# P28 A Commonly Used Single-item Physical Activity Question Fails to Discriminate Expected Blood Pressure-related Cardiovascular Risk in a General Community Sample 

Martin Schultz, Dean Picone, Ricardo Fonseca, James Sharman<br>Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia


#### Abstract

Background: Completion of $\geq 150$ minutes/week of physical activity (PA) is recommended for cardiovascular health, but this is achieved only by $\sim 50 \%$ of Australian adults. Assessing self-reported PA via quick single-item question is desirable for largescale cardiovascular research and health screening. We aimed to determine if a commonly used PA question elicits the expected discrimination of blood pressure (BP) related cardiovascular risk in a community population. Methods: 958 individuals (aged $47 \pm 15$ years; $54 \%$ female) participated in a community BP screening campaign. BP was measured in triplicate using a validated oscillometric device and cardiovascular risk factors assessed by self-report. Adherence to PA guidelines was assessed via a single binary 'yes/no' question as to whether individuals met the guideline of $\geq 150$ minutes of PA/week. Results: A higher than expected proportion of participants ( $68 \%$ females, $74 \%$ males) reported meeting PA guidelines. There was no difference in SBP or DBP ( $127 \pm 15$ vs. $128 \pm 15 \mathrm{mmHg}, p=0.144 ; 80 \pm 11 \mathrm{vs} 81 \pm 11 \mathrm{mmHg}, p=0.232$ respectively) between those reporting to meet or not meet PA guidelines. There were also no between-group differences in age, prevalence of diabetes, myocardial infarction, stroke or alcohol consumption ( $p>0.05 \mathrm{all}$ ). Prevalence of BP $\geq 140 / 90 \mathrm{mmHg}$ ( $26 \%$ vs $30 \%$, $p=0.129)$ and antihypertensive treatment ( $12 \%$ vs $12 \%, p=0.801$ ) was similar between groups. Conclusion: Assessment of PA via a commonly used research question did not elicit expected prevalence or discrimination of BP-related cardiovascular risk in this community sample. Further work is required to assess the usefulness of single item selfreport PA questions for use in cardiovascular research and health screening.


© 2019 Association for Research into Arterial Structure and Physiology. Publishing services by Atlantis Press International B.V.
This is an open access article distributed under the CC BY-NC 4.0 license (http://creativecommons.org/licenses/by-nc/4.0/).

