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## Letters to the editors

Sir,

In a paper<sup>1</sup> recently published in *SPM*, Abel and co-authors explored the possibility of a gender bias in the assessment of physical activity in population surveys. To their views, most questionnaires are focusing on the practice of competitive sports in which men are participating predominantly and therefore are likely to underestimate the level of physical activity in women. We conducted a large population-based study<sup>2</sup> (MONICA-Switzerland, Vaud-Fribourg, 1992–1993) in which physical activity was measured with pedometers (step-counters) worn by the participants during one week. Participants had to complete a questionnaire with three questions related to physical activity: the type of leisure-time activity (mainly sedentary, mainly moderately active or mainly sport), the frequency of sport practice and the type of activity at work (mainly sitting, mainly standing, with moderate effort, with heavy work). The first two questions discriminated equally well men and women according to their level of measured physical activity whereas the question

concerning occupation performed significantly better in men. This latter result points to another potential gender bias in physical activity assessment as, in many questionnaires, physical activity has been conceptualised as consisting of two components: occupational and leisure-time. Such a dichotomisation ignores household chores, a time-consuming activity of moderate intensity which does not fall under either of the components and is predominantly done by women. However, in our study and in a recent population survey<sup>3</sup> conducted in Geneva, a higher mean level of physical activity was found in men than in women although the difference was narrowing with age. This difference was largely explained by more frequent physical activities of high intensity (whether at work or in sport practice) in men than in women. Therefore we feel that there is a real gender gap in physical activity and that the observed difference is only partially due to biases in questionnaires.

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### References

- 1 Abel T, Graf N, Niemann S. Gender bias in the assessment of physical activity in population studies. *Soz Präventivmed* 2001; 46: 268–72.
- 2 Sequeira MM, Rickenbach M, Wietlisbach V, et al. Physical activity assessment using a pedometer and its comparison with a questionnaire in a large population survey. *Am J Epidemiol* 1995; 142: 989–99.
- 3 Bernstein SM, Costanza MC, Morabia A. Physical activity of urban adults: a general population survey in Geneva. *Soz Präventivmed* 2001; 46: 49–55.