ORIGINAL ARTICLE

Association of Non Specific Lower Back Pain With Level of Disability among Medical Students of (ANMCL) Lahore

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ABSTRACT

Background: Low back torment (LBP) is the main source of incapacity and failure to work, and anticipated that would influence up to 90% of individuals sooner or later in their lives. The term low back pain (LBP) was characterized by Andersson as "Pain restricted to the area between the lower edges of the twelfth rib and the gluteal folds". LBP is the most well-known sort of back pain. Low back pain (LBP) is the principle side effect of most lumbar spine sicknesses and it is a continuous multi etiological disorder. LBP is normally named subject to mechanical components, non mechanical elements, and instinctive infection.

Aim: To find the relationship between basic Lower back pain (LBP) and Level of disability among medical students of Azra Naheed Medical College (ANMC), Lahore.

Methods: The current study was a analytical associational research. The data was collected from Department of Pharmacy and Department of physiotherapy.The data was collected through questionnaire from 217 students out of total 247 original sample size, while 30 students did not participated in research.

Results: Out of 217 participants (91.7%) described mild level of pain. Only (64.1%) showed minimal level of disability. The stuy showed that out of 217 participants, 139 participants had minimal disability and 74 participants had moderate level of disability and only 4 had severe level of disability.

Conclusion: This present study showed that that medical students have higher prevalence of non-specific (LBP) with majority of the students indicated higher frequency of mild pain, minority indicated moderate levels of non-specific lower back pain (LBP), but severe levels of non-specific lower back pain (LBP) was not described. This study also determined that mild and moderate levels of non-specific lower back pain (LBP) are not significantly connected by higher levels of disability.

Keywords: Pain measurement **(PM)**, Physical therapy modalities **(PTM)**, Prevalence,

INTRODUCTION

Lower back pain **(**LBP) is very common among general population, those who engage in physical activity, students and geriatric population as well; often it is very disabling depending upon the aggressiveness of condition which varies individual to individual. Low back pain (LBP) is a most common kind of back agony. (LBP) is the main cause of disability and failure to work, and anticipated that would impact up to 90% of persons earlier or future in their lives **.** When lower back pain problem develop in any person, it might be a sort of lumbar spine sicknesses and it is a continuous multi etiological disorder.

MATERIALS AND METHODS

This study is based on analytical associational research. The data was collected from Department of Pharmacy, Department of physiotherapy and department of MBBS. Sample size was calculated using Raosoft. The data was collected through questionnaire from 217 students out of total 247 original sample size, while 30 students did not participated in research.

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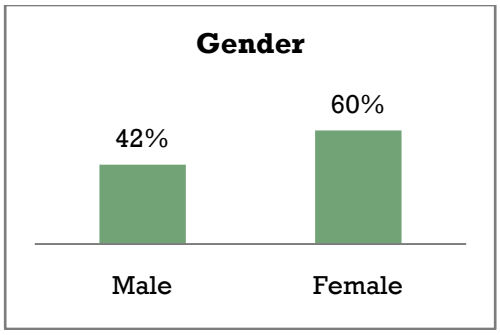
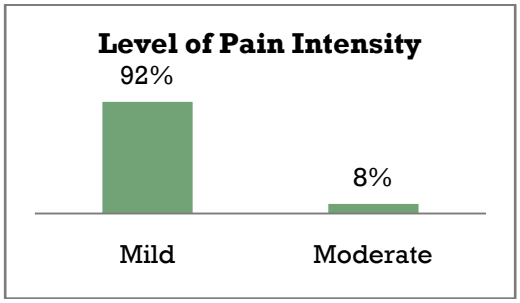
RESULT

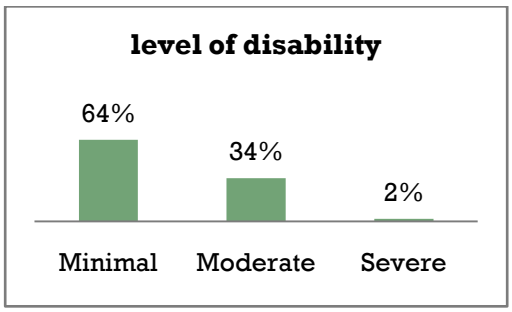
Most of the participants were females 127(58.5%). Most of the participants 199(91.7%) reported mild level of pain on visual analogue scale. Most of the participants 139(64.1%) reported minimal level of disability on Oswestry disability index. Average age in years of the students was 21.33 with (SD=1.813).

Out of 217 total respondents 139 had minimal disability 74 had moderate level of disability and 4 had severe level of disability. On Visual analogue scale 199 respondents showed mild pain 18 showed moderate pain while nobody responded with severe level of pain.

Chi-square test of independence showed no significant association between non specific LBP and level of disability i.e., $\chi 2$, (n=247)=3.25, p>.05.







Descriptive statistics for age of Students

	Mean±SD	Min	Max
Age	21.33± 1.813	18	25

Tabulation between pain intensity and Disability

Disability	Visual analogue scale score			Total
	Mild	Moderate	Severe	
Minimal	138	1	0	139
Moderate	60	14	0	74
Severe	1	3	0	4
Total	199	18	0	217

Chi-square test of association between nonspecific Pain intensity and level of disability.

	Value	p-value
Pearson Chi-square	3.25	0.36

DISCUSSION

Asdrubal Falavigna et al (2013) examined the expanded commonness of low back ache among physiotherapy undergraduates contrasted with medical undergraduates. They used self administered questionnaire and utilized comparative study to find prevalence of low back pain. They found that the physiotherapy understudies were 2.51 times more prone to have LBP in an example made out of medicinal and physiotherapy understudies[1]. This study is based on association between non specific LBP with level of disability and it concluded that medical students have higher prevalence of non specific LBP most respondents reported mild levels on pain while some respondents reported moderate levels of pain.

