

**CLINICAL CORRESPONDENCE**

# Cancer survivors and return to work: current knowledge and future research

Saskia Duijts<sup>1,2</sup> | Susanne Oksbjerg Dalton<sup>3</sup> | Marie Høyer Lundh<sup>4,5</sup> | Trine Allerslev Horsboel<sup>3</sup> | Christoffer Johansen<sup>3,6</sup>

<sup>1</sup>VU University Medical Center, Department of Public and Occupational Health, EMGO+ Institute for Health and Care Research, Amsterdam, The Netherlands

<sup>2</sup>The Netherlands Cancer Institute, Division of Psychosocial Research and Epidemiology, Amsterdam, The Netherlands

<sup>3</sup>Danish Cancer Society Research Center, Unit of Survivorship, Copenhagen, Denmark

<sup>4</sup>Metropolitan University College, Department of Nursing, Copenhagen, Denmark

<sup>5</sup>Uppsala University, Department of Public Health and Caring Sciences, Uppsala, Sweden

<sup>6</sup>Rigshospitalet, Department of Oncology, Copenhagen, Denmark

**Correspondence**

Saskia Duijts, VU University Medical Center, Department of Public and Occupational Health, Van der Boechorststraat 7 – C573, 1081 BT Amsterdam, the Netherlands.  
Email: s.duijts@vumc.nl

**1 | COMMENTARY**

It is a common cultural belief and also a moral position that working is a sign of health and reflects the ability to contribute to the common good. Research on occupational rehabilitation of cancer survivors has been conducted for about 40 years. It started with ground-breaking studies in the mid-1970s that showed that cancer survivors were discriminated against at work and denied insurance because of the often fatal prognosis of their disease. In the 1980s and 1990s, more factors were taken into account in this line of research; specifically, the predictive effect of these factors on return to work and work ability was explored. For example, we learned that younger survivors and men are more likely to return to work and that employer accommodation and flexible working arrangements, such as modified work hours, facilitate work ability in survivors of all types of cancer.<sup>1</sup> Because of ongoing improvements in cancer management and enhanced survival, the number of cancer survivors who are eligible to resume work is increasing. Nevertheless, today, the number of cancer survivors on long-term sick leave, and also those receiving a disability grant or those becoming unemployed, is still much higher than in the general population.<sup>2–4</sup> These observations and the fact that approximately 50% of the 3.5 million new cancer patients per year in Europe are of working age at the time of diagnosis has increased attention on “cancer and work” research during the past few decades.<sup>5</sup> Numerous large descriptive cohort studies have been conducted, and various intervention programs have been developed to support cancer survivors in returning to work.

At present, approximately 6 of 10 cancer survivors are able to return to work within the first year after diagnosis.<sup>6</sup> Not a bad result, one might say. However, the initiated intervention programs contributed little to this outcome so far, not in quality nor in

quantity. There is some evidence that multidisciplinary interventions, combining vocational counseling with psycho-education or physical exercises, generate a higher return to work rate than care as usual.<sup>7</sup> And recently, it was found that participants in both a low-intensity, home-based physical activity program and a moderate- to high-intensity, combined supervised resistance and aerobic exercise program returned earlier to work, as well as for more hours per week, than the control group.<sup>8</sup> However, almost all of the limited number of randomized controlled trials, evaluating work-related outcomes, have been conducted in breast cancer survivors and have produced only moderate quality evidence, which means that there is only modest certainty about the results and that further research will probably impact our confidence in the estimate of effect. The reason for the largely insignificant results—from both a societal and a clinical viewpoint—might be that the primary aim of most of the scientifically tested interventions is not to help cancer survivors return to work but rather, for example, to improve their quality of life or reduce the risk for depressive or anxious moods. Return to work is merely included as a secondary outcome measure, and the intervention as such is not specifically developed to address a work-related outcome. Moreover, although the multidisciplinary intervention programs include occupational components, such as adjusting work tasks, many lack methodologically robust and tailored vocational interventions that actually are able to detect an effect.<sup>7,9</sup> For example, in a randomized controlled trial, in which the intervention, among others, concerned improving communication between stakeholders, difficulties were experienced in involving the occupational physician and the employer, which may have caused the absence of an intervention effect in this study.<sup>9</sup> Therefore, it is essential to design high-quality randomized controlled trials, taking facilitating

factors into account when developing the tailored (vocational) intervention, and to actually focus on adequate and standardized work-related outcome measures.

