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Cancer and Work: A Canadian Perspective

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Introduction

Cancer is a complex array of illnesses that can bring a potentially overwhelming spectrum of physical, psychological, social, emotional, functional and economic challenges (Carlson, 2008; Stanton, 2006). Over the past twenty years, psychosocial oncology programming, services and research have greatly expanded in recognition of these hardships (Owen, Klapow, Hicken, & Tucker, 2001). While it is agreed upon that vocation and employment are distinct and fundamental components of psychosocial well being, the work-related needs of cancer survivors have been insufficiently addressed in the continuum of cancer care (de Boer, Taskila, Ojajarvi, van Dijk, Verbeek, 2009; Hoving, Broekhuizen, Frings-Dresen, 2009).

The advance of successful medical treatment for many of the over 200 types of cancers has resulted in a dramatic increase in both the life span and quality of life of people with cancer. At the same time, the incidence of cancer continues to grow due to early detection. Thus there is a growing population of Canadians living with cancer who have distinct psychosocial and vocational needs. While it is estimated that 171,000 new cases of cancer will occur in Canada in 2009, there also exists a five-year survival rate of 82.5 per cent, the third highest in the world (Canadian Cancer Society Statistics, 2009). In 2005, there were just fewer than 700,000 Canadians who had been diagnosed with cancer 10 years prior. This number represents almost 2.5% of the national population. Almost half of adult cancer survivors are under the age of 65 (de Boer et al. 2009). 51,000 new cases (30%) will occur between the ages of 20 and 59, which are the most productive years for employment and raising family (CCS, 2009). This cohort is seeing a surge of research, programs and services on an international level, but little attention has been paid to the development of assistance with work related issues.

Currently cancer survivorship is broadly defined as the time frame from diagnosis of cancer through the balance of life (Ristovski-Slijepcevic, 2008). The growing interest in this field is evidenced by numerous reports on survivorship needs from several countries including the United Kingdom, Australia, USA, Finland, and Canada. A new journal devoted exclusively to the subject, called the Journal of Cancer Survivorship, has recently developed, and one can find a bevy of studies looking at survivors and their reintegration back to the "new normal" (Hill-Schnipper, 2003). The majority of these reports and studies at least mention employment issues such as changes in functioning at work, return to work, income loss, and the need for employer accommodation. Very few papers, however, review or discuss clinical interventions or practices and their effects on workers' experiences.

The recent Cochrane review of interventions to enhance return to work for cancer patients reviewed 3,433 abstracts on eleven different cancer groups and identified only eleven studies meeting the inclusion criteria. All intervention studies were conducted in hospital settings. Few interventions were found to be effective in enhancing return to work and work retention in cancer patients. It was postulated that a mixed approach of vocational, psychological and physical rehabilitation aiming at return to work might be effective in improving occupational outcomes among cancer survivors but further research was recommended (deBoer, Taskila, Tamminga, Frings-Dresen, & Feuerstein, 2010).

Importantly, vocational rehabilitation and reintegration models have been advanced for many distinct disabilities and psychiatric, cardiac and musculoskeletal conditions. Rehabilitation textbooks address many distinct health and disability conditions, however cancer is absent from the great majority of them. As a result of this review and the authors' clinical and research perspectives, we have developed an initial vocational model for this population, which can be

seen at the conclusion of the paper. Recently Michael Feuerstein has also developed and published an integrative model for oncology based on his exhaustive work in the field (Feuerstein, 2010). His model incorporates health, functional status, work demands, work environment, policy, procedures, and economic components as a framework to aid both clinicians and survivors in conceptualizing work-related issues.

The purpose of this review was to determine what is known from reviews, reports, research studies and descriptions of psychosocial oncology services about the impact of cancer on work-related life in seven domains. These are: (1) Epidemiology and return to work (RTW) statistics; (2) Functional and personal impact of cancer on work; (3) Factors associated with positive RTW experiences; (4) Barriers to RTW; (5) Vocational rehabilitation and psychosocial interventions, (6) Canadian policies and programs addressing the vocational needs of persons with cancer; and (7) Recommendations for vocational rehabilitation in cancer care. This review focuses on Canada however; an international perspective is represented in the findings.