Derek R (2007) Assessed concentrates on led among school youngsters and college understudies on the back agony. He worked on a single variable I-e low back pain. He collected data from various publications which mostly used questionnaire; He used cross sectional study method to conduct review. By and large, this audit proposes that BP is most likely normal among youngsters, with numerous studies reporting a sensibly high pervasiveness rate inside school kids and college understudies. His study concluded that LBP is common among young students and research findings state that university/college and school students have higher prevalence of LBP[4]. This study is based on association of non specific LBP with level of disability and it concluded that medical students have higher incidence of non specific LBP with majority falling in Mild level of non specific LBP and minority of the respondents reported moderate level of non specific LBP while no one reported with severe level on non specific LBP.

Sikiru L and Hanifa S (2010) examined the predominance and danger variables of low back torment among medical attendants in Nigerian hospital. They worked on single variable i.e., low back pain. They collected data from nurses using self structured and valid questionnaire. They used cross sectional study to find prevalence of low back pain among nurses. It was reasoned that poor back consideration ergonomics is the major inclining component of LBP[10].

This study indicated higher prevalence of non specific LBP among medical students and it concluded that mild and moderate levels of non specific low back pain is not causing any significant disability among medical students.

CONCLUSION

This study showed that medical students have higher prevalence of non specific LBP with majority of the students indicated higher frequency of mild pain, minority indicated moderate levels of non specific LBP while severe levels of non specific LBP were not reported. This study also concluded that mild and

moderate levels of non specific LBP are not significantly associated with higher levels of disability.

REFERENCES

1. Falavigna A, Teles AR, Mazzocchin T, de Braga GL, Kleber FD, Barreto F, et al. Increased prevalence of low back pain among physiotherapy students compared to medical students. European Spine Journal. 2011;20(3):500-5.
2. Calvo-Muñoz I, Gómez-Conesa A, Sánchez-Meca J. Prevalence of low back pain in children and adolescents: a meta-analysis. BMC pediatrics. 2013;13(1):1.
3. Ünsal A, Tozun M, Ayranci U. Prevalence of low back pain among a group of Turkish men and its effect on quality of life. Pak J Med Sci. 2010;26:930-4.
4. Smith DR, Leggat PA. Back pain in the young: a review of studies conducted among school children and university students. Current pediatric reviews. 2007;3(1):69-77.
5. Yamada K, Matsudaira K, Takeshita K, Oka H, Hara N, Takagi Y. Prevalence of low back pain as the primary pain site and factors associated with low health-related quality of life in a large Japanese population: a pain-associated cross-sectional epidemiological survey. Modern Rheumatology. 2014;24(2):343-8.
6. SBFM HMK. Prevalence and risk factors of low back pain among nurses in operating rooms, Taif, Saudi Arabia. Journal of Medical Science and Research. 2013;4(1):3.
7. Hafeez K, Memon AA, Jawaid M, Usman S, Usman S, Haroon S. Back Pain–Are Health Care Undergraduates At Risk? Iranian journal of public health. 2013;42(8):819.
8. do Nascimento PRC, Costa LOP. Low back pain prevalence in Brazil: a systematic review Prevalência da dor lombar no Brasil: uma revisão sistemática La prevalencia de dolor lumbar en Brasil. Cad Saúde Pública. 2015;31(6):1-13.
9. Smith AJ, O'sullivan PB, Beales D, Straker L. Back pain beliefs are related to the impact of low back pain in 17-year-olds. Physical therapy. 2012;92(10):1258-67.
10. Sikiru L, Hanifa S. Prevalence and risk factors of low back pain among nurses in a typical Nigerian hospital. 2010.
11. Al-samawi MAG, Awad HMAA. prevelenace of low back pain among nurses working in Elmak Nimer University Hospital–Shendi-Sudan 2015.
12. Kwon B, Roffey D, Bishop P, Dagenais S, Wai E. Systematic review: occupational physical activity and low back pain. Occupational medicine. 2011;61(8):541-8.
13. Kamper SJ, Stanton TR, Williams CM, Maher CG, Hush JM. How is recovery from low back pain measured? A systematic review of the literature. European Spine Journal. 2011;20(1):9-18.
14. Korovessis P, Repantis T, Zacharatos S, Baikousis A. Low back pain and sciatica prevalence and intensity reported in a mediterranean country: ordinal logistic regression analysis. Orthopedics. 2012;35(12):e1775-e84.
15. Thiese MS, Hegmann KT, Wood EM, Garg A, Moore JS, Kapellusch JM, et al. Low-back pain ratings for lifetime, 1-month period, and point prevalences in a large occupational population. Human Factors: The Journal of the Human Factors and Ergonomics Society. 2014;56(1):86-97.
16. Smeets R, Köke A, Lin CW, Ferreira M, Demoulin C. Measures of function in low back pain/disorders: Low Back Pain Rating Scale (LBPRS), Oswestry Disability Index (ODI), Progressive Isoinertial Lifting Evaluation (PILE), Quebec Back Pain Disability Scale (QBPDS), and Roland-Morris Disability Questionnaire (RDQ). Arthritis care & research. 2011;63(S11):S158-S73.
17. Vianin M. Psychometric properties and clinical usefulness of the Oswestry Disability Index. Journal of chiropractic medicine. 2008;7(4):161-3.