Cancer Survivorship and Work in Ireland

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Increased cancer survival has prompted focus on optimising quality of life for those living with and beyond cancer, including reintegration into work. Despite a desire for support in return to employment post-cancer diagnosis[1,2], some evidence suggests that healthcare professionals and those living with and beyond breast cancer, do not believe that there is enough designated work-related support in an Irish context[3]. Occupational therapists, however, have been identified as key stakeholders in supporting work outcomes[4,5] and can play a significant role in addressing this unmet need. The Occupational Therapy-led 'Work and Cancer' Study commenced in 2018 in Ireland, with the aim to develop and evaluate the feasibility of a work-focused intervention for those living with and beyond breast cancer[6]. This article will therefore provide an overview of cancer survivorship and return to work in Ireland, briefly outline the role of the occupational therapist in addressing this area of growing importance, and highlight several key findings from the Work and Cancer Study.

In 2015, almost 25,000 individuals in Ireland were diagnosed with cancer, 44% of whom were of working age (20-64 years)[7]. Engaging in work offers many benefits; improved quality of life[8], a sense of 'normalcy'[9], reduced social isolation and increased self-esteem[10]. Despite this, continuing to work during and after cancer treatment can be challenging, where only 16%, 25.2%, and 50.8% of those diagnosed with breast, colorectal or prostate cancer, continue to work in Ireland immediately post-diagnosis, respectively[11]. Overall, those living with and beyond cancer are 1.4 times more likely to be unemployed than healthy control participants, although this differs across cancer types[12]. Return to work rates vary and can be influenced by personal, societal, workplace, healthcare, and legislative systems.

Barriers in Return-to-Work Post-Cancer Diagnosis

A recent cross-sectional study commissioned by the Irish Cancer Society observed that 79% and 62% of those living with and beyond cancer report physical and psychological health issues as the most common barriers in return to work, respectively[1]. This is in line with international literature which cites physical and psychological limitations such as cancer-related fatigue, pain, cognitive dysfunction, anxiety and depression, as commonly reported disease- and treatment-related side effects which impact on return to work[13,14]. Indeed, the importance of psychological and physical readiness in return to work is widely cited internationally[4,13].

1. Physical Barriers

Cancer-related fatigue is common and is defined as "a distressing, persistent, subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer and/or cancer treatment that is not proportional to recent activity and interferes with usual functioning"[15]. Evidence suggests that while fatigue can improve within the first year post-treatment, that one-quarter to one-third of those living with and beyond cancer experience persistent fatigue for up to ten years post-diagnosis[16]. This is important to note, as persisting cancer-related fatigue after five years is associated with reduced activity participation, such

as work[8]. Furthermore, cancer-related fatigue has also been associated with cognitive dysfunction and reduced physical endurance, all of which can impact on work ability[17]. In addition to cancer-related fatigue, pain is also known to compromise quality of life[18,19], and can particularly impact on mood, sleep, and engaging in work[20]. Several studies explore the negative association of chronic pain on employment for those living with and beyond cancer that are of working age[21,22]. In addition, pain is associated with adverse financial outcomes, where the greater the pain, the worse the financial outcome[23].

2. *Psychological Barriers*

Several psychological barriers in return to work have been cited, including (but not limited to) psychological distress, body image, and cognitive dysfunction. Distress is an all-encompassing umbrella term for anxiety, depression, fear and panic[24] and is frequently experienced by those living with and beyond cancer[25]. It is, however, amenable to intervention where an intervention group incorporating education re. coping strategies, progressive muscle relaxation, and effective use of social support) subsequently experienced lower levels of distress and higher functional status, compared to the control group[26]. Body image can also impact on work outcomes where positive body image has been positively associated with return to work[27]. In addition, physical changes in appearance such as hair loss and nail changes have been identified as a barrier in work, where a discomfort has been described when interacting with colleagues[25].

Finally, while cognitive dysfunction is usually self-reported as mild or moderate, even minor deterioration can impact occupational performance and quality of life[28]. This functional decline is even more so prevalent when coupled with cancer-related fatigue[29]. In a cross-sectional study of 1,393 women living with and beyond breast cancer, 47.2% reported cognitive difficulties and were more likely to be on sick leave than women living with and beyond breast cancer without cognitive impairment[30]. It can also impact those who are seeking employment who also report their cognitive dysfunction as a barrier in return to work where reduced information processing and memory deficits can impact on perceived interview performance[31]. It is unsurprising, therefore, that increased support for those living with and beyond cancer in self-managing cognitive impairments in the workplace has been recommended[32,33], with the potential to enhance long-term employability[34]. Cognitive dysfunction is amenable to rehabilitation where interventions that centre on compensatory strategy training and/or computer training have demonstrated promising results post-cancer treatment[35], and therefore could be considered when targeting self-management of cognition in the workplace.

