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INVITED COMMENTARY

Step hunting!—how fitness apps and electronic feedback devices enter our lives

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"Papa, how many steps did you make today?" is a common question when I come home from a day at work. My 9-year-old son has a tracker himself, and boys at his age love competition with their dads. He tries to beat me wherever he can and actually and increasingly does. Apps have entered our daily lives and remind us vibrating at our hand wrists on smartwatches that it is time to stand up and get in motion for at least a minute, to close our activity circles for the day. The movement gives us a good feeling and implies that we are fit and healthy. And as we all know that "sitting is supposed to be the new smoking" and that it is associated with tremendous morbidities, such as (morbid) obesity and its associated adverse events. In their current randomized trial, Marina Serper and coworkers investigated whether a structured and tracked step-counting program after liver or kidney transplant in patients with weight gain can reduce weight. Although the transplant recipients did not lose weight, they were highly compliant and achieved an average walking distance of more than 7000 steps/day in all monitored groups [1]. A 2015 article asks whether you need to take 10 000 steps per day to stay healthy (https://www.bbc.com/news/magazine-33154510), as recommended by the fitness tracker industry and has been published by official bodies [2]. The UK data reflect that the average UK citizen only walks 3000 to 4000 steps per day, which is compared to the highly motivated study group, only a little more than half the steps they achieve per day. So, as a conclusion that we can take from this trial is, that fitness tracker can put people into a status of being highly motivated and goal setting for increased well-being as a direct effect from exercising.

Because> 50% of wait-list patients have sarcopenia [3], but still may be obese, exercising should be a pivotal pillar of peritransplant care. The elements must be exercise, nutrition, and psychosocial well-being, which are associated with reduced rates of morbidity and mortality and, as a secondary effect, a bodily transformation by preserving muscle mass and losing body fat, thus avoiding progress of sarcopenia and the potential of frailty [4–6].

However, besides all the positive aspects associated with fitness tracking, the dark sides have to be considered. As a recent article in the medical futurist shows, 79% of health tracker users feel pressured by their daily targets, and 59% feel controlled by the provider. Fitness

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trackers can lead to addictive exercising, and in the worstcase, adverse events lead to an increased risk of bodily damage. Switching off location sharing, exercising under medical guidance, and realistically defining your own goals may prevent such adverse effects and lead to a mutual gain of providing better care by digitalizing health care. (https://medicalfuturist.com/the-dark-side-ofhealthtrackers/?utm_source=The%20Medical%20Futurist%20Newsletter&utm_campaign=3090c20c9eEMAIL_CAMPAIGN_2019_10_29_diabetes_companies_COPY_&utm_medium=email&utm_term=0_efd6a3cd08-3090c20c9e-420747385).

From my academic viewpoint, electronic devices, apps, and wearables will be introduced rapidly into the daily medical care of transplant and other surgical patients. Surgeons and other medical professionals should drive the transformational process. People that understand the need for such devices that can judge the therapeutic benefit and that realize the potential for improving medical care must lead that change.

Conflict of interest

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