Differences in objectively measured physical activity and sedentary behaviour between White Europeans and South Asians recruited from primary care

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1. Background

SA’s have an increased risk of developing diseases such as type 2 diabetes and cardiovascular disease (1, 2).

Self-reported data has consistently shown South Asians (SAs) to be less physically active than White Europeans (WEs) in developed countries, although robust objective data has been lacking (3-6).

Differences in sedentary time have not been elucidated in this population.

2. Aim

To quantify differences in objectively measured physical activity and sedentary behaviour between WEs and SAs recruited from primary care.

3. Methodology

Baseline data were utilised from a randomised control trial (PROPELS) recruiting individuals identified at high risk of type 2 diabetes from primary care (7).

Light intensity physical activity (LPA), moderate-vigorous intensity physical activity (MVPA) and steps were measured using the Actigraph GT3X+.

Sitting, standing and stepping time were measured using the activPAL3™.

4. Results

Compared to WEs, SAs did less MVPA (26 vs 33 min/day, p=0.001) and fewer steps (6487 vs 7402, p<0.001), but sat less (515 vs 552 min/day, p<0.001) and stood more (329 vs 284 min/day, p<0.001).

5. Strengths and Limitations

Strengths:
• Large sample size from primary care.
• Objective measures.

Limitations:
• Disparity in ethnic group size.
• Participants recruited for a randomised control trial.

6. Conclusion

Lifestyle interventions may benefit from tailoring when delivered in multi-ethnic communities, with a physical focus and a sedentary behaviour focus for SA and WE respectively.

Given the high risk population, specific focus should be given to diabetes prevention programmes to ensure ethnic differences are accounted for.

References:
8. National Institute for Health Research. 2016. Public Health...