Method

Literature and research were reviewed using a scoping procedure framework (Arksey, O'Malley, 2005). Over 130 articles, reports and papers from 13 different countries were reviewed. In order to update the information on oncology based vocational programs and services available in Canada, an email inquiry was sent to over 300 members of the Canadian Association of Psychosocial Oncology (see Appendix A). Information was extracted from articles and summarized from the literature in each of the seven areas outlined above. Consistent with the scoping literature review method (Mays, Roberts, & Popay, 2001), we did not evaluate the methodological quality of the studies, reports or programs, as this area has not previously been reviewed comprehensively in Canada. While we recommend that at some stage this

evaluation be done, it is beyond the scope of this review and likely premature given the limited results of Cochrane's review (deBoer et al, 2010). The primary purpose was to gain a broad understanding of the work-life experience, services and needs of persons with cancer in Canada in order to discuss the implications for clinical practice, policy and research.

Impact of Cancer on Work

Our survey demonstrated that there exists a good deal of research that describes the impact of cancer on work including RTW statistics that consider type and site of cancer; patient concerns; employer concerns, and highest risk times for RTW. Michael Feuerstein's book, Work and Cancer Survivors, published in 2009 provides a comprehensive view of the current state of the discipline and indicates the growing attention being paid to the field. Several countries have extensive reports on the vocational impacts of cancer including Norway, Finland, Australia, the Netherlands and Canada. Very little research, however, was found that directly focused on interventions and practice, especially outside of the hospital context (de Boer et al, 2010). Up until recently, psychosocial intervention in general has focused on the early stage after diagnosis (Stanton, 2006) but in the past five years, there is a growing focus on the impact of cancer over time (Feuerstein, 2009).

Epidemiology and Work-related Statistics

In general, RTW rates after a cancer diagnosis vary but are relatively high. The rate of return to work varies by cancer type, treatment type, time of return and other factors. The great majority of cancer survivors have returned to work one year after diagnosis, and remain there 5-7 years later unless they retire (Feuerstein, 2009). The biggest risk time for work loss is in the early stage, from diagnosis to 3 months following diagnosis. In their study of work absence after breast cancer (BC) diagnosis, Drolet and her colleagues found that one year after diagnosis, 85%

of BC survivors were absent from work for four weeks or more compared to 18% of disease free individuals (Drolet, Maunsell, Mondor, Brisson, Masse, & Dechenes, 2005). By the third year post diagnosis, the difference in time away from work between cancer survivors and disease free individuals was significantly reduced. In their review of fourteen studies, Spelten's team reported a mean rate of RTW as 62% within one year of diagnosis (Spelten, Sprangers, & Verbeek, 2002). Bradley & Bednarek (2002) found that out of 253 cancer survivors working at the time of initial diagnosis only 67% were employed 5-7 years later. The 33% of individuals who were no longer working had primarily retired and 50% of them reported their retirement was unrelated to cancer. In a study of 100 participants aged 21-64 yrs old at the time of diagnosis, researchers found that only eight were no longer employed (Steiner, Cavender, Nowels, Beaty, Bradley, Fairclough, & Main, 2008). Fifty-two percent had either decreased their hours or reduced their workload and/or experienced changes in their job, but minimally reported these changes were related to cancer.

Rates of RTW or unemployment vary with the site or stage of disease. Breast cancer survivors and individuals diagnosed with prostate or testicular cancer have relatively high RTW rates (Dunbrack, 2009; Bradley, Neumark, Luo, Bednarek, Schenk, 2005). High-risk groups for return and maintenance of employment include cancers of the gastro-intestinal and female reproductive systems, lung cancer, head and neck cancers, grade IV blood cancers and brain cancer (Farley-Short, Vasey, & Tunceli, 2005; Taskila-Brandt, Martikain, Virtanen, Pukkala, Hietanen, & Lindbohm, 2004). In their large scale national study, Finnish researchers found that two years after diagnosis, lung and stomach cancer survivors had the lowest probability of being employed compared to other sites (Taskila-Brandt et al., 2004). Feuerstein's work has repeatedly shown that brain cancer survivors struggle with more work limitations than other

cancer survivors due to the broad spectrum of neurocognitive, physical and psychological effects of the disease and treatment (Feuerstein, Hansen, Calvio, Johnson, & Ronquillo, 2007; Feuerstein, 2005).