3. *Other Risk Factors*

Risk factors for work discontinuation vary. For example, work roles that include interaction with the public, are high-pressured, physically demanding, or shift work, have been found to compound the effects of cancer-related fatigue which may impact on work ability[36]. Furthermore, decreased work ability is associated with other factors such as chemotherapy, cancer type, co-morbidities, and treatment- and disease-related side-effects[37]. It is clear that support in reintegration to work for those living with and beyond cancer is warranted, however current supports available are not sufficient in addressing this unmet need.

Return to Work Resources in Ireland

It is widely acknowledged that there is not enough dedicated work-related support post-cancer diagnosis, in Ireland[3,38]. This gap in survivorship care is underlined in a recent unmet needs report, where work-related issues have been identified as needing attention in Ireland[39]. Resources in Ireland are evolving, however. The Marie Keating Foundation (2019) launched the *Back to Work after Cancer* booklet[40], and the Irish Cancer Society has pledged the development of a work-focused online hub for employers and employees as one of their ten strategic commitments[41]. Despite this, written information alone may not be sufficient, where the level of support is dependent on the complexity of the issue[42]. Where individualised support is required, Occupational Therapy can play a significant role.

The Role of Occupational Therapists in Supporting Work Outcomes

While there remains a lack of effective and methodologically rigorous rehabilitation intervention studies to support work outcomes for those living with and beyond cancer specifically[43,44], there is strong potential for Occupational Therapy, where interventions are known to positively influence employment outcomes for other cohorts[5,45,46], and the evidence for a cancer cohort is evolving[44].

1. The Work and Cancer Intervention

A recent report from the Irish Cancer Society (2021, p.4)[38] recommends that "The Government should introduce a state-run pilot programme on reintegration into the workplace for cancer patients and survivors out of work at the time of their diagnosis or after their diagnosis". The Occupational Therapy-led 'Work and Cancer' intervention, underpinned by the Medical Research Council Framework for Complex Interventions[47], and developed in an Irish context, is therefore timely and relevant. It is a six-week online intervention supported by self-management theory and was developed as part of the four-phase Work and Cancer Study. (Figure 1)[6].

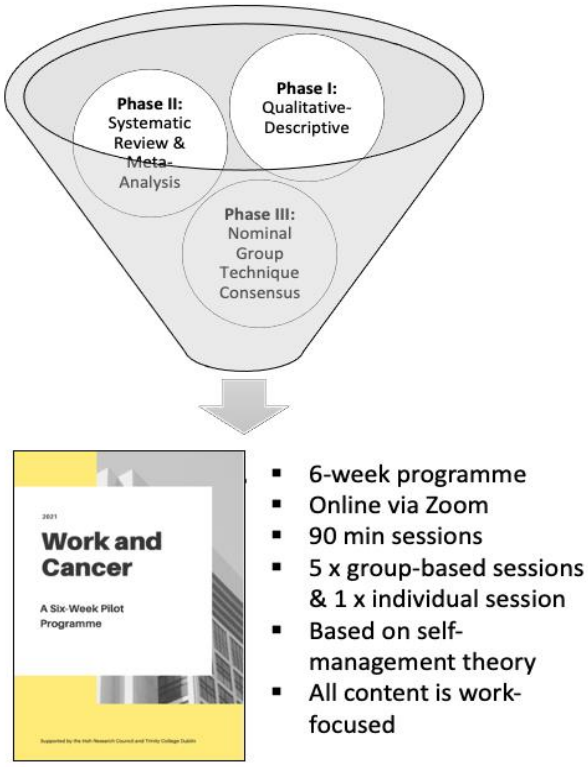

Figure 1: The Development of the Work and Cancer Intervention

Emerging evidence is promising where retention and adherence to the intervention was 100% and 90%, respectively. Intervention content addresses several of the aforementioned barriers in return to work, including managing cancer-related fatigue, cognitive dysfunction, and psychological/physical side-effects in the workplace. In addition, employment rights and entitlements as well as effective employer-employee communication are explored.
The intervention was found to be acceptable to women living with and beyond breast cancer in Ireland who described it as "*necessary", "supportive"* and *"empowering"*. One participant reflected on the unique nature of the intervention pulling all information on work and cancer together[6].

