## Oncological occupational physicians: meeting the challenge of an ageing workforce

Social, demographic and financial imperatives throughout the Western world have led to widespread increases in the official retirement age of workers. These changes are leading to an increasingly ageing workforce, further compounded by many countries having fewer younger people entering the workplace [1]. Arising from this, enduring age-related health conditions will increase in prevalence in the working population. How occupational health professionals can best advise employees and employers on the workplace implications of such disorders is a major challenge for the profession.

An exemplar of such conditions is cancer. Compared to the 55- to 59-year-old age group, incident rates of all cancers in the UK are 70% higher in the 60-64, 250% greater in the 65-69 and 340% higher in the 70-74 age groups [2]. In addition, it is estimated that in the UK, the number of cancer survivors has doubled since the 1970s and will increase by 3% per year for the foreseeable future [3]. This is likely to lead to increasing numbers of survivors seeking to return to the workplace. While the majority of working cancer survivors do return to work with little or no occupational health input [4], it is estimated that 25% of survivors experience long-term or late effects from their condition and/or its treatment [5]. This can include physical effects, such as continence problems, fatigue, cardiac complications (such as from treatment with anthracycline), as well as psychological difficulties. Consequently, there is an increasing need for occupational health professionals to ensure they have an appropriate skill set to understand the functional impact of cancer and its treatment, and advise on appropriate rehabilitation approaches.

In the case of the common cancers, how well is society in general and occupational health in particular meeting these challenges? Firstly, these challenges have been recognized, and for the first time work and finance considerations have been considered in the development of UK national policy relating to the provision of cancer services [6]. Over the past 10 years, there has been a significant increase in research exploring the impact of cancer on work and factors associated with return-to-work outcomes, and, increasingly, research is appearing on the effectiveness of different occupational rehabilitation models.

Most recently, the extent of our understanding of these issues, as well as up-to-date research findings, have led to the publication of a special supplement of the *European Journal of Cancer Care* relating to the impact of cancer

diagnosis on employment. The contributors to the supplement come from a range of clinical and social science backgrounds and the basis for much of their research is the complex relationship between pathology, psychological status, occupational demands and societal factors that influence occupational issues such as return to work and ill-health retirement [7]. The increased prevalence of co-morbidities in cancer survivors found to have been subject to unlawful discrimination (mainly termination of service) in the workplace demonstrates the need for occupational rehabilitation advice to integrate the functional effects of all pathologies experienced by the cancer survivor [8]. The necessity for rehabilitation programmes, that seek to enhance work ability during and after cancer treatment, to address these multiple nonclinical prognostic factors for work-related outcomes is also explored. There is only a limited literature relating to the occupational rehabilitation of cancer survivors. In recognition of this, one review explored the evidence for the application of behavioural change models in both the general (non-cancer specific) attendance management literature and cancer studies seeking to elicit behavioural changes beneficial to quality of life and prognosis. Both themes sought to explore factors such as self-efficacy and social norms, while the former included workers expectations towards work or recovery, attitude, motivation and the meaning of work. The authors integrate these findings to provide useful guidance on how successful use of behavioural interventions may inform the development of rehabilitation interventions specific to cancer survivors [9].

Most novel among the reports, however, is an account from the Netherlands for development of the role of oncological occupational physician (OOP), specializing in occupational rehabilitation for workers surviving cancer [10]. Some occupational health professionals have long specialized in specific areas of employment, but specialization based on pathology and its impact on work ability represents a radically different development. The OOPs underwent specific training relating to the support of patients with cancer who encounter work-related problems. This was followed by work in clinical settings where patients had undergone curative treatment. Although the effectiveness of this new subspeciality has yet to be established, this qualitative study suggested high levels of satisfaction from cancer patients. Opportunities for research into the effectiveness of occupational rehabilitation interventions, arising from such a role, are multifold.

This could represent a significant step forward in both developing and quantifying the effectiveness of different models of occupational health intervention in enhancing return to work and workability, an area with limited research evidence for a wide range of common health conditions. The prognostic variables relevant to return to work for cancer survivors identified in the literature are, in large part, not unique or specific to cancer survivors, and establishment of robust evidence for the effectiveness of a rehabilitation model for cancer could have implications for occupational health intervention for a wide range of age-related enduring health conditions.

