





نمونه ترجمه مقاله رشته ---

شماره پروژه ترجمه نمونه ترجمه









اثرات چاقی بر اندازه سینه، ساختار و عملکرد ستون فقرات قفسه سینه، درد عضلانی بالا تنه و فعالیت بدنی در زنان

چکیده

هدف: این مطالعه اثرات چاقی بر اندازه پستان (سینه)، ساختار و همچنین عملکرد ستون فقرات قسمت قفسه سینه، درد اسکلتی عضلانی بالاتنهای و مشارکت در فعالیتهای بدنی در زنان مستقل (زنانی که به طور مستقل در جامعه زندگی میکنند) را بررسی میکد.

روشها: در کل ۳۷۸ زن به سه گروه تقسیم شدند (بدون اضافه وزن: شاخص توده بدنی (0.2 § 0.2) BMI = 27.4 § 0.3 kg/m2 (میانگین ± انحراف از معیار)، و دارای اضافه وزن 8 kg/m2 و 9 BMI = 27.4 § 0.3 kg/m2 و دارای اضافه وزن 0.3 kg/m2 و داره شده بر ستون فقرات (به نانو متر)، گشتاور خَمِشی وارد شده بر ستون فقرات (به نانو متر)، کیفوز (قوز کمر) به درجه، درد عضلانی اسکلتی بالا تنهای (نمره) و زمان صرف شده در فعالیت بدنی (به دقیقه) محاسبه و در بین سه گروه محاسبه و مورد بررسی قرار گرفتهاند. این متغیرها با توجه به اختلاف سن در بین گروهها تقسیم شدند.

یافتهها: در تمامیِ متغیرهای برآیند تاثیر گذاری شاخص توده بدنی (BMI) مشخص است. زنانی که در گروه چاق قرار داشتهاند، سینههای بسیار بزرگتر (حجیمتری) داشتند و گشتاور خمشی بیشتری نیز داشتند اما نسبت به زنانی که در گروه بدون اضافه وزن و با اضافه وزن حضور داشتهاند، فعالیتهای بدنی کمتری را گزارش کردهاند. همچنین قوز کمر (کیفوز) در بین زنان گروه چاق شایعتر است و آنها در مقایسه با دو گروه دیگر از درد عضلانی بالاتنه بیشتری رنج می بردند.

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Original article

Effects of obesity on breast size, thoracic spine structure and function, upper torso musculoskeletal pain and physical activity in women

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Abstract

Purpose: This study investigated the effects of obesity on breast size, thoracic spine structure and function, upper torso musculoskeletal pain and physical activity participation in women living independently in the community.

Methods: A total of 378 women were divided into 3 groups (Not Overweight: body mass index (BMI) = 22.5 ± 0.2 kg/m² (mean ± standard deviation); Overweight: BMI = 27.4 ± 0.3 kg/m²; Obese: BMI = 35.4 ± 0.3 kg/m²). Outcome variables of breast volume (milliliters), thoracic flexion torque (Nm), thoracic kyphosis (degrees), upper torso musculoskeletal pain (score) and time spent in physical activity (minutes) were calculated and compared among the 3 groups, adjusting for between-groups differences in age.

Results: There was a significant main effect of BMI on all outcome variables. Participants classified as Obese displayed significantly larger breasts, had greater thoracic flexion torques and reported less time participating in physical activity relative to the participants who were classified as Not Overweight and Overweight. Participants in the Obese group also displayed significantly more thoracic kyphosis and reported significantly more upper torso musculoskeletal pain compared to their counterparts who were classified as Not Overweight.

Conclusion: This study is the first to demonstrate that increased obesity levels were associated with compromised kyphosis and loading of the thoracic spine, as well as increased symptoms of upper torso musculoskeletal pain and reduced time spent in physical activity in women living in the community. We recommend further research to determine whether evidence-based interventions designed to reduce the flexion torque generated on the thoracic spine can improve these symptoms of upper torso musculoskeletal pain and the ability of women with obesity to participate in physical activity.

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Keywords: Breast volume; Obesity; Thoracic kyphosis; Upper torso loading

1. Introduction

Obesity has been consistently associated with the development of an extensive range of detrimental physical and mental health issues. These issues include, for example, well-documented increases in the relative risk of diabetes mellitus, i hypertension and dyslipidemia, ^{1,2} coronary heart disease, ^{3,4} a range of cancers, ⁵ and most mood, anxiety and personality disorders, ^{6–8} as well as musculoskeletal problems such as loadinduced osteoarthritis. ⁹ Given that obesity has nearly tripled worldwide since 1975, 10 with a significant increase particularly in the prevalence of obesity among women, 11 it is imperative that individuals, especially women, are encouraged to maintain an active lifestyle. This is because participating in physical activity together with having a healthy diet have been shown to be an effective strategy for reducing obesity 10 and the associated higher risk of developing a wide range of negative physical and mental health issues detailed in numerous review articles. 12-14

To be able to maintain an active lifestyle and enjoy the health benefits associated with participating in physical activity, the structural framework of the body should not be unnecessarily compromised. Although the musculoskeletal framework of the body is designed to enable individuals to perform tasks of

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