Breast cancer continues to be the most highly researched in the psychosocial oncology literature (Stanton, 2006). The report from the Canadian Breast Cancer Network's (CBCN) survey of 446 people with BC indicates a heavy economic impact on survivors. They report that 80% of respondents experienced a financial impact due to the cancer, including an average decline of 10% of the family income. (Dunbrack, 2009). In their Canadian research on work after BC, Maunsell and colleagues surveyed 646 survivors and 890 healthy women who were both working and under 60 years at the beginning of the study (Maunsell, Drolet, Brisson, Brisson, Masse, Deschenes, 2004). Three years later, 21% of women with cancer were unemployed compared to 15 % in their healthy matches. The majority of respondents from both groups stated, however, that the decision to leave work was their own. Those with cancer did not report any discrimination or deterioration in their working conditions after diagnosis. The CBCN's report showed different outcomes. Sixteen percent of respondents reported their jobs had been terminated, while one-fifth stated that they had to leave their jobs due to work-related restrictions and/or side effects of treatment. Another 12% of respondents were unable to return to the same job title or salary prior to illness due to medical issues, reorganization, reassignment, seniority issues, restructuring or fatigue (Dunbrack, 2009). Of particular note, two-thirds of those surveyed had to take more time off from work than is allotted by Employment Insurance (EI) benefits. The average time required for treatment was 38 weeks and EI coverage lasts for only 15 weeks (Dunbrack, 2009).

Numerous reports demonstrate that cancer is associated with unemployment. In their meta-analysis of 26 articles describing 36 studies from the United States and Europe, de Boer, Taskila and Ojajarvi (2009) reported on 20,366 cancer survivors and 157,603 healthy control participants. Their analysis showed that cancer survivors are nearly 1.5 times more likely to be unemployed than healthy control participants in both Europe and America. In Korea, higher rates of unemployment have also been found. Choi et al., (2007) found that just over half of the 305 males diagnosed and treated for cancer lost their job with only 23 % of the men later being re-employed. In their Korean study, Park et al. (2009) concluded that cancer adversely affects employment status across both age and gender. In their meta-analysis of 36 studies, de Boer et al. (2009) state that 33.8% of cancer survivors were likely to be unemployed compared to 15.2% of their healthy counterparts. Even for women with breast cancer, who generally have high RTW rates, Ahn et al. (2008) reported that only 58.9 % of women returned to work (n = 1594) after treatment.

Cancer has also been associated with wage loss. Syes (2008) reports an average of 12 percent decreases in wages, with the largest earnings declines for leukemia, lung, brain bone, colorectal and head and neck cancer. Lower education levels further exacerbate the decline in wages. Charles et al. (1996) also found that 12% of subjects reported that cancer affected ones ability to earn a living. Kennedy (2007) reported that many participants in their study spoke of the financial pressure caused by being off work.

Few studies focused on sociodemographic, medical and occupational factors complicating return to work outcomes. There likely exists a subgroup of cancer patients at increased risk of poor occupational outcomes. The results of a recent Finnish study (Lindbohm, Taskila, Kuosma, Hietanen, Carlsen, Gudbergsson, & Gunnarsdottir, 2010) indicate that

particular attention should be paid to survivors with comorbid chronic diseases; those who have undergone chemotherapy; and those with insufficient supervisory and coworker support.

Work retention is yet another essential issue that has been poorly addressed in the literature. While the rates of RTW are relatively well documented, few studies have shed light on work maintenance, absences, and the workplace experience from the point of view of either the cancer survivor or other stakeholders such as employers and coworkers.

Functional and Personal Impact of Cancer on Work

In general, cancer survivors are motivated to return to work (Feuerstein, 2009; Melette, 1985). Reasons for this include financial need and access to health insurance and treatment (Bradley, 2002). Beyond the financial need, however, cancer survivors consider work to be healthy activity that offers structure, purpose, social support, distraction, sense of identity and signifies 'getting back to normal' (Amir et al, 2008; Nachreiner, Dagher, McGovern, Baker, Alexander, & Gerberich, 2007). While the findings generally indicate that the majority of survivors remain in the workplace, particular challenges and benefits regarding the RTW experience and functionality are noted in the literature. Cancer and its treatment may involve a broad range of impairments ranging from the highly visible such as amputation and change in physical ability to the less obvious but often debilitating problems such as fatigue, depression, cognitive limitations and pain (Farley Short & Vargo, 2006). Fatigue is often reported as one of the greatest barriers to RTW (Durack, 2009; Amir et al. 2008; Taskila, deBoer, van Dijk, & Verbeek, 2010). Almost 20% of cancer survivors report limitations in their ability to work from 1-5 years post diagnosis (Farley-Short & Vargo, 2006). Over 57 percent of cancer survivors report work changes such as reduced hours, change of occupational role and job termination after RTW (Steiner, Cavender, Nowels, Beaty, Bradley, Fairclough, & Main, 2008). Involuntary

unemployment, undesired changes in work situation and problems with co-workers continue to challenge the cancer survivor's re-integration into the work world (Nowrouzi, Lightfoot, Cote, & Watson, 2009).

