



Prevalence of low back pain among female health sciences students



Deanship of Scientific Research

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INTRODUCTION

Low back pain (LBP) is a physical and economical dilemma that individuals from all age groups encounter. Interestingly, LBP was considered as the leading cause of years lived with disability globally [1].

A meta-analysis of the prevalence of low back pain in adolescents revealed that the mean lifetime prevalence was 39.9% [2].

The commonest variety of back pain is LBP, arising in 60-80% of people at a certain point in their lives [4].

OBJECTIVES

- To identify the prevalence of LBP among female health sciences undergraduates
- To compare those who are at more risk among the specialties and to identify the risk factors of LBP among the study sample.

Methods

Cross-sectional study was conducted among seven hundred and forty-seven female undergraduates from five health sciences colleges during the academic year 2016-2017. Self-administered questionnaire was conducted and included 4 sections: demographic characteristics, risk factors, Nordic Musculoskeletal questionnaire and Oswestry disability questionnaire. Data were analyzed using SPSS.

Results

Mean Age was 20.3 ± 1.5 years. 35.8% of students were physically active. Lifetime prevalence of LBP was 53.1%, 12-months 47.4% and point prevalence 21.6%. Medical students reported highest lifetime prevalence of LBP (64.3%) with significant p-value (<0.001). Physical activity was not associated with point prevalence of LBP. BMI of more than 25 associated insignificantly with increased risk of LBP (OR 1.13; CI 95% 0.74-1.73; $p= 0.568$). None of recreational sports have been shown to be associated with LBP. Feeling discomfort on bed was significantly associated with LBP (OR 2.49; 95% CI 1.74-3.56; $p= <0.001$). Sitting on comfortable college furniture was associated significantly with decreased risk of LBP (OR 0.56; 95% CI 0.38-0.82; $p= 0.003$). Psychological factors such as being overwhelmed and feeling sad were associated with LBP. According to Oswestry disability scale, majority of students who have LBP are having minimal disability due to LBP.

CONCLUSION

This study has shown high prevalence of LBP among future health care providers. Female medical students are at a higher risk to develop LBP compared to other health sciences students. These risk factors should be well established and identified to minimize the prevalence of LBP among future health sciences students.

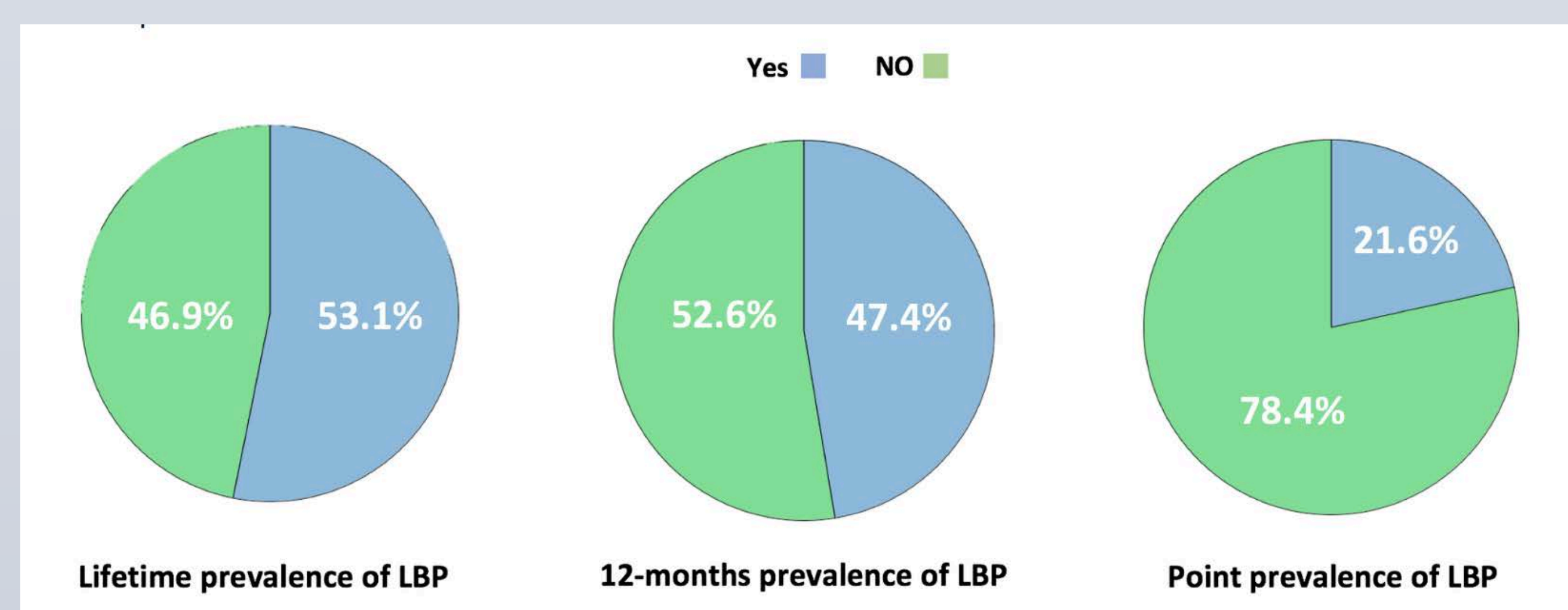
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Over-all Prevalence of Low Back Pain



Prevalence of LBP compared with physical activity

Point Prevalence (%)			
		%	P-value
Physical Activity	Active	24.3	0.179
	Inactive	20.0	

Prevalence of LBP compared with colleges

Prevalence (%)									
	Medicine	Dentistry	Pharmacology	Nursing	Physical therap	Occupational therapy	Clinical Nutrition	Clinical Laboratory	P-value
Lifetime prevalence	64.3	63.7	41.0	42.9	42.5	42.9	61.4	51.6	<0.001*
12-months prevalence	57.4	57.1	34.8	40.3	40.2	38.1	50.5	48.4	<0.001*
Point prevalence	24.3	36.3	17.4	24.7	12.6	14.3	13.6	12.9	0.002*