40 - PRESENCE OF LOW BACK PAIN IN PHYSIOTHERAPY STUDENTS OF A PRIVATE COLLEGE LOCATED IN CASCAVEL, PR

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INTRODUCTION

Low back pain is usually defined as pain, discomfort, muscle tension or hardness located under the ribcage until the bottom of the gluteo, with or without leg pain. (ROBALO et al. 2011).

To Ehrilich (2003) low back pain is naimportante reason of inability, with high level presence in every culture, influencing negatively on people's quality of life. Cox (2002) says that between 60% and 80% of adults have or had na inability pai non spine, mainly on low back.

Low back pain is one of the most frequent diseases nowadays, happening in more than 80% of people during their lifetime. Low back pain is mainly acute and self-limited, but, can become chronic, generating a huge suffering and serious repercussion. As low back pain can be caused by the practice of some activities that overloads spine, physiotherapists, that make exhaustive activities on a daily basis, as moving patients with some physical limitations, patient's assistance, manual resistance, weight lifting and material lifting among other things, exposing their spine a big weights during their work time. So, physiotherapists are Professional that can have low back pain. (SILVA et al, 2005).

Presence of low back pain is stimated in 50% to 80% in any time on people's lifetime of industrialized nations (CARVALHO et al. 2009).

To be sitting for long periods is one of the causes of low back pain, as it causes increasing of pressure inside the intervertebral disc. This pressure increases 35% if person shifts from standing to sitting. Another importante thing about remain sitting is that with the falttening of intervertebral disc, all the structures of low parto f spine, as ligaments, nerves and small articulations are stretched. As these structures are very sensitive, there can happen symptoms of low back pain, mainly when mantainningna anterior body flexion. (OLIVEIRA, 2004).

The main objective is to verify the presence of low back pain in physiotherapists students of a private college in Cascavel, Pr.

MATERIALS AND METHOD

This research is epidemiologic with field research quantitative and transversal cut. It was done from May 19th, 2014 until June 6th, 2014, in a private college, AssisGurgacz, in Cascavel, Pr.

The sample was composed by 95 students, 20 from each class or 100% off emale physiotherapy students. The age of this population is between 18 and 30 yeasr old. The choice of this students was intentional and random.

Data collection was done through a questionnaire fill prepared by the researchers, based on inability index questionnaire of Oswestry, 10 minutes screening testo f Hendler and Roland Morris questionnaire.

The exclusion criteria was the students that didnt want to participate of the research, the one with prognosis of herniated discs and arthodesis, pregnants and with neurological changes.

Data were analysed on Microsoft Office Excell 2013 and statistic evaluation was done on SPSS15.0 software.

RESULTS

95 students participated from the research. 55 students had low back pain during their lifetime or live with pain nowadays. The presence of low back pai non the sample was 60,2%, the average of duration of pain was 22.4 +- 2.1 months. Data are on the table below

Period	Students	With low Back pain
1º	20	8
3º	20	10
5º	20	13
7º	20	16
9º	13	8

Table one: Presence of low back pain

The average age of students with low back pain was 21,3 + - 0,4 yeasr old, with intensity of pain of 3,6 +-1,4. The pain is from low intensity to moderate intensity. 67,9% of these students related low back pain when they do physical activity, 12.5% with reduced muscle strenght, 7,1% with local paim, 7,1% with sciatica sympthoms, 5,4% with legs tingling or numbness. Related to the activity or position that makes the pain worse, 7,4% of the students related yes and 28,6% related no: the main activuties related were: remain sitting 30,4% and squat 21,4%, 62,4% of the students related that they remain sitting for more than 2 hours.

Relation between weight and height was evaluated through body mass index (IMC). It was considered overweight when result was above 25 (KHOURI et al. 2008). The average was 22,5+- 0,3 and average height was 1,63 + - 0,0m and average weight was 60+ - 1,1 Kg

Students that worked as a trainee on patient care clinic, the average was 52,7%, working average 4,9 +-0,9hours per week. From 55 students that had low back pain, 31 were working as a trainee.

Regarding physical activities, 62% of the students didn't work out and 38% worked out about 3,5 +- 0,1 hours per week. The activities were: running 5,4%, walking 6,5% and going to the gym 25,8%.

The biggest difficulties level related by the low back pain patients were: working out 51,1% with a lot of difficulty, doing the cleaning 50,2% with some difficulty , to squat 39,4% with a lot of difficulty, remain stand 35,7% with a lot of difficulty. The other difficulties related on the research are on the table below.

