Predictors of return to work in European cancer survivors: a systematic review

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Background:
- 4.4 million new cancer diagnoses in Europe in 2020
- 36% of the new diagnoses in working-age population (20-64 years)
- Indirect costs of 20 billion € in Europe in 2018
- Temporary withdrawal from work due to treatment and side effects
- Work is self-efficacy and identity-promoting factor impacting peoples well-being and quality of life
- Return to work (RTW) rates vary between cancer populations, European countries, and study design and operationalization of RTW (39%-77%)

Research question: What are predictors of return to work in European cancer survivors?

Methods:
- Within the EU Joint Action CraNE
- Systematic literature search in PubMed, Web of Science, Embase in February 2023
- Eligibility criteria:
  - Studies published in German and English language
  - Published between 2013-2023
  - Population: Cancer survivors in working-age (study cohort n=200), excluding childhood cancer
  - Outcome: RTW
  - Study designs: Cohort studies, cross-sectional designs, RCTs, qualitative designs
  - Screening and data extraction examined by two reviewers
  - Quality assessment with the Mixed Methods Appraisal Tool

Results:
- Identification of studies via databases
- Records identified (n=9610)
- Databases: PubMed (n=3210), Web of Science (n=3260), Embase (n=3140)
- Records removed before screening: Duplicates (n=2317)
- Records screened (n=7293)
- Records excluded (n=7065)
- Records sought for retrieval (n=228)
- Records not retrieved/Abstracts (n=37)
- Records assessed for eligibility (n=191)
- Records excluded: wrong outcome (n=38), wrong population (n=39), wrong study design (n=2), study cohort <200 (n=25), no predictors (n=12), wrong publication year (n=1), wrong language (n=2)
- Studies included in review (n=76)
- Records identified from reviews (n=41) – (n=4)

Sociodemographic predictors: Age, education, income, region, family status

Work-related predictors: workplace characteristics, work-ability, intention to RTW, work situation before and after diagnosis

Psychosocial and health behavior-related predictors: Physical activity, lifestyle decisions, mindset regarding return to work

Disease-related predictors: Cancer entity and prognosis, comorbidities, consequences of disease

Treatment-related predictors: Treatment decisions, side effects

Social welfare system-related predictors: Country-specific programs, rehabilitation

Discussion:
- The review identified work, treatment, disease and health behavior-related predictors as well as predictors relating to the psychosocial and sociodemographic situation and the social welfare system
- Predictors vary over the patient pathway: pre-diagnosis, at diagnosis, during treatment, during rehabilitation, at follow-up
- Heterogenous results: Associations between predictors and RTW differ depending on the cancer entity, the time point of measurement, the country and social welfare system, and the definition and operationalization of RTW

Conclusion:
- Cancer survivors at risk can be identified by involved providers
- It is important to consider the type and stage of cancer for RTW
- Predictors can be used to develop cancer survivorship programs
- Lack of knowledge regarding when and by whom the needs of cancer survivors need to be addressed

References: