Sustained employability in cancer survivors: a behavioural approach

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“Work we know is both a burden and a need, both a curse and a blessing. But work is an extension of personality. It is an achievement. It is one of the ways a person defines himself or herself, measures his work and his humanity.”

Prof. dr. Peter Drucker
Outline

• History of cancer and work research
• Meaning of work
• Fact & Figures
• Factors related to return to work
• Interventions
• Behavioural approach
• Future directions
History of cancer and work research
History – 70s

• Topic of interest for about 40 years
• Corresponds with the beginnings of psycho-oncology in the mid 1970s
  • First stigma: speaking about cancer became possible
  • Second stigma: negative attitude towards psychological problems diminished
• First studies related to occupational rehabilitation
• Early research mainly reported about job discrimination of cancer patients and denied access to life and health insurances.

History – 80s and 90s

- Factors associated with return to work
- In 2002, Spelten et al published a literature review
  - 14 studies were included (from 1985 – 1999)
  - Factors were categorized into:
    - Work-related factors (e.g., the attitude of coworkers, accommodations at work)
    - Disease- or treatment-related factors (e.g., cancer site, cancer stage)
    - Person-related factors (e.g., socio-demographics)
History – 80s and 90s

• While disease and treatment have the most impact on return to work, managing cancer-related symptoms, such as fatigue and cognitive problems, can also influence work ability.

• Critical of the return to work research in this period

• All 14 studies suffered from methodological weaknesses

Spelten, Psycho Oncology – 2002
History – 2000 until present

Number of papers/year

- Number of papers: 0, 10, 20, 30, 40, 50, 60, 70, 80

European Cancer Survivorship & Rehabilitation Symposium – September 20th 2016
History – 2000 until present

• Studies from the perspective of:
  • Patient / survivor (e.g., work ability, problems related to return to work)
  • Caregiver and family (e.g., burden and (work related) consequences of care, financial problems)
  • Employer / coworkers (e.g., working conditions, work load)
  • Health care providers (e.g., supportive care to return to work)
  • Community / society (e.g., economic and policy changes)
Meaning of work

Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. ~ Steve Jobs
Meaning of work

- Self-esteem, self-concept
- Social relationships
- Sense of normalcy
- Financial security
- Contribute to society
- Provide for oneself and loved ones

Both the fact that one has had cancer and the long-term physical and psychological consequences of diagnosis and treatment often lead individuals to renegotiate their relationship to work life.
Meaning of work

- Interview study
- Male participant, 59 years old

“When we were driving home after receiving the diagnosis, I said to my wife: ‘now, I am never going back to work again.’”
Facts & Figures
Facts & Figures – incidence

• Global
  • 12.7 million new cancer cases each year
  • 50% (about 6.5 million) of the cases are of working age

• Europe
  • 3.5 million new cancer cases
  • 50% (about 1.7 million) of the cases are of working age

• National (the Netherlands)
  • 105.000 new cancer cases each year
  • 40% (about 40.000) of the cases are of working age
Facts & Figures – percentages

- At 6 months after diagnosis $\rightarrow$ 40% (range 24 – 72%)
- At 12 months after diagnosis $\rightarrow$ 62% (range 50 – 81%)
- At 18 months after diagnosis $\rightarrow$ 73% (range 64 – 82%)
- At 24 months after diagnosis $\rightarrow$ 89% (range 84 – 94%)

- At 5 years after diagnosis $\rightarrow$ 67% of patients was able to return to work

- Most cancer survivors are able to return to work
Facts & Figures – factors

• A substantial number of cancer survivors might benefit from help, advice, cancer-specific accommodations, and support on work issues.

• Information is required on factors associated with return to work and continuation of work.

