

## IN-DEPTH REVIEW

# Employment and the common cancers: return to work of cancer survivors

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<b>Background</b>	Support for the return to work of working-age adult cancer survivors is a major theme for occupational health professionals in Europe.
<b>Aims</b>	To provide an overview of the outcomes of recent European research in this field and discusses future research directions to explore and improve the return-to-work experience of cancer survivors.
<b>Methods</b>	European research, principally from English and Dutch language journals, on the subject of return to work was reviewed.
<b>Results</b>	Few European interventions have been developed and evaluated which enhance returning to work in cancer patients. They include a nurse-based intervention in the UK, a group rehabilitation programme in Sweden, rehabilitation programmes in Germany and a specialist–occupational physician intervention in Holland. Also described are current evaluation and research into models of occupational health support that seek to improve the experience of cancer survivors in their interaction with work. The development of evidence-based guidelines by the Dutch Society of Occupational Medicine is described.
<b>Conclusions</b>	Research within the European international scientific literature has begun to identify priorities for the successful rehabilitation of employees back to the workplace after cancer diagnosis.
<b>Key words</b>	Cancer; Europe; re-integration; research; return to work; work.

## Return to work of cancer survivors: a European perspective

In a recent meta-analysis, we assessed the unemployment risk of survivors of cancer compared to healthy controls. The results of a total of 26 papers were combined, including 20 366 cancer survivors and 157 603 healthy controls. Fourteen studies were from the USA, seven from Europe and five from other countries. Overall, cancer survivors were 1.4 times more likely to be unemployed than healthy controls [1]. For survivors in the USA, the unemployment risk was 1.5 times higher compared to European survivors. After adjustment for diagnosis, age and background unemployment rate, this risk disappeared. In addition, Amir *et al.* [2] have described an overview of the published literature examining rate of return to work for cancer survivors in this issue of *Occupational Medicine*. Results show that, on average, 75% of working cancer survivors return to the workplace.

These reviews indicate that although many survivors do not have work-related problems, there is ample room for improving the guidance of cancer patients in their return to work process. Programmes addressing return-to-work and re-integration issues are potentially of value in all phases of the treatment and rehabilitation process. The aim of this paper is to provide an overview of the outcomes of European research in this field and of future research directions to improve the likelihood of successful return to work of cancer survivors.

Few European interventions have been developed and evaluated which enhance return to work in cancer patients. One of the first was the study by Maguire *et al.* [3] in the UK, performed in the early 1980s. In this study, performed in a university affiliated hospital, a specialist nurse was appointed to counsel patients undergoing mastectomy and who also monitored their progress after discharge. Results showed that patients counselled by the nurse showed a greater social recovery and return to work than patients who received care as usual (75 versus 54%). This study showed that advice on return to work can be given very early on in the treatment process and that re-integration to work could start within the hospital setting during early medical treatment. During the 1990s, a group rehabilitation programme was evaluated

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in Sweden which emphasized physical training, information and coping skills [4]. This study found no effect on employment or sick leave duration. In Germany, rehabilitation services have been well established as part of mainstream health services since the 1970s. Every patient with a malignant disease is entitled to a place on an inpatient oncologic rehabilitation programme provided by specialized facilities. Participation is voluntary and health insurance providers encourage their members to participate, with the intention of improving the rate of reintegration into working life. However, in a non-randomized study, Hensel *et al.* [5] found that employment status was similar in patients who participated in a rehabilitation programme and those who did not.

Given the evidence that early advice on return to work in a hospital setting is feasible and may be effective, a pilot intervention study was conducted in The Netherlands to explore whether enhanced communication between attending and occupational physicians could improve work outcomes. Nieuwenhuijsen *et al.* [6] enhanced communication by way of letters from the treating radiotherapist to the occupational physician containing information on diagnosis, treatment plan and outcome of treatment. Additionally, cancer survivors and occupational health professionals received a leaflet with practical guidelines on how to return to work. The leaflet described a detailed 10-step plan for return to work based on principles of graded activity and goal setting (Table 1). Examples are 'make an appointment with your occupational physician' and 'make sure the return-to work plan encompasses the date and number of hours of the week you will work'. Almost all patients (96%) scheduled an appointment with their occupational physician (Step 1), all patients kept in contact with their colleagues and employer (Steps 2 and 3), most patients (62%) drew up a de-

tailed return-to-work plan (Steps 4 and 6), but only 15% drew up a second, less ambitious return-to-work plan. However, there was no effect of level of adherence on actual return to work, perhaps because of the small sample size ( $n = 26$ ).