Work-related challenges facing people with cancer include higher levels of unemployment, changes in employer, work hours and type of work, and inability to do physical labour as prior to diagnosis. Survivors are disadvantaged in the labour market compared to the general population (Amir et al., 2008). Difficulties such as neurocognitive impairment (Boykoff, Mmoieni, Subramamian, 2009) can impair the work abilities of some cancer survivors (Dunbrack, 2009; Calvio, Feuerstein, Hansen & Luff, 2009). Nieuwenhuijsen and his colleagues (2009) identified lower neuropsychological functioning as a central role in difficulty in RTW for cancer survivors one year after diagnosis. In a Norwegian study of 317 women and 279 men diagnosed with cancer between the ages of 25 and 57 years, Gudbergsson et al. (2006) found that survivors reported more health problems, and mental and physical challenges than disease free employees. This raises concerns regarding their ability to perform their duties as competently as prior to their illness and whether or not these individuals will be able to work all the way through to retirement. Bradley and Bednarek (2002), in their exploration of the employment patterns of 253 people working at the time of a cancer diagnosis, found that multiple limitations were imposed on employees due to cancer. Those of particular significance reported were: ability to perform physical tasks; ability to concentrate for extended periods of time; and ability to keep pace learning new things at work.

In contrast, the literature identifies several other factors associated with RTW after cancer. In some self-report studies, the ability to RTW after cancer treatment has been linked with survival (Hoffman, 1999) and with well being (Peteet, 2000). For some individuals,

particularly those with breast cancer, survivors identify changing personal priorities that result in either a change of type of employment or reason for not returning to work (Chapman, 2001). In their 2001 study from the University of Toronto, Stewart, Cheung, Duff, Wong, McQuestion and Cheng found that over 40 percent of breast cancer survivors reported changes in priorities as an important factor in their RTW choices and experience. It has been found that women with breast cancer tend to work longer hours and get higher wages than non-cancer employees (Bradley, Bednarek, Neumark, 2002) and it has been hypothesized that a possible explanation for this is their motivation to avoid job loss in the future.

Factors Associated with Positive Outcomes for RTW

The literature identifies multiple factors that are associated with a successful RTW experience after a cancer diagnosis. These factors can be subsumed under the following categories: (1) Work-related factors; (2) Individual characteristics; and (3) Cancer / Health-related factors. These factors focus primarily on initial RTW experiences, as there appears to be a paucity in longitudinal research concerned with work maintenance and retention.

Work -related Factors.

In Spelten, Spranger, and Verbeek's review (2002) of factors influencing the RTW of cancer survivors, work accommodations stood out among the most influential components of a successful RTW experience from the point of view of cancer survivors. Effective accommodations included employer flexibility regarding both work hours and duties; identified support at work; and positive attitude of co workers. In Ontario, Nowrouzi et al. (2009) found that public sector and larger organizations (greater than 50 employees) offered greater assistance in accommodations such as paid time for medical appointments and reduction in hours, resulting in better RTW outcomes. Other studies gleaned similar results. In particular, employees

interviewed three years post diagnosis reported that having some discretion regarding work hours and duties facilitated a successful RTW experience (Amir, Neary, & Luker, 2008). These individuals described their relationships with their employers and/or managers to be supportive and respectful of their changing needs post diagnosis. The CBCN report of breast cancer survivors showed that 20% of respondents reported that a gradual RTW facilitated a positive transition back into their workplace (Dunbrack, 2009). In Finland, Taskila (2007) and Hakanen and Lindbohm (2008) reported that a good social climate and support at work fostered high commitment and work engagement on the part of employees with cancer. Also, workplace accommodations, such as reducing number of work hours and reducing physical task demands after RTW, was significantly related to reduced fatigue at 18 month follow up (Taskila et al, 2010). Along with these occupational factors, Pryce (2007) also identified that disclosure to coworkers assisted in successful RTW. Finally, white-collar jobs also seem to be associated with better RTW experiences (Bradley & Bednarek, 2002; Bradley, 2005).

In order to provide an organizational perspective on the process, Grunfeld, Rixon, Eaton, & Cooper (2008) had 252 medium to large companies complete questionnaires about cancer and their employees. Half of the employers did not know the number of employees with cancer. RTW services & policies were identified but only 38% supported this information with written guidelines about the policies. The majority of organizations identified employee related factors as the primary explanation for successful RTW, citing good attitude and emotional health as essential factors (Grunfeld et al, 2008). These studies suggest a lack of communication and awareness regarding employee perceptions of what promotes a successful RTW experience.