• Knowledge regarding these factors can provide input for future interventions.
Factors – related to return to work

- Socio-demographic factors
  - Gender
  - Age
  - Educational level

- Disease-related factors
  - Cancer type
  - Chemotherapy
  - Surgery alone

E.g., Mehnert, Critical Review in Oncology – 2002
Factors – related to return to work

• Disease-related factors
  • Fatigue
  • Depression
  • Anxiety
• Cognitive functioning
  • Problems with attention, concentration, and memory interfere with job performance, beyond return to work.
  • No significant association between cognitive functioning and return to work.

E.g., Mehnert, Critical Review in Oncology – 2002
Factors – related to return to work

• Work-related factors
  • Type of work
  • Physical job demands
  • Perceived employer accommodation
  • Practical support from the workplace

• Survivor perspectives
  • Meaning of work
  • Coping skills
  • Social support

Taskila, Support Care Cancer – 2004; Banning, European Journal of Cancer Care – 2011
Interventions

✓ BEST PRACTICE
Interventions

- Psychological interventions (e.g., counseling)
- Physical interventions (e.g., physical exercise)
- Vocational interventions (e.g., job placement services)
- Occupational interventions (e.g., work adjustments)
- Legislative interventions (e.g., anti-discrimination)
- Multidisciplinary interventions
Interventions

• Most intervention programs aimed at improving, for example, quality of life, well-being or reducing fatigue
• Work-related outcomes only included as a secondary outcome measure
• Hardly any of these interventions showed significant effects so far

E.g., de Boer, Cochrane – 2015
Missing link?
Return to work – behaviour

• Three parties involved:
  • Work (e.g., type of job, employer support)
  • Cancer (e.g., type of treatment, cancer site)
  • Individual (e.g., socio-demographics)

Very little attention is paid in research to behavioural determinants of return to work in cancer patients and survivors.
Return to work – behaviour

- Can return to work be seen as behaviour: something you do or something you don’t do?
- If so, behavioural determinants might be important to consider in cancer and work research.
Return to work – behaviour

- Theory of Planned Behaviour
- People’s behaviour is best predicted by basically asking people about their intention to display a specific behaviour.
  - “Do you intend to go back to work?”

Ajzen, Organiz Behav and Human Decision Processes – 1991
Return to work – behaviour

• In 2009, Brouwer et al explored the association between attitude, subjective norm and self-efficacy and time to return to work.
• 926 employees on sickness absence
• Different reasons for sick leave (musculoskeletal symptoms, mental health symptoms, other symptoms)
• Work attitude, social support and willingness to expend effort in completing the behavior were significantly associated with a shorter time to return to work in employees on long-term sickness absence.
Return to work – behaviour

Musculoskeletal symptoms ≠ Cancer
Mental health symptoms

It might be a promising approach to address behavioral determinants in the development of interventions focusing on return to work and continuation of work in cancer survivors.
Return to work – behaviour

• Other relevant factors related to the individual
  • Meaning of work ("What does work mean to me and how important is this for me at present?")
  • Illness perception ("If the patient considers the disease as a narrowly defined medical disorder, the duration as long and the consequences as serious, the functional outcome will be worse, irrespective of the objective medical seriousness of the illness.")
  • Coping strategies (e.g., active / problem-solving; "I will actively try to return to work.")
Sustained employability – a behavioural approach

- Explorative review
  - Theories and models used in behavioural research in cancer patients and survivors, not work-related
    - Exercise; diet; smoking; alcohol use
  - Determinants for return to work in other study populations than cancer patients and survivors
    - Mental health problems; musculoskeletal symptoms
Sustained employability – a behavioural approach

- Two search strategies
  - Behavioural models and theories used in the development of lifestyle interventions (exercise, smoking, alcohol intake and diet) for cancer survivors
  - Behavioural determinants regarding work in non-cancer populations
- Medline, Embase, PsycInfo, CINAHL, Cochrane (’00 – ’15)
- 34 studies exploring lifestyle interventions in cancer survivors were retrieved; 26 studies on the role of behavioural determinants regarding work were found
Sustained employability
– a behavioural approach