Apart from research on interventions, two studies examined the performance of occupational physicians in the return-to work process of cancer patients. In Finland, Taskila [7] studied sources and levels of satisfaction in the amount of social support that 640 long-term cancer survivors had received. Most support was received from colleagues and least from occupational health services. The patients, especially those who had received chemotherapy, indicated that they had hoped for more support from the occupational health services. The authors concluded that there was a need to better organize occupational health services for cancer survivors. In The Netherlands Verbeek *et al.* [8] measured the quality of care delivered by their occupational physicians in a cohort of 100 cancer survivors, 1–2 years after diagnosis. There was minimal communication between the occupational physician and the treating specialists. In only 6% of the cases was there any formal exchange of information. As to the continuity of care, most patients had seen the same occupational physician when review was arranged, but no follow-up was arranged in almost 40%. The authors concluded that quality of occupational health support was reasonable but that, in particular, communication between specialist and occupational physician was open for improvement.

Because there is ample room for improving the guidance of cancer patients in their return to work process, the development of a multi-disciplinary guideline 'Cancer and work' was initiated in 2007 by the Dutch Society of Occupational Medicine (Nederlandse Vereniging voor Arbeids- en Bedrijfsgeneeskunde; NVAB). An important step in the guideline development involved assessment of the experiences of patients and line managers concerning return to work after diagnosis and treatment for cancer by means of three focus groups [9]. The most important themes for the patients were as follows:

1. contact with and support from colleagues and line managers
2. advice and expertise from the occupational physician
3. advice from other physicians
4. knowledge of the late effects of cancer.

For the line managers, the main themes were as follows:

1. the occupational physician and their own role in the return to work process
2. work adjustments
3. communication with all involved.

**Table 1.** Ten-step plan for return to work [6]

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Ten steps of advice

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1. Schedule an appointment with your occupational physician.
  2. Keep in contact with your employer or line manager.
  3. Keep in contact with your co-workers.
  4. Draw up a return-to-work plan in consultation with your line manager and occupational physician.
  5. Start to return to work before full recovery, but start with a very limited number of hours.
  6. Make sure the return-to work plan encompasses the date and number of hours of the start, which days of the week will be worked, the timing of the expansion of hours, the tasks and number of hours of this expansion and the proposed date of full return to work.
  7. Provide information on the prognosis of return to work.
  8. Evaluate the return-to-work plan with your line manager every 2 weeks.
  9. Draw up a second, less ambitious return-to-work plan that may be used if the first plan fails.
  10. Provide an example of a return-to-work plan.
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In addition, a multidisciplinary group of health care professionals including occupational physicians, oncologists, oncological nurses, general practitioners and psychiatrists, together with experts from the work field including patients and employers, developed an evidence-based guideline which will be published in May 2009.

The guideline consists of two parts. In the first part, advice is given on how to include the issue of 'employment' in monodisciplinary guidelines. The second part is aimed at professionals counselling working cancer patients and consists of three phases: diagnosis, treatment and recovery and re-integration and follow-up. For each phase, guidance on appropriate activities is provided. For instance, in the diagnostic phase, information on the work-related implications of the upcoming treatment is given and advice that an occupational physician should preferably communicate between specialist, employer or line-manager and the patient about work-related issues. In the re-integration phase, special attention should be paid to physical limitations and fatigue. Furthermore, re-integration programmes aimed at re-entry to the labour market of cancer survivors should be offered to the patient when appropriate.

In future research, several aspects need to be addressed. As Amir *et al.* [2] and Kennedy *et al.* [10] have indicated, not all cancer survivors have problems with return to work or have diminished work ability. Therefore, physicians should assess which patients are most in need of support for return to work based on patient preferences and evidence-based predictors of return to work. Those most in need can be assisted through recommendations about work resumption, work adaptation, communication with the employer or line manager and attending to cancer and treatment-related symptoms. Projects in which this risk selection is combined with a supportive intervention should be developed and evaluated. The oncology nurse could play a key role in establishing the risk of losing employment, communicating with the occupational physician and addressing return-to-work problems. Alternatively, the oncologist could assess the need for return to work support at an early stage and communicate with the primary care or occupational physician or nurse, who could subsequently provide tailored advice on work accommodations and return to work.

Finally, multidisciplinary guidelines are needed in more countries to enhance the shared care for cancer patients across disciplines and in cooperation with

employers and colleagues. Research which evaluates the implementation of these guidelines and its effects on the care of cancer patients is required.

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