		0 No difficulties	1 Low difficulties	2 Some difficulties	3 Big difficulties	4 inability	5 Not applied
1	Sleep all night long	58,9	21,5	19,6	0	0	0
2	Turning over in bed	60,7	23,2	10,7	5,4	0	0
3	Reach high shelves	55,3	28,6	10,7	3,6	0	1,8
4	Carrying two shopping bags	46,4	17,9	28,6	7,1	0	0
5	Doing the cleaning	10,5	21,4	50,2	16,1	0	1,6
6	squat	23,1	16,1	21,4	39,4	0	0
7	Remain sitting	14,3	26,8	21,4	35,7	1,8	0
8	walking	57,2	26,8	8,9	7,1	0	0
9	Working out	0	7,1	20,3	51,1	17,9	3,6

Table 2: Identified difficulties

DISCUSSION

This research verified the presence of low back pain in physiotherapy students aged between 18 and 30 years old. On the investigation, was observed the presence of low back pain in 60.2% of the students. On Robalo (2011) study, presence of low back pain was 60% in a sample compound of 186 people aged between 18 and 42 years old. On Machado et al, (2013) study, with a sample of 45 people aged between 26 +-6 years old, presence of low back pain on physiotherapy trainee was 59,3%. These data are similar to the one found in this research.

Nyland and Grimmer (2003) found on their study that the risk of low back pain in physiotherapy students is increases significantly on the first year of trainee program. To these authors, this risk becomes higher as soon as the graduation is going to the end and during professional life.

Presence of chronic low back pain increases linearly as IMC increases, which is related to Silva et. al (2004) study. This is justified by the extra weight that spine must sustain. This can change the biomechanical balance of the body, justifying the higher chronic low back pain in overweight people. The results found on Guedes (2006) research show that people that have body mass index above normal (>30 Kg/m2) had higher presence of pain. The author believes that obesity is a risk factor to the appearance of low back pain. He also states that low back is the most injured, mainly due to the weight it supports. But, on this study, average IMC was 22.5 +-0,3. So, in this case there is no relation between obesity and low back pain.

Remain sitting for a long period was one of the risk factors found on this study. The same was found by Moraes et.al (2009). He verified that the longer people remain sitting, the bigger was the discomfort. People that remained sitting for 3 hours a day, 33,3% had discomfort and people that remained sitting for eight or nine hours a day, 66,7% had discomfort. Souza (2010), with the same intention, states that wrong positions for a long period, increases the pressure on the spine, causing discomfort and pain. It was also observed on this study, but without statistics significance.

As per Barros et.al (2011), to remain sitting helps muscle shortening, reducing mobility of hip joint and low back .

One of the most important results of this research was that 38% of students worked out and 25% practiced bodybuilder at the gym. On Souza et.al (2010) study, was observed that there was a high presence of low back pain during and after the bodybuilder exercise, 41% abd 63% respectively. As per Bompa and Cornacchia (2000), there is a relation between the way exercise is done, low repetitions and high weight, as a wrong exercise, causing low back pain. As per Duca, Silva and Nhaus (2011), bodybuilder exercise must respect the individualities of each person. They also say that to workout regularly improves life quality.

CONCLUSION

This research showed that low back pain is present in 60.2% of physiotherapy students. The main issues related, known as ergonomic activity risk, 25,8% of students workout at the gym and related discomfort, mainly on squat exercise 39,4%. On this study, there was not found relation between obesity and low back pain, but it identified an increase of low back pain presence when evaluated the long period remained sitting.

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PRESENCE OF LOW BACK PAIN IN PHYSIOTHERAPY STUDENTS OF A PRIVATE COLLEGE LOCATED IN CASCAVEL, PR

ABSTRACT

Introduction: Low back pain is usually defined as pain, discomfort, muscle tension or hardness located on the lowest part of spine, below thoracic spine and above sacrum, with or without leg pain. Objective: The objective of this article was verifying the presence of low back pain in physiotherapy students of a private college in Cascavel, Pr. Methodology: this is a n epidemiological study, with quantitative and cross cut research. The sample was compound by 95 students, female, ages between 18 and 30 years old. The researchers made a questionnaire, based on incapacity level of Oswestry, 10 minutes screening trial of Hendler and Roland Morris questionnaire, applied from May 19th 2014 until June 06th 2014. The results were analyzed on Microsoft Office Excel 2013 and statistics evaluation was done on SPSS15.0 Software. Results: We observed that 60,2% of the students had low back pain and intensity fluctuated from 3,6 +/-1,4 weak to medium. 39,4% have difficulty to execute squat exercise at the gym. 62,4% of the students have low back pain when they remain seated for a period longer than 2 hours. Conclusion: this study showed the presence of low back pain in 60,2% of the students and possible reasons are remain seated and the gym exercises when made in an incorrect way.

KEYWORDS: Low back pain.Presence.Young adults.