"There's a lot written about [work and cancer] but there's nothing that pulls it all together in a one-stop shop package like this." (P8)

Further piloting of the intervention is planned with large-scale evaluation to confirm effectiveness, however preliminary findings show promising potential for the intervention which could be expanded to other cancer cohorts. In addition to the Work and Cancer intervention, occupational therapists also enhance work outcomes through occupational rehabilitation, as well as through OT-led survivorship programmes such as 'OptiMal'[48].

Occupational Rehabilitation

Occupational rehabilitation is defined as "a range of services and supports aimed at people with acquired disabilities who already have a job with the primary objective of facilitating return to work in the original job or an alternative with or without accommodations or supports"[49]. Occupational therapists are trained to support occupational and vocational rehabilitation and have been identified as a key stakeholder in providing this type of

rehabilitation for those living with and beyond cancer[4]. They are uniquely qualified to provide vocational rehabilitation due to their understanding of the complex and dynamic relationship between the person, environment, and occupation; and their ability to address interacting physical, social, and cognitive supports and barriers to performance[50].

Work accommodations, or reasonable accommodations, can be defined as a change or modification to the tasks and/or structure of a job or work setting, which enables the qualified employee (with a disability) to complete the job and enjoy equal employment opportunities[51]. They are frequently tailored by occupational therapists for those living with and beyond cancer as part of an occupational rehabilitation intervention. Typically, work accommodations are put in place to manage physical and psychological side-effects of cancer and are associated with positive health benefits[52]. Involuntary job changes (i.e., unwanted work modifications since diagnosis) however, are negatively associated with women living with and beyond breast cancer's satisfaction with occupational development[53]. Examples of work accommodations vary but can include flexibility in working hours, working from home, and environmental adaptations[13]. Changes by employers to work schedules to facilitate cancer treatment and any follow-up appointments have also been shown to facilitate return to work and ease the workload[54,55].

Findings from the Work and Cancer Study outlined reduced awareness of employment rights and entitlements after a cancer diagnosis, including the right to reasonable accommodations[56]. One participant reflected she was not aware of the legal obligation on employers to offer accommodations; *"Not by law, I thought they were just being nice."* (P10). The minority who were aware of rights including reasonable accommodations, reflected how those with cancer might not recognise the applicability to their situation, instead associating accommodations solely with physical impairment[56].

"And in terms of reasonable accommodations…I'd tend to think about someone who had an injury or in a wheelchair. [I] don't even know how I would consider it in terms of my situation." (P28)[56]

Healthcare professionals, such as occupational therapists, are well-placed therefore to support those living with and beyond cancer in identifying and accessing tailored accommodations where required. In addition to work accommodations, occupational rehabilitation can include comprehensive assessment of work skills and capacity, negotiating a phased return to work and environmental modifications, liaison with employers, and education on strategies to self-manage physical and psychological side-effects of cancer and its treatment in the workplace[57].

2. Self-Management of Psychological and Physical Sequalae: OptiMal

OptiMal is a six-week, occupation-based, intervention underpinned by self-management theory that is facilitated by occupational therapists with multidisciplinary team input. It has been evaluated for those living with and beyond cancer in an Irish context, and appears to facilitate the transition from treatment to survivorship with positive outcomes on quality of life[48]. While the intervention is not work-focused, evaluation has demonstrated increased activity participation among those living with and beyond cancer, including returning to work roles. This is likely explained by findings that participants in the OptiMal intervention

experienced statistically significant improvements in activity participation, anxiety, self-efficacy, depression and quality of life, all of which can impact on employment outcomes[48].

> *"I think these groups are invaluable, it's got me back to work and I'm finding with the memory stuff, I really have to think on my feet now, it's actually helping me"* (P6)[48]

Moving Forward

As outlined in this article, supporting reintegration into employment for those living with and beyond cancer can offer significant psychological and individual benefits. In addition, it is estimated that productivity loss due to cancer morbidity in Ireland in 2018 was €113 million[58]. Therefore, successful transition back into the workplace for those living with and beyond cancer can also have significant socio-economic benefits. Both individual and societal benefits of reintegration into work after cancer are now being recognised and reflected in international and national policy and strategy[41,59-61]. While the role of Occupational Therapy in addressing reintegration into employment is very well established in other countries, it is growing in the Irish context and further evidence to support the role is evolving. Nonetheless, there remains significant scope and potential for further development of such services as a standard aspect of routine survivorship care in Ireland.

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*The Occupational Therapy Oncology/Haematology Outpatient Service at St. James's Hospital accepts internal referrals for supporting work roles for those living with and beyond cancer, in addition to its regular outpatient service. Furthermore, the OptiMal intervention outlined in this article will be adapted for online delivery in 2022. For more information, contact Naomi at nalgeo@stjames.ie

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