In addition, we should ask whether we in fact support the survivors who are in greatest need. Cancer can have far-reaching consequences, especially among survivors, who live in affluent societies characterized by strong individual responsibility for health, in social classes with limited resources. It is well known that in individuals with an educational level beyond high school, a higher number of healthy behaviors, such as non-smoking, being physically active, and consuming a nutritious diet, are present. Also, sustained employability during or after cancer treatment is more likely in middle- and upper-class cancer survivors, and their employment conditions are, by and large, more flexible. These segments in society may require less support to return to work, because they generally have better health insurance and are financially and socially better equipped to manage their return to work themselves.<sup>1</sup> In contrast, within the group of survivors who lose their jobs or experience a drop in income, there is overrepresentation of blue-collar workers with no or short education and workers whose temporary employment contracts were not prolonged. Some of these cancer survivors in particular reported that going through medical interventions and suffering from the debilitating side-effects was one thing, but the loss of work (ability) above the loss of health was what made their life situation really hard.<sup>10</sup> Moreover, coping with both unemployment and the psychological pressure of the cancer diagnosis and following treatment can seriously affect their quality of life.

The ability to work is vital, as it supports an individual's sense of normalcy, social relationships, financial security, well-being, and health. In a horizontal perspective, it is beneficial for society as a whole, as long-term sick leave and work disability may have extensive economic consequences in decreased work productivity and increased mortality. Therefore, medical specialists and other health care professionals should give cancer survivors information about the (health) effects of returning to work at an early stage, at the same time as they address lifestyle factors, such as sufficient physical activity, a healthy diet, reduced alcohol intake, and smoking cessation. Awareness of the urgency of returning to work and retaining work, in both cancer survivors and health care professionals, enhances the necessity for evidence-based intervention programs. A distinction should nevertheless be made between those survivors who do not even consider being occupationally active again because of a debilitating prognosis, those who can afford changes in life priorities and, for example, decide to stop working, those with adequate resources to reenter the workplace without additional support, and finally, those who are profoundly in need of help in returning to work.

Contrary to what might be expected, there is a remarkable lack of scientific evidence for interventions that facilitate the return of cancer survivors to the labor market and a lack of social stratification in studies of this crucial problem. One should take into account that this research can be hampered, because of many factors that closely interact with the work situation of cancer survivors, which hardly can be controlled for, eg, national work and insurance policies, economic factors, or certain working conditions. Nevertheless, we consider it of the utmost importance that professionals in

(occupational) cancer care identify early on the patients who are in greatest need of support about work by screening, and adequately target them with comprehensive vocational interventions specifically designed for helping them to return to or retain work. Recently published protocol papers on return to work interventions for cancer survivors only partially seem to fill this gap in evidence, once these studies have been completed.<sup>11-14</sup> Whereas return to work is still occasionally found to be a secondary outcome measure in these protocols, multidisciplinary approaches and target populations other than highly educated breast cancer survivors are given enhanced attention. That said, a protocol paper is one thing, finalized research another, and ultimate results are a third parameter. Therefore, additional research is required to develop screening tools and to initiate, test, and implement intervention programs to support those cancer survivors with the highest barriers to be occupationally active. This will address a significant problem, which has hitherto been disguised in the prevalent view that cancer survivors are a homogeneous group of individuals.

## KEY POINTS

- 50% of the 3.5 million new cancer patients per year in Europe are of working age.
- 6 of 10 cancer survivors are able to return to work within the first year after diagnosis.
- Intervention programs contributed little to the return to work of survivors so far.
- Cancer care professionals should early identify survivors in need of support.
- High-quality randomized controlled trials are required focusing on tailored (vocational) interventions.

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## ETHICS APPROVAL

Not applicable.

## CONFLICT OF INTEREST

The author have declared no conflict of interest.

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