



Self-report vs. pedometer steps in COPD: Are they similar?

Joana Cruz, Dina Brooks, Alda Marques

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Abstract

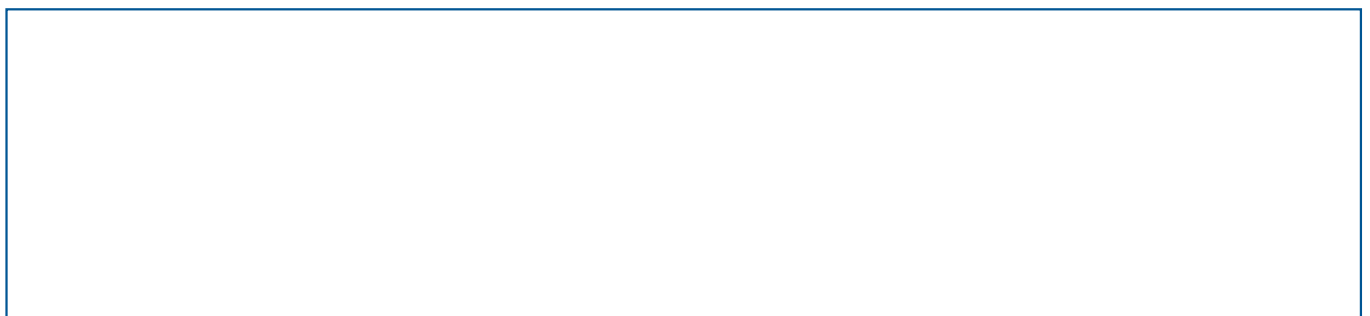
Background: Pedometers have been used as an objective measure to assess physical activity (PA) in COPD. However, in most studies, pedometer results rely on users' ability to provide accurate information using daily logs. It is important to understand if self-report steps correspond to actual steps recorded by pedometers, in order to use more confidently self-report data.

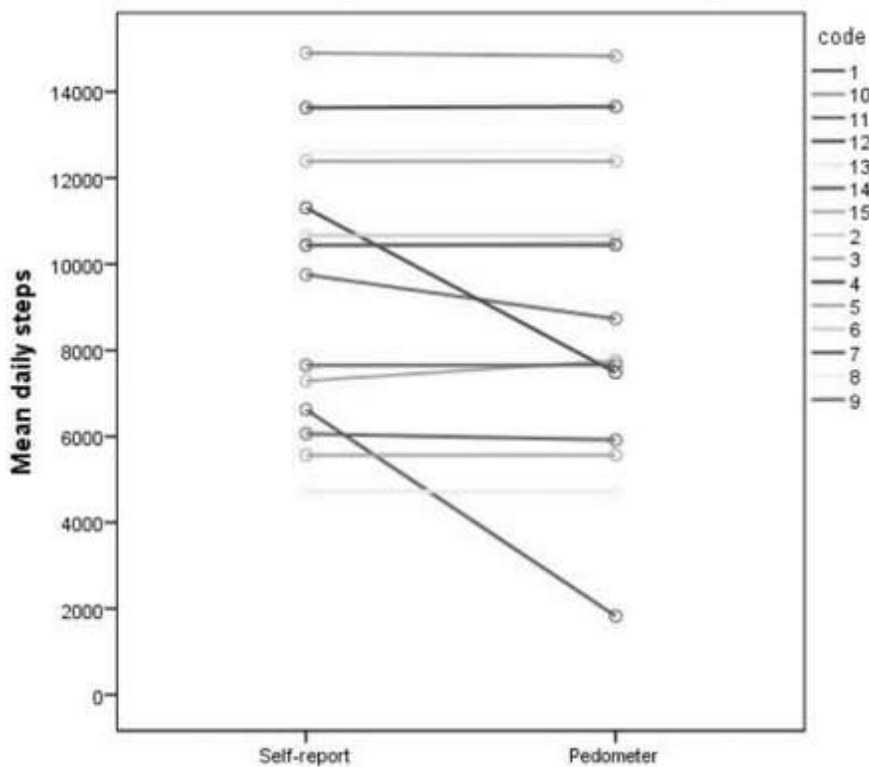
Aims: This study aimed to compare self-report steps and steps recorded by a pedometer with a memory function in patients with COPD.

Methods: Patients (n=15, 75.4±26.6yrs, FEV1=69.9±27.6pp) were asked to use a pedometer and register their daily steps, as part of a rehabilitation programme with step goals. Patients were unaware of pedometer memory. A researcher recorded the steps stored in pedometers. A mixed-model ANOVA was used to investigate if self-report and pedometer steps differed among patients (method X patient, P<0.05), using 7 random days.

Results: Self-report and pedometer steps were significantly different among patients (P<0.001). Nevertheless,

Fig. 1 shows that self-report steps were overreported in only 3 patients (out of 15).





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Conclusions: Most patients with COPD provide an accurate estimation of their PA, although differences between self-report and pedometer steps may occur. Patients' failure to recall steps or technological problems with pedometer memory may explain these differences.

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