PRÉVALENCE DE LA LOMBALGIE EM COURS ACADÉMIQUE DE TRAITEMENT D'UNE INSTITUTION PRIVÉ DE CASCAVEL PR

RÉSUMÉ

Introduction: La lombalgie est habituellementdéfiniecomme une douleur, l'inconfort, latensionmusculaire ou raideur à lapartieinférieure de lacolonnevertébrale, et em dessous de lanervureau-dessusdusacrum, avec ou sanscolonne de douleur à lajambe. Objectif:Cetteétudevisait à déterminerlaprévalence de lalombalgieaucoursacadémique de laphysiothérapiedans une institutionprivéedanslaville de Cascavel-PR. Méthodologie: Il s'agit d'une étude d'une épidémie de recherchessurleterrain, quantitative et transversale, l'échantillonétaitcomposé de 95 femmesuniversitairesâgés de 18 à 30 ans, um questionnaire, écrits par leschercheurseux-mêmes a étépréparé , surla base de questionnairesdesOswestry index de handicap, ledépistage d'essai 10 minutes Hendler, et Roland Morris questionnaire, administrésur 19 mai 2014 à 6 Juin 2014, lesdonnéesontétécompiléesdans Microsoft office Excel 2013, effectué une analysestatistiquedescriptive par lelogiciel SPSS 15.0. Résultats: Il a étéobservé que 60,2% desuniversitairesontle mal de dos, avec une intensité de 3,6 ± 1,4 faible à modérée, 39, 4% ont de grandes difficultésdansl'exercice de squatdanslegymnase, que 62,4% desuniversitaireslombalgierapporté reste assis pendant plus de 2h. Conclusion:L'étude a révélé une prévalence de 60,2% dansladouleurlombaire, et lesconclusions possibles ontétépasséassis, et lesexerciceseffectuésdanslegymnase mal.

MOTSCLÉS: douleur aubasdu dos. Prévalence. Lesjeunesadultes.

LAPREVALENCIA DEL DOLOR LUMBAR EM CURSO ACADÉMICO DE TERAPIA DE UNA INSTITUCIÓN PRIVADA DE CASCAVEL – PR

RESUMEN

Introducción: El dolorlumbar se define generalmente como dolor, malestar, tensión muscular o rigidez em laregión inferior de lacolumna vertebral, y por debajo de lacostilla superior del sacro, con o sinlacolumna de dolor em lapierna. Objetivo: El presente estúdio fue determinar laprevalencia de dolorlumbarenel curso académico de la fisioterapia en una institución privada em laciudad de Cascavel-PR. Metodología: Se trata de um estudio de una epidemia conlainvestigación de campo, cuantitativa y transversal, lamuestraestuvo conformada por 95 mujeres académicas de entre 18 a 30 años, um cuestionario, escrito por lospropios investigadores fue preparado , basado em loscuestionarios de los índices de discapacidad de Oswestry, proyección de prueba 10 minutos cuestionarioHendler, y Roland Morris, administrado em mayo 19, 2014 a junio 6, 2014, losdatosfueron tabulados en Microsoft Office Excel 2013, realizo elanálisis estadístico descriptivo por el software SPSS 15.0. Resultados: Se observó que el 60,2% de los académicos tienedolor de espalda, con una intensidad de 3,6 ± 1,4 débil a moderada, 39, 4% reportó grandes dificultades em squat em elgimnasio, que el 62,4% de los académicos dolor de espalda baja informado permanece sentado durante más de 2 h. Conclusión: El estúdio reveló una prevalencia de 60,2% em eldolorlumbar, y losposibleshallazgos se pasó sentado, y losejercicios a cabo enelgimnasio de forma incorrecta.

PALABRAS CLAVE: Dolor de espalda baja. Prevalencia. Los adultos jóvenes.

PREVALÊNCIA DE LOMBALGIA EM ACADÊMICAS DO CURSO DE FISIOTERAPIA DE UMA INSTITUIÇÃO PRIVADA DO MUNICÍPIO DE CASCAVEL-PR

RESUMO

Introdução: Lombalgia é usualmente definida como dor, desconforto, tensão muscular, ou rigidez, localizadana região inferior da coluna vertebral abaixo da coluna torácica e acima do sacro, com ou sem dor na perna. Objetivo: A presente pesquisa foi verificar a prevalência de lombalgia em acadêmicas do curso de fisioterapia de uma instituição privada do município

de Cascavel-PR. Metodologia: trata-se de um estudo de caráter epidemiológico com pesquisa de campo, quantitativa e de corte transversal, a amostra foi composta por 95 acadêmicas do sexo feminino com idade entre 18 à 30 anos, foi elaborado um questionário, de autoria dos próprios pesquisadores, tomando como base os questionários do índice de incapacidade de Oswestry, Teste de triagem de 10 minutos de Hendler, e questionário de Roland Morris, aplicado em 19 de maio de 2014 à 06 de junho de 2014, Os dados foram tabulados no Microsoft Office Excel 2013, realizada análise estatística descritiva pelo Software SPSS 15.0. Resultados: Observou-se que 60,2% das acadêmicas apresentam dor lombar, com intensidade 3,6 ± 1,4 fraca à moderada, 39, 4% relata muita dificuldade no exercício de agachamento na academia, 62,4% das acadêmicas que relatam dor lombar permanece sentada por mais de 2h. Conclusão: O estudo revelou uma prevalência de 60,2% na dor lombar, e os possíveis achados foram a permanência sentado, e os exercícios realizados na academia de forma inadequada.

PALAVRAS-CHAVE: Lombalgia. Prevalência. Adultos jovens.