• Transtheoretical model
  • Precontemplation (not considering returning to work within the next six months)
  • Contemplation (considering return to work in the next six months)
  • Preparation (beginning to take active steps to return to work)
  • Action (back at work)
  • Maintenance (staying at work for six months or more)
  • Relapse (on sick leave again)
Sustained employability
– a behavioural approach

The results indicate the significance of behavioural change theories and models, and of behavioural determinants in related research areas, which encourages a behavioural approach in the development of work-related interventions for cancer survivors.
Sustained employability – a behavioural approach

• Interview study
• Aim: to explore cancer survivors’ perspectives and experiences regarding behavioural determinants of return to work and continuation of work
• Semi-structured telephone interviews
• 28 cancer survivors (of working age; 1-2 years after diagnosis; employed at time of diagnosis)
Sustained employability
– a behavioural approach

“My husband always says: ‘if you’re not feeling well, just stop working!’”

“Yes, the meaning of work has changed. I do not worry as much as before and I am not working as hard as I did. That time is gone. My health is my main priority now.”

“I know I will return to work eventually, but I just do not know when that moment will be.”

Duijts, Disability & Rehabilitation – 2016, in press
Sustained employability – a behavioural approach

- ELSA-study
- Aim: to explore the effect of health- and work-related factors, and expectation of being at work on future employment status in cancer survivors
- A comparison with heart attack survivors was made
- Cancer and heart attack survivors of working age were included and followed up for two years
Sustained employability
– a behavioural approach

• In cancer survivors
  • Participating in moderate/vigorous sport activities; OR 2.68 (1.00–7.16)
  • Fair general health; OR 0.34 (0.14–0.84)
  • Being at work at baseline; OR 57.43 (21.51–153.33)
  • Expectation of being at work was not significant in the final model

• In heart attack survivors
  • Female gender; OR 0.03 (0.00–0.38)
  • Being at work at baseline; OR 51.27 (13.40–196.18)
  • High expectation of being at work; OR 10.01 (1.93–52.29)

• Employment status at baseline most relevant to consider when predicting future work status
Sustained employability – a behavioural approach

• Longitudinal study
• Aims: to explore the influence of change in employment status on HRQoL in cancer survivors long-term after diagnosis, and to identify predictors of work continuation in occupationally active survivors
• Data from a prospective cohort of cancer survivors
• ‘Continuously not working’, ‘positive change in employment status’, ‘negative change in employment status’, and ‘continuously working’
Sustained employability – a behavioural approach

• Of the EORTC QLQ-C30, physical, role, and emotional functioning, fatigue, pain, nausea and vomiting, appetite loss, constipation, financial impact, global health/QoL, and the Summary Score showed statistically significant differences between the four groups.

• In occupationally active survivors, a high score on self-perceived current work ability was found to be associated with work continuation one-year later OR 1.46 (1.11-1.92).

Duijts, submitted to Acta Oncologica
Sustained employability
– a behavioural approach

• Cancer survivors ‘continuously working’ are by far better off, regarding functioning, health and QoL, than those who are not able to work.

• However, in occupationally active cancer survivors, one should keep an eye on those with low self-perceived work ability, because they have an increased risk to discontinue their work.

• Such a negative change in employment status has shown to deteriorate health and QoL, to levels even lower than those ‘continuously not working’.
Future directions
Future directions

- Focus on work-related outcome measures
- Develop vocational interventions
- Take behavioural factors into account when developing these interventions
- Apply screening to identify the survivors who are in greatest (work-related) need
“Many individuals who survived cancer are your colleagues, co-workers, or family members. They wish to continue to be long-term contributors to our work communities. Various stakeholders should be engaged in a serious international dialogue in order to achieve improved work-related outcomes for all involved. Let us not forget that this is a global matter.”

Prof. dr. Michael Feuerstein
Thank you

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