

Comparison of the Prevalence of Preclerkship Medical Student Diagnosed Sacral and Pelvic Girdle Somatic Dysfunctions and the Expected Findings in the General Population

Authors and affiliations: Barabara Senger, OMS-III (1); Jonathan Bingham, OMS-III (1); Brian Degenhardt, D.O. (1)

1. A.T. Still University Kirksville College of Osteopathic Medicine, Kirksville, MO 63501

Introduction/Background:

In the Osteopathic Theory & Methods curriculum at Kirksville College of Osteopathic Medicine, students are required to diagnose somatic dysfunction and perform Osteopathic Manipulative Treatments (OMT) on volunteer "patients" and keep a log of their findings. Practice logs (PL) are graded based on correct documentation of SD in relation to current osteopathic models.

Objective:

To compare the prevalence of physiologic and non-physiologic sacral and pelvisomatic dysfunctions between classes to the expected findings in the general population.

Methods:

Student PL (Classes of 2020 - 2023) were obtained and SD for the sacral and pelvic regions were extracted. The SDs were classified physiologic or non-physiologic for both diagnostic regions and prevalence was calculated for each class & semester.

Results:

In the sacral region, physiologic dysfunctions were diagnosed less frequently (39%) than non-physiologic dysfunctions (61%). The most common sacral diagnoses were sacral margin posterior (25%) and unilateral sacral flexion (20%). For the pelvic region, physiologic dysfunctions were diagnosed more frequently (56%) than non-physiologic dysfunctions (44%). The most common pelvic diagnoses were anterior innominate rotation (32%) and posterior innominate rotation (24%).

Discussion/Conclusion:

In general, due to the mechanism of dysfunction, physiologic dysfunctions would be expected to be more prevalent amongst the student population than non-physiologic dysfunction, contradicting this study's outcome. Potential causes in the inconsistencies are fabricated entries, inability to accurately assess landmarks and construct associated diagnosis, and variations within the diagnostic model taught in the OMT curriculum. Improvements to the curriculum could be made by using technology and additional documentation of SD findings to ensure that students are performing the assigned task to national standards and expected clinical findings.