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 Ehrlich (2003) low back pain is a important 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 important thing about remain sitting is that with the flattening 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 maintaining a 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 year 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 didn't want to participate of the research, the one with prognosis of herniated discs and arthodesis, pregnant 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 pain on the sample was 60.2%, the average of duration of pain was 22.4 +- 2.1 months. Data are on the table below.

<table>
<thead>
<tr>
<th>Period</th>
<th>Students</th>
<th>With low Back pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>3rd</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>5th</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>7th</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>9th</td>
<td>13</td>
<td>8</td>
</tr>
</tbody>
</table>

Table one: Presence of low back pain

The average age of students with low back pain was 21.3 + - 0.4 year 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 pain, 7.1% with sciatica symptoms, 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 activities 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.

JAYNE GRASEL;
JOSÉ MOHAMUD VILAGRA
FACULDADE ASSIS GURGACZ - FAG, CASCAVEL, PARANÁ, BRASIL.
Jaynegrasel@hotmail.com

doi: 10.16887/85.a1.40
Table 2: Identified difficulties

<table>
<thead>
<tr>
<th></th>
<th>0 No difficulties</th>
<th>1 Low difficulties</th>
<th>2 Some difficulties</th>
<th>3 Big difficulties</th>
<th>4 Injury</th>
<th>5 Not applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sleep all night long</td>
<td>58.9</td>
<td>21.5</td>
<td>19.6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2 Turning over in bed</td>
<td>60.7</td>
<td>23.2</td>
<td>10.7</td>
<td>5.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3 Reach high shelves</td>
<td>55.3</td>
<td>28.6</td>
<td>10.7</td>
<td>3.8</td>
<td>0</td>
<td>1.8</td>
</tr>
<tr>
<td>4 Carrying two shopping bags</td>
<td>46.4</td>
<td>17.9</td>
<td>28.6</td>
<td>7.1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5 Doing the cleaning</td>
<td>10.5</td>
<td>21.4</td>
<td>50.2</td>
<td>16.1</td>
<td>0</td>
<td>1.6</td>
</tr>
<tr>
<td>6 Squat</td>
<td>23.1</td>
<td>16.1</td>
<td>21.4</td>
<td>39.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7 Remain sitting</td>
<td>14.3</td>
<td>26.8</td>
<td>21.4</td>
<td>35.7</td>
<td>1.8</td>
<td>0</td>
</tr>
<tr>
<td>8 Walking</td>
<td>57.2</td>
<td>26.8</td>
<td>8.9</td>
<td>7.1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9 Working out</td>
<td>0</td>
<td>7.1</td>
<td>20.3</td>
<td>51.1</td>
<td>17.9</td>
<td>3.6</td>
</tr>
</tbody>
</table>

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.

REFERENCES

GUEDES, F.G.; MACHADO, A. P. N. B. Fatores que influenciam no aparecimento das dores na coluna vertebral de acadêmicos do curso de fisioterapia. Estação Científica Online (Ed. Esp. Saúde)Juiz de Fora, n.05, Jan. 2008
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.


PRÉVALENCIA DE LA LOMBALGIE EN COURS ACADÉMIQUE DE TRAITEMENT D’UNE INSTITUTION PRIVÉE DE CASCAVEL, PR

RÉSUMÉ

Introduction: La lombalgie est habituellement définie comme une douleur, l'inconfort, latension musculaire ou raideur à la lombar région, et en dessous de l'anulus vertébral et sacrum, avec ou sans douleur de lombaire. Objectif:Cette étude visait à déterminer la prévalence de la lombalgie en cours académique de l'éducation et en physiothérapiedans une institution privée dans la ville de Cascavel, Pr. Méthodologie: Il s’agit d’une étude d’une épidémie de recherche sur 10 minutes, le protocole de Hendler et Roland Morris questionnaire, évalué de Mai 2014 à Juin 2014. Les résultats ont été compilés dans Microsoft Office Excel 2013 et l’évaluation statistique a été faite sur SPSS15.0. Résultats: Nous avons observé que 60.2% des étudiants avaient une lombalgie et l’intensité fluctuait de 3.6 +/-1.4 faible à modérée, 39.4% ont des difficultés à exécuter l’exercice de squat au gymnase. 62.4% des étudiants ont du mal à rester assis pendant plus de 2h. Conclusion: Cet examen a révélé une prévalence de 60.2% dans la danse, les exercices de squats, et les exercices de musculation ont été possibles. Les étudiants ont constaté des difficultés avec la posture et la gymnastique sont restés assis dans un incorrect way.

MOTSCLÉS: douleur, assis, prévalence, études des adultes.

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

RESUMEN

Introducción: El dolor lombar se define generalmente como dolor, malestar, tensión muscular o rigidez, en el área inferior de la columna vertebral, y por debajo de la cintilla superior del sacro, con el sínfisis de dolor en la pierna. Objetivo: El presente estudio fue determinar la prevalencia de dolor lombar en curso académico de la fisioterapia en una institución privada en la ciudad de Cascavel-PR. Metodología: Se trata de un estudio de una epidemia con un tamaño de 95 mujeres académicas de entre 18 a 30 años, un cuestionario, escrito, por los propios investigadores fue preparado, basado en los cuestionarios de los índices de incapacidad de Oswestry, proyección de prueba 10 minutos cuestionarioHendler, y Roland Morris, administrado en mayo 19, 2014 a junio 06, 2014, los datos fueron tabulados en Microsoft Office Excel 2013, analizado en el software SPSS15.0. Resultados: Se observó que el 60.2% de los académicos tenía dolor de espalda, con una intensidad de 3.6 ± 1,4 débil a moderada, 39.4% reportó grandes dificultades en el ejercicio de gimnasia, que el 62.4% de los académicos dolor de espalda baja informado permanece sentado durante más de 2 h. Conclusión: El estudio reveló una prevalencia de 60.2% en edololombar, y los posibles hallazgos se pasó sentado, y los ejercicios a cabo en el gimnasio de forma incorrecta.


PREVALENCIA DE LOMBALGIA EN CURSO ACADÉMICO DE FISIOTERAPIA DE UNA INSTITUCIÓN PRIVADA DEL MUNICIPIO DE CASCAVEL-PR

RESUMO

Introdução: Lombalgia é usualmente definida como dor, desconforto, tensão muscular, ou rigidez, localizada na 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 acadêmicos 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.