponível em http://www.scielo.br/scielo.php. Acesso em: 05 out.2008.

PEREIRA, L.M; BARROS, P.C.C;OLIVEIRA, M.N.D; BARBOSA A.R**. Rev .Saúde Com Escoliose**: triagem em escolares de 10 a 15 anos. 2005; 1(2): p.43-134.

RESENDE, J.A; SANCHES, D. **Revista da Educação Física** Avaliação dos desvios posturais em crianças com idade escolar de 11 a 16 anos. vol. 3 nº1.1992.

SANTOS, L.; DA ROS, M. A.; CREPALDI, M. A. & RAMOS, L. R. **Revista Saúde Publica**.Grupos de promoção à saúde no desenvolvimento da autonomia. Condições de vida e saúde. 40, 2, 346-352. (2006).

PIMENTEL, A.**O método da análise documental: seu uso numa pesquisa historiográfica.** Cadernos de Pesquisa-(nov. 2001) p. 179-195 .

VILARINHO, R.M.A**. Rev. Acta Fisiátrica.** Incidência de hipercifose como alteração postural em escolares de 6 a 17 anos em uma escola pública municipal da cidade Catanduva. 1(9).2002.

THE ROLE OF FISIOTERAPY IN PROMOTING HEALTH THROUGH UNIVERSITY EXTENSION

ABSTRACT

The university extension is seen as one of the basic functions of the University. In the project of extension of the University "Attention to the health of children, adolescents and their caregivers" elected the promote the health as the main orientation. This study aimed to identify key postural disorders in children 5 to 15 years and promote educational posture. The documentary analysis method was used to develop this search**.** A obtain clinical data was based on individual assessment posture with objective to determine the prevalence of postural changes in students through the criteria proposed by Kendall, MC. From March to September 2008 to evaluate physical therapy and guided 78 students with the average age of 5 to 15 years. These were 38 male and 40 female. The main shortcomings were found in students: 19 (24%) inclination of the head to the right, 28 (35%) right shoulder higher, 38 (48%) knee valgus, 11 (14%) flat feet, 61 (78%) Internal rotation of shoulder, 46 (58%) shoulder blades away from the costal grid, 24 (30%) dorsal kyphosis, 15 (19%) concavity of the thoracic spine to the left, 8 students (10%) hyperlordosis lumbar, 39 (50%) shoulders forward, 27 (34%) **anterio**r head, 17 (21%) cervical spine forward, 34 (43%) abdominal protusos, 28 (35%) and lumbar hyperlordosis 8 (10%) students with hyperextension of the knee. These results are cause for concern because they are children, where the skeleton is now being formed and are more susceptible to deformations. Moreover, this is an age conducive to the establishment of healthy habits. This reinforces the idea that the school is responsible for the area of health promotion formalizing of the teaching-learning process, when the child is in the phase of growth.

Key-Words: Physiotherapy, University extension, promotion of health.

L'ACTCTION DE LA KINÉSITHÉRAPIE DANS LA PROMOTION DE LA SANTÉ PAR L'EXTENSION UNIVESITAIRE

RÉSUMÉ

L'extension univesitaire est conçue comme des fonctions basiques de l'université. Dans le projet d' extension universitaire “Attention à la santé des enfants, des adolescents et de leurs responsables”nous avons choisi la promotion à la santé comme dimension principale d' orientation.L' objectif decette étude d' identifier les principales disfunctions posturales d' élèves de 5 à 15 ans et promouvoir des actions éducatives posturales. L' analyse documentaire a été la méthode utiliée pour développer cette étude.L' obtentio dês données cliniques s' est basée sur l' évaluation de la tenueindividuelle avec l'objetif de vérifier la prévalence des altérations posturales des élèves à travers des critères proposés par Kendall,MC. Pendant la période de mars à septembre 2008, la kinésithérapie a analysé et orienté 78 élèves d'âge moyen de 5 à 15 ans. De ceux-là 38 étaient du sexe masculin et 40 du sexe fèminin.Les principales disfonctions rencontrées dans les élèves ont été :19 (24%) inclinaison de la tête à droite, 28 (35%) l'épaule droite plus élévée, 38 (48%) le genou valgus, 11 (14%) les pieds plats, 61 (78%) épaules proéminentes, 46 (58%)les omoplates saillantes, 24 (30%) cyphose dorsal redressée, 15 (19%) colonne thoracique voûtée sur la gauche, 8 (10%) hyperlordose lombar, 39 (50%) épaules proéminentes, 27 (34%) tête en avant, 17 (21%) colonne cervicale redressée, 34 (43%) sbdomen proéminent, 28 (35%) hyperlordose lombaire, 8 (10) élèves avec hyperextension de genoux. Ces

résultats sont motif de préocupation parce que ce sont des enfants,oú le squellete est en période de information,étant plus suscetibles de déformation. D'autre part c'est un âge favorable à la créations d' habitudes salutaires. Cela renforce l' idée que c' est l' école le lieu responsable pour formaliser la promotion de la santé dans le processus enseignement- apprentissage, quand l' enfant se trouve en phase de croissance.

