

# YOUEX-Studie

## Implementation and evaluation of three exercise modules for young adults with cancer

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### Background

- Hundreds of studies display the positive effect of physical activity and exercise for cancer patients and survivors.
- The development of tailored digital media tools for exercise programming for young adults in oncology is of high interest.
- Little evidence is given about the efficacy of digital media exercise approaches on medical treatment and related side-effects of oncological patients.



„Aufgrund meiner Arbeit und meiner Familie, kann ich nur abends an einem Sportprogramm teilnehmen, Flexibilität ist mir sehr wichtig.“

„Ich versuche regelmäßig aktiv zu sein, aber ich bin mir oft unsicher.“

**Project information:**  
Project start: 09/2020  
Estimated end of recruitment: 04/2021  
First detailed results: 08/2021

### Objective

#### What do you choose?

The primary goal of this study is the assessment of interest by young adults with cancer in the three offered exercise modules (see fig.1) and the feasibility of modules. Secondary, the impact of exercise modules on cancer related fatigue (CRF), quality of life (QoL) and physical activity level (PAL) will be analyzed.

**Primary endpoints:** feasibility, free choice of modules

**Secondary endpoints:** quality of life (QoL), cancer related fatigue (CRF), physical activity level (PAL)

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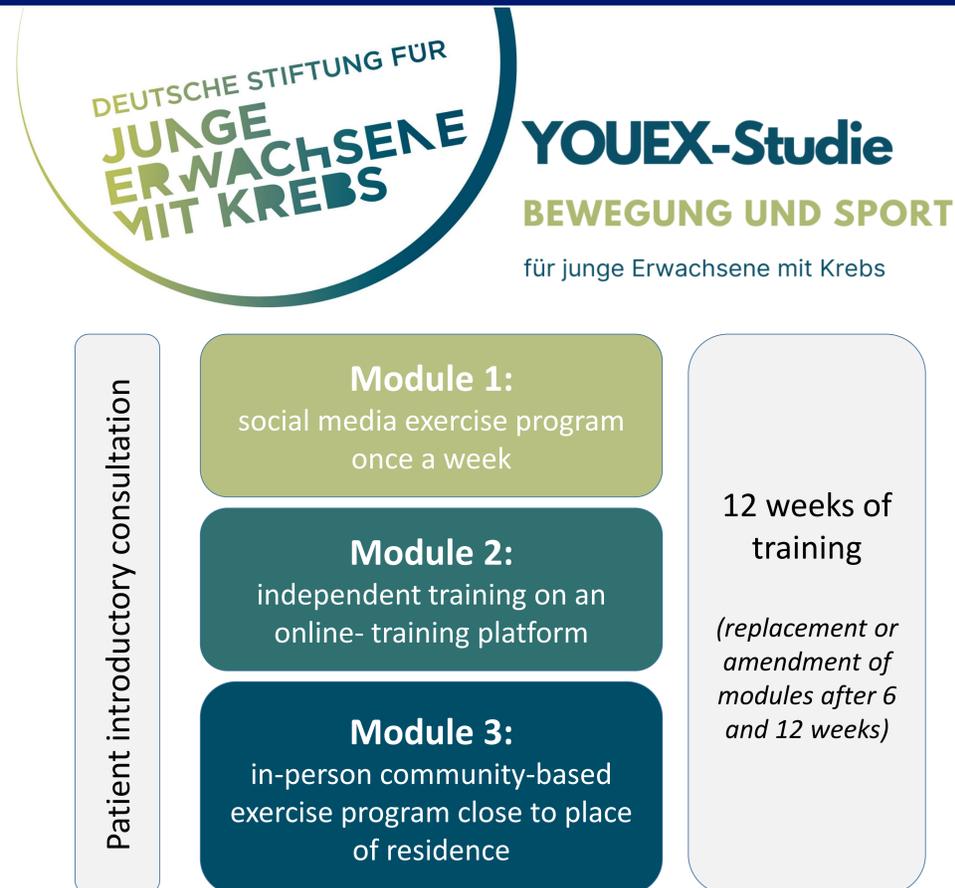


Fig. 1: Study workflow and exercise module descriptions

### Methods

This study is an explorative intervention of a 12-week exercise program for cancer patients aged 18 – 39 years who currently have or had a cancer diagnosis within the past 5 years. Eligible patients get an exercise consultation and may choose between three exercise modules (see fig.1). The selected module can be replaced or amended by another module after 6 and 12 weeks. The aim is to recruit 70-80 patients with a completion rate incl. follow up (T3) of at least 70%. The endpoints are surveyed by questionnaires at four time points (T0: baseline, before exercise program, T1: after 6 weeks intervention; T2: after 12 weeks; Follow up T3: after 24 weeks). Further, a daily online fatigue diary observes the intra- and interindividual impact on fatigue-levels.

### Initial results

From September to December 2020, n= 58 young adults (female n=56, male n=2) were recruited, from which n=57 got their introductory consultation. Until now, the module preferences of participants is n=21 for M1, n=22 for M2 and n=10 for M3, plus 4 dropouts. However, 6 patients could not start in M3 due to COVID-19 restrictions, therefore started in M1 or M2. After 6 weeks, 2 participants added M1 to M2, 6 participants M2 to M1, 3 exchanged M2 for M1. Further, 3 participants wanted to switch from M2 to M3, but did not because of COVID-19 concerns or constraints. First results indicating a medium to high commitment to selected modules and completion-rate of questionnaires (approx. 80%). The next recruitment phase starts from the 25<sup>th</sup> of January 2021.

„Ich fühle mich in normalen Rehasport-Gruppen unwohl und bin oft unterfordert.“

„Es gibt wenig Sportangebote, die die Interessen von uns beachten, das ist schade!“



### First insights

- Recruitment of younger adults via social media can be highly effective.
- Until now, YOUEX online exercise approaches targeting mostly women.
- Further execution of module 3 could not be realized due to COVID-19 restrictions from Nov 2020.
- Survey completion rate of participants is high (approx. 85%).

**The YOUEX-Studie is a group-project of the following research community:** National Centre for Tumor Diseases (NCT) Heidelberg, Netzwerk OnkoAktiv and ActiveOnkoKids, University Hospital Essen, University Hospital Cologne, Charité University Medicine Berlin.

#### References

- [1] Campbell, K. L., Winters-Stone, K. M., Wiskemann, J. et al. (2019). Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable. *Medicine and science in sports and exercise*, 51 (11), 2375–2390.
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- [3] McCann, L., McMillan, K. A., & Pugh, G. (2019). Digital Interventions to Support Adolescents and Young Adults With Cancer: Systematic Review. *JMIR cancer*, 5(2), e12071.