Other manifestations of the changing impact of cancer on the workplace are emerging. This is likely to include an increasing number of employees who in earlier years may have retired early to care for ageing family members with cancer, or any number of other age-related enduring health conditions, but for whom this will no longer prove an option. As these care responsibilities will not go away, occupational health professionals may well see increasing numbers of employees experiencing psychological stress from the changes in work life balance brought about by such care roles [11]. A further challenge relates to the increasing importance of self-employment in Western economies, and in particular that of the UK. In Europe, the enlargement of this sector of the labour market is being actively encouraged. However, an unintended consequence of this is the potential for reduced protection for such workers developing cancer and poorer workrelated outcomes [12]. This may be a particular concern in the UK, where access to occupational health by the self-employed, small and 'micro' employers is minimal. Once again, such challenges are likely to apply to many age-related conditions.

It is essential that occupational health professionals use their influence with employers to highlight the workplace implications of the common and enduring health conditions associated with ageing, changes in the effectiveness of medical interventions and the changing demographics of the workforce. Occupational health professionals should contribute to the creative revision and development of procedures and processes in the workplace, in collaboration with health and safety and human resource colleagues, to facilitate the appropriate rehabilitation of employees back to the workplace after recovery from complications of, or treatments for, all age-related disorders, including cancer.

## Philip Wynn

Durham County Council, Durham DH1 5UG, UK. e-mail: philip.wynn@durham.gov.uk

## References

- CIPD. Creating Longer, More Fulfilling Working Lives: Employer Practice in Five European Countries. London, UK: CIPD, 2016. https://www.cipd.co.uk/knowledge/ fundamentals/relations/diversity/ageing-workforce-report.
- Cancer Research UK. Cancer Incidence by Age. http://www.cancerresearchuk.org/health-professional/cancer-statistics/incidence/age#heading-Zero (21 June 2018, date last accessed).
- Maddams J, Utley M, Møller H. Projections of cancer prevalence in the United Kingdom, 2010–2040. Br J Cancer 2012;107:1195–1202.
- Amir Z, Neary D, Luker K. Cancer survivors' views of work 3 years post diagnosis: a UK perspective. Eur J Oncol Nurs 2008;12:190–197.
- 5. Armes J, Crowe M, Colbourne L *et al.* Patients' supportive care needs beyond the end of cancer treatment: a prospective, longitudinal survey. *J Clin Oncol* 2009;27: 6172–6179
- Cancer Research UK. Achieving World-Class Cancer Outcomes: A Strategy for England 2015–2020. July, 2015. https://www.cancerresearchuk.org./sites/default/files/achieving\_world-class\_cancer\_outcomes\_-a\_stragegy\_for\_england\_2-15-2020.pdf (21 June 2018, date last accessed).
- 7. Mehnert A, Barth J, Gaspar M *et al.* Predictors of early retirement after cancer rehabilitation—a longitudinal study. *European J Cancer Care* 2017;**26:**e12528.
- Gehrke AK, Feuerstein M. Cancer, co-morbidity and workplace discrimination: the US experience. European J Cancer Care 2017;26:e12748.
- Duijts SFA, Bleiker EMA, Paalman CH et al. A behavioural approach in the development of work-related interventions for cancer survivors: an exploratory review. European J Cancer Care 2017;26:e12545.
- Zaman ACGNM, Bruinvels D, de Boer DJ et al. Supporting cancer patients with work-related problems through an oncological occupational physician: a feasibility study. European J Cancer Care 2017:26:e12378.
- Romito F, Goldzweig G, Cormio C, Hagedoorn M, Andersen BL. Informal caregiving for cancer patients. Cancer 2013;119(Suppl. S11):2160–2169.
- 12. Sharp L, Torp S, Van Hoof E *et al.* Cancer and its impact on work among the self-employed: a need to bridge the knowledge gap. *European J Cancer Care* 2017; **26:**e12746.