

Self-Reported Physical Activity Intensities and Disease Risk Factors in the Kuwaiti Population

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Abstract

Introduction: Low physical activity (PA) association with health risks is known, but data are lacking in Kuwait. This study describes reported PA and health risk associations in the Kuwaiti population.

Methods: A national cross-sectional survey involved Kuwaiti adults (age:18-69, n=3915) who reported whether or not they participated in PA for at least 10 min/day of moderate (MOD) and vigorous (VIG) intensities. Glycated haemoglobin (HbA_{1c}), fasting plasma glucose (FPG), body mass index (BMI), waist to hip ratio (WHR), resting heart rate (RHR), systolic and diastolic blood pressure (SBP, DBP), total cholesterol (TChol), low and high-density lipoprotein (LDL, HDL) and triglycerides (TG) were analysed. Comparisons and correlations were made for MOD and VIG associations with measured health risks across.

Results: Low overall PA engagement levels were reported (5.2%, and 13.5% for VIG and MOD respectively). Both MOD and VIG were significantly different between genders ($p<0.001$). More men reported performing PA at MOD and VIG than women ($p<0.001$), irrespective of age, BMI, and HbA_{1c}.

When diabetic and prediabetic participants were excluded, both VIG ($r=0.104$, $p<0.001$) and MOD ($r=0.053$, $p<0.05$) correlated positively with HDL, and VIG correlated negatively with SBP ($r=-0.059$, $p<0.05$). No correlation found between either VIG or MOD for any of the remaining risks.

Conclusion: Low PA at both MOD and VIG needs addressing in Kuwait, especially in women. Associations between higher HDL with both VIG and MOD, and lower SBP in VIG, suggests that either PA intensity could potentially be effective in reducing health risks in the Kuwaiti population.

Keywords: Exercise, Health Risk, Moderate Intensity, Physical Activity Questionnaires, Kuwait