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Exercise and Return to work after a cancer diagnosis: A prospective observational study

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Purpose: Returning to work after a cancer diagnosis can be challenging due to a number of factors, including cancer- and treatment-related side effects such as fatigue. Exercise is known to have beneficial effects on fatigue and may therefore also support return to work. The aim of this study was to investigate whether exercising after diagnosis is positively associated with return to work, and if so, whether this association is mediated by fatigue.
Methods: Data was derived from a survey conducted in Germany as part of the prospective observational LIFT study (Longitudinal Investigation of cancer-related Fatigue and its Treatment). Using logistic regression, we tested for an association between the mean metabolic equivalent of task (MET)-minutes/week patients expended during exercise the year since diagnosis (log-transformed) and return to work (yes/no) until one year after diagnosis. Additionally, we explored the potential mediating role of physical fatigue (EORTC-FA12) using regression-based mediation models with 2,000 bootstrap samples. All models were adjusted for age, education, chemotherapy, and fatigue before diagnosis.
Results: The analysis included 327 patients with cancer who were ≤ 65 years old and employed at the time of diagnosis. The mean exercise-related MET-minutes/week since diagnosis were positively associated with return to work one year after diagnosis (Odds-Ratio=1.15, 95% Confidence-Interval (CI) [1.05-1.27]) and tended to a negative association with physical fatigue (β=-1.63, 95%CI [-2.75 to -0.52]). In turn, physical fatigue was negatively associated with return to work (OR=0.97, 95%CI [0.96-0.98]). However, mediation analysis did not indicate that the effect of exercise on return to work was based on physical fatigue (average causal mediation effect=0.0078, 95%CI [0.0023-0.0146]).
Conclusion: Patients who reported a greater exercise volume after their cancer diagnosis were more likely to return to work one year after diagnosis. The mechanism does not appear to operate primarily through reductions in fatigue.

Keywords

Return to work, Fatigue, Exercise, Survivorship

Conflict of Interest & Ethical Approval

yes

Abstract submitters declaration

yes

Author: KIAS, Alina (Division of Physical Activity, Cancer Prevention and Survivorship, German Cancer

Research Center (DKFZ), Heidelberg, Germany & Medical Faculty, University of Heidelberg, Heidelberg, Germany)

Co-authors: BRUMMER, Julian (Division of Physical Activity, Cancer Prevention and Survivorship, German Cancer Research Center (DKFZ), Heidelberg, Germany & Medical Faculty, University of Heidelberg, Heidelberg, Germany); MILZER, Marlena (Department of Psychosomatic Medicine and Psychotherapy, Central Institute of Mental Health, Medical Faculty Mannheim/Heidelberg University, Mannheim, Germany & University Hospital Mannheim, Mannheim Cancer Center, Heidelberg University, Mannheim, Germany); WAGNER, Anna (Chair of Integrated Psychosomatic Medicine and Psychotherapy, Department of Internal Medicine II, University Hospital Würzburg, Würzburg, Germany); KIERMEIER, Senta (Chair of Integrated Psychosomatic Medicine and Psychotherapy, Department of Internal Medicine II, University Hospital Würzburg, Würzburg, Germany); MAATOUK, Imad (Chair of Integrated Psychosomatic Medicine and Psychotherapy, Department of Internal Medicine II, University Hospital Würzburg, Würzburg, Germany); SCHMIDT, Martina (Division of Physical Activity, Cancer Prevention and Survivorship, German Cancer Research Center (DKFZ), Heidelberg, Germany); STEINDORF, Karen (Division of Physical Activity, Cancer Prevention and Survivorship, German Cancer Research Center (DKFZ), Heidelberg, Germany)

Presenter: KIAS, Alina (Division of Physical Activity, Cancer Prevention and Survivorship, German Cancer Research Center (DKFZ), Heidelberg, Germany & Medical Faculty, University of Heidelberg, Heidelberg, Germany)

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