



Health-enhancing physical activity, exercise and sports – a never-ending success story

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Published online: 16 March 2020
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Today, the importance of physical activity, exercise and sports concerning health issues cannot be overestimated [1]. For the last decades, exercise in medicine, namely prevention, therapy and rehabilitation seem to have the touch of a never-ending success story [1–3]. It is a pleasure for me to highlight two current Viennese approaches concerning this relevant preventive, therapeutic and rehabilitative means within this issue [2, 3].

Regular physical activity reduces the risk for several diseases, such as cardiovascular and neoplastic diseases and for health problems, such as back pain [1]. Furthermore, it can also improve the prognosis of several health conditions, such as cancer and cardiovascular diseases but also functional health and quality of life [1]. For example, there is a proven association between fulfilling the recommendations for health-enhancing physical activity with instrumental activities of daily living (IADL) in older Austrians: older people who regularly do more exercise cope more easily with these tasks and can manage them independently for longer [4]. This helps them to stay healthy and independent for longer and to remain self-sufficient [4]. In these times of demographic change, this seems to be a very important clinical but also and especially socioeconomic fact. This is due to the fact that independency and participation increase and therefore costs.

Physical activity, exercise and sports have proven positive effects on physical capacity including muscular strength, endurance capacity, sensorimotor functions, flexibility, and mobility. Furthermore, there

are benefits concerning the risk of atherosclerosis, metabolic syndrome, cardiovascular morbidity and mortality, but also concerning morbidity (prevention) and mortality in different cancer types (cancer-specific survival). Positive effects on metabolism, chronic inflammation, mental health, but also on risk of falls are only selected further benefits but of importance in all ages [1–4]. There are international and national recommendations, which should be followed by all of us [1]. Nevertheless, today far too many people continue to do too little physical activity and this despite the proven benefits of exercise [4]. People of all ages, but also patients suffering from chronic diseases should be more active and at least fulfil the recommendations for health-enhancing physical activity.

Concerning chronic diseases, Cenik et al. mention in this issue that patients suffering from advanced multiple myeloma—after checking individual contraindications and clinical considerations using a multiprofessional and interdisciplinary setting—are able to exercise. Only 25% of patients with notably impaired physical performance should exercise in an individual setting, but most patients seem to be able to exercise in groups [2]. We are now awaiting the future results of planned interventions focusing on the effects of exercise on these different settings.

Furthermore, new and easy ways to support people and patients to be physically active such as tele-rehabilitative apps should be developed to increase their adherence [3]. In this issue, Hasenöhrle et al. describe a smartphone app with individualized therapeutic exercises for patients suffering from so-called non-specific (not dangerous) back pain. The authors were able to show that the prescription of therapeutic exercises via smartphone app to patients suffering from non-specific back pain seems to be feasible and well accepted, and their pilot data additionally

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pointed towards efficacy of this quite new and special intervention [3]. This could be a step into the future—additional to inpatient and outpatient rehabilitation of these patients.

Thanks to the editors of *Wiener Klinische Wochenschrift* for their kind invitation and the possibility to write an Editorial concerning the importance of health-enhancing physical activity, exercise and sports and highlighting new aspects. Nevertheless, we all have to continue to strive towards greater public awareness for fulfilling the recommendations for health-enhancing physical activity [4].

Conflict of interest R. Crevenna declares that he has no competing interests.

References

1. Piercy KL, Troiano RP, Ballard RM, et al. The physical activity guidelines for Americans. *JAMA*. 2018;320(19):2020–8. <https://doi.org/10.1001/jama.2018.14854.at>.
2. Cenik F, Keilani M, Hasenöhl T, Huber D, Stuhlpfarrer B, Pataraiia A, et al. Relevant parameters for recommendations of physical activity in patients suffering from multiple myeloma: a pilot study. *Wien Klin Wochenschr* <https://doi.org/10.1007/s00508-019-01582-z>. (in press)
3. Hasenöhl T, Windschnurer T, Dorotka R, Ambrozy C, Crevenna R. Prescription of individual therapeutic exercises via smartphone app for patients suffering from non-specific back pain: a qualitative feasibility and quantitative pilot study. *Wien Klin Wochenschr*. 2020; <https://doi.org/10.1007/s00508-020-01616-x>.
4. Crevenna R, Dorner T. Association between fulfilling the recommendations for health-enhancing physical activity with (instrumental) activities of daily living in older austrians. *Wien Klin Wochenschr*. 2019;131(11–12):265–72. <https://doi.org/10.1007/s00508-019-1511-8>.

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