

## Letter to the Editor

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# Obesity: An inevitable risk factor in evaluation of Low Back Pain

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Dear Sir,

In a large cross-sectional study by Capkin and colleagues, they well investigated associated risk factors of low back pain (LBP) in a population of Turkey and revealed that smoking cigarettes, female gender, marital status, a low level of education and presence of chronic disease were identified as independent risk factors for LBP [1]. Their high quality study is being appreciated but unfortunately, they underestimated the role of anthropometric status among their study population (e.g. overweight and obesity) in their study design and multivariate data analysis.

The role of obesity in the pathophysiology of low back pain was the matter of various investigations. Recent meta-analysis showed that over-weight and obesity increased the risk of low back pain. Based on the data from cross-sectional studies, obesity was associated with increased prevalence of low back pain in the past 1 year and chronic low back pain. Besides, overweight and obesity have the strongest association with seeking care for low back pain and chronic low back pain [2]. Also, being overweight or obese in early adulthood could increase the risk of radiating but not non-specific LBP [3]. On the other hand, in patients with underlying rheumatologic disease the association

between high body mass index (BMI) and LBP has been documented [4]. Although, it seemed that the role of different measures of body size (such as: height, weight, waist and hip circumferences, fat mass and etc.) on LBP has not firmly determined so far but in the latest cohort study, Heuch and colleagues compared the relationships of several of body size measures with LBP and represented the significant positive associations between LBP and body weight, BMI, waist circumference and hip circumference [5].

Altogether, it is suggested that in future investigations particularly population-based studies, the role of body composition should not be underestimated specifically in their study design assessing the risk factors of LBP. Although, it is costly to obtain such information in large populations but considering body weight and height as the least suitable measures of obesity can provide valuable information regarding the association between obesity and LBP.

### Conflict of interest

The authors declared no competing interests.

### Authors' contributions

AZ contributed to the conception of the study and drafting of the manuscript. PN contributed to the validating the presented documents, critical revision of the manuscript for important intellectual content and approve the final manuscript.

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