Most-clé : kinésithérapie,extension universitaire,promotion de la santé

EL PAPEL DE FISIOTERAPY EN LA PROMOCIóN DE LA SALUD A TRAVéS DE LA EXTENSIóN UNIVERSITARIA

RESUMEN

La extensión universitaria es visto como una de las funciones básicas de la Universidad. En el marco del proyecto extramuros "La atención a la salud de los niños, los adolescentes y sus cuidadores" elegidos para promover la salud y el tamaño de la principal orientación. Este estudio tuvo como objetivo identificar los principales trastornos posturales en niños de 5 a 15 años y promover la educación postura. El método de análisis documental se utilizó para elaborar este estudio. La adquisición de los datos clínicos se basa en la evaluación individual postura, a fin de determinar la prevalencia de los cambios posturales en los estudiantes a través de los criterios propuestos por Kendall, MC. De marzo a septiembre de 2008 para evaluar la terapia física y 78 estudiantes guiados con el promedio de edad de 5 a 15 años. De estos 38 eran varones y 40 mujeres. Las principales deficiencias se encontraron en los estudiantes: 19 (24%) la inclinación de la cabeza a la derecha, 28 (35%) del hombro derecho superior, 38 (48%) valgus de rodilla, 11 (14%) los pies planos, 61 (el 78%) La rotación interna de hombro, 46 (58%) hombros fuera de la red costal, 24 (30%) retificada cifosis dorsal, 15 (19%) concavidad de la columna torácica a la izquierda, 8 estudiantes (10%) hyperlordosis lumbar, 39 (50%) hombros protusos, 27 (34%), anterior jefe, 17 (21%) la columna cervical retificada, 34 (43%) abdominal protusos, 28 (35%) y lumbar hyperlordosis 8 (10%) estudiantes con hyperextension de la rodilla. Estos resultados son motivo de preocupación porque son los niños, cuando el esqueleto se está formado y son más susceptibles a las deformaciones. Por otra parte, esta es una época propicia a la creación de hábitos saludables. Esto refuerza la idea de que la escuela es responsable de la esfera de la promoción de la salud de formalizar el proceso enseñanza-aprendizaje, cuando el niño está en la fase de crecimiento.

Palabras clave: Fisioterapia, Universidad de extensión, la promoción de la salud.

A ATUAÇÃO DA FISIOTERAPIA NA PROMOÇÃO A SAÚDE ATRAVÉS DA EXTENSÃO UNIVERSITÁRIA

RESUMO

A extensão universitária é entendida como uma das funções básicas da Universidade. No projeto de extensão universitária “Atenção à saúde de crianças, adolescentes e seus cuidadores” elegemos a promoção à saúde como dimensão principal de orientação. O objetivo deste estudo foi identificar as principais disfunções posturais em escolares de 5 a 15 anos e promover ações educativas posturais. A análise documental foi o método utilizado para desenvolver este estudo. A obtenção dos dados clínicos baseou-se na avaliação postural individual com o objetivo de verificar a prevalência de alterações posturais em escolares através dos critérios propostos por Kendall, MC. No período de março a setembro de 2008 a fisioterapia avaliou e orientou 78 alunos com a idade média de 5 a 15 anos. Destes 38 eram do sexo masculino e 40 do sexo feminino. As principais disfunções encontradas nos alunos foram: 19 (24%) inclinação da cabeça para a direita, 28 (35%) ombro direito mais elevado, 38 (48%) joelho valgo, 11(14%) pés planos, 61(78%) rotação interna de ombros, 46 (58%) escápulas afastadas do gradil costal, 24 (30%) cifose dorsal retificada, 15 (19%) concavidade da coluna torácica para a esquerda, 8 alunos (10%) hiperlordose lombar, 39 (50%) ombros protusos, 27 (34%) cabeça anteriorizada, 17 (21%) coluna cervical retificada, 34 (43%) abdômen protusos, 28(35%) hiperlordose lombar e 8(10%) alunos com hiperextensão de joelhos. Esses resultados são motivos de preocupação por serem crianças, onde o esqueleto está em fase de formação, sendo mais susceptível a deformações. Por outro lado, essa é uma idade favorável à instalação de hábitos saudáveis. Isso reforça a idéia, que é na escola o espaço responsável pela formalização da promoção à saúde no processo ensino-aprendizagem, quando a criança encontra-se na fase de crescimento.

Palavras-chave: Fisioterapia, Extensão universitária, Promoção à saúde.