Assessing the Relationship Between Vape Use and Cardiovascular Disease Risk

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PURPOSE: The purpose of this study was to assess the relationship between e-cigarette use and physical activity and cardiovascular health. METHODS: Twenty-five (13M/12F; ~21yrs) healthy college students were recruited from the Pennsylvania State University, Berks campus. Vapers (current, or use <3 months) and non-vapers were assigned based on self-report. Blood pressure and heart-rate were measured to assess cardiovascular health. Fitbit Charge-HR was deployed to evaluate students’ weekly physical activity levels. RESULTS: Nine-vapers and 16-non-vapers; blood pressure (128/76 vs. 123/75 mmHg), heart-rate (76 vs. 84bpm), step counts (6061 vs. 7878steps), PO2 (97 vs. 98), walking distance (2.81 vs. 3.67mi/day), sedentary (943 vs. 805min/day), lightly activity (178 vs. 213min/day) were recorded without statistical significance due to a small sample. CONCLUSION: Vapers were overall pre-hypertensive and 30% less active compared to non-vapers indicating an increased risk for cardiovascular disease compared to non-vapers.