Berlin School of Public Health | BSPH

Kurzbeschreibung eines Projektthemas

Projektanbieter Institution	Molekulare Epidemiologie (AG Pischon) Max-Delbrück-Centrum für Molekulare Medizin Robert-Rössle-Str. 10 13125 Berlin Tel: 030 / 9406 4573
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Projektthema	Factors associated with habitual time spent in different physical activity intensities using multiday accelerometry
Projektbeschreibung	Regular physical activity (PA) is an important modifiable factor for prevention of many chronic diseases. It is important to know and characterize factors that are related to habitual PA because modifiable factors might be targets for measures to increase PA on a public health level, while unmodifiable factors might allow to identify target groups that may particularly benefit from interventions. However, evidence is inconsistent for many factors and mainly based on self-reported PA, which is prone to measurement error, especially regarding PA intensities. Further, most studies focus on total activity and do not differentiate between PA duration and intensity; which, however, are both independent behaviors and risk factors. Accelerometry allows to detect accelerations of the body under free-living conditions, capturing PA duration and intensity more precisely than self-reports. In a previous study based on pretest data from the German National Cohort (NAKO), we found higher age associated with more time in low-intensity and less time in vigorous-to-very-vigorous activity, while higher BMI was related to less time in low-intensity activity (Sci Rep 2020;10:774). Current versus never smoking was associated with more time in low-intensity and less time in vigorous-to-very-vigorous activity. Finally, having versus not having a university entrance qualification and being not versus full time employed were associated with more inactivity time and less time in low-intensity activity. However, the sample size for that analysis was restricted to 249 participants who participated in the NAKO pretest study. NAKO is a large prospective study, including more than 205,000 participants (Eur J Epidemiol. 2014 May;29(5):371-82). With baseline examination completed in 2019, we now have the ability to assess the association of factors that are related to habitual PA in a much larger population, allowing a more detailed analysis.
Aufgaben (Umfang 140 Stunden)	Literature research; Development of research question/hypotheses; Preparation of an analysis plan; quality control, data analysis, interpretation and reporting; Familiarization with software (SAS) for data analysis
Anzahl der Projektplätze	1