Individual Characteristics.

Not surprisingly, individual factors also impact the RTW experience. Most studies included good social support as a salient factor in successful RTW (Bradley & Bednarek, 2002; Spelten et al., 2002). In his study of men treated for prostate cancer, Bradley (2005) found that younger men who were better educated and had more prestigious jobs had an easier time returning and readjusting to work. Other studies show that higher educational levels, and a high level of commitment to work facilitated the RTW experience (Taskila, 2007). In a Korean study, women with breast cancer who were single, over 40, and well educated seemed to adjust back to employment more successfully (Ahn et al, 2009).

Cancer / Health Factors.

Numerous cancer related factors influence the RTW experience. Breast cancer, prostate cancer and testicular cancer are associated with somewhat easier and more positive RTW experiences (Bradley, 2005; Spelten et al, 2002). Differences in the treatment and severity of disease in these types of cancer also mediate as predictors for RTW outcomes. Spelten et al.'s review (2002) indicated that people who returned to work a longer time after treatment fared better, again depending on the type of cancer and treatment. The need for health insurance was also identified as a strong motivator to RTW (Bradley et al, 2005). Unfortunately, this may be related to the fact that many people with cancer do not qualify for the U.S. criteria for disability protection (Feuerstein, 2009). In Canada, Employment Insurance is available to working people for 15 weeks. However, treatment for breast cancer, considered to be among the diagnostic groups most likely to return to work, is found to last for an average of 38 weeks (Dunbrack, 2009).

Factors Associated with Negative Outcomes for RTW

A considerable body of research has been accumulated that identifies factors impacting RTW for cancer patients and survivors. These studies present some contrasting results, but consistently demonstrate that cancer and its treatment have long-term effects on people's employment situations. Barriers to RTW will be outlined within the same categories as the positive factors related to work and cancer.

Work related Factors.

Work demands can greatly influence the RTW experience of a cancer survivor. For jobs where heavy lifting and greater physical demands are required, cancer survivors may no longer be able to perform these tasks to the same degree they could pre-diagnosis (Spelten et al., 2002; Steiner et al., 2008). Bradley and Bednarek (2002) identified physical tasks such as lifting heavy loads and stooping, kneeling or crouching as limitations in their post-cancer employment experience. Cognitive tasks that presented as limiting included: keeping pace with other workers; concentration; data analysis; and ability or pressure to learn new skills or knowledge (Bradley & Bednarek, 2002). Similar findings have been reported in Canadian, Finnish and Norwegian studies. As indicated in the previous section, employees who feel supported and accommodated in the work place fare better overall. Non- supportive work environments are consistently correlated with poor RTW experiences (Dunbrack, 2009; Spelten et al., 2002). A 1996 survey of over 200 supervisors found that 66% generally believed that cancer survivors would not be able to adequately perform their jobs (Hoffman, 2005). Similarly, 27% of their coworkers were concerned that they would have to pick up the slack of additional work upon the RTW of a cancer survivor. Thus, survivors' fears regarding negative reactions from coworkers to their return to work may have some foundation. On the other hand, several studies indicate that people

feel relatively well supported in the workplace post diagnosis (Spelten et al., 2002; Steiner et al., 2002).

Discrimination in the workplace continues to be a salient issue for people with cancer despite suggestions to the contrary. In an analysis of allegations of workplace discrimination in the U.S.A., researchers found that the parties with cancer who made discrimination claims were more often meritorious than the general disability population making similar claims (McKenna, Fabian, Hurly, McMahon, & West, 2007). Issues addressed were serious employer offenses including discharge, terms of employment, lay-offs, wages and demotions. These results confirm earlier research where individuals diagnosed with cancer perceived that they faced reassignment, discharge and different treatment more often than their healthy coworkers (Rothstein, Kennedy, Ritchie, Pyle, 1995). These issues seem to be more prevalent where physical labour is involved. A further discriminatory factor for people with cancer is the tendency to not hire these individuals (Hoffman, 1995).

Individual Factors.

Several individual factors negatively associated with RTW for cancer survivors have been identified in the literature. These include higher age, less education, multiple co morbidities, blue-collar jobs and lower income (Hewitt et all, 2003; Bradley and Bednarek, 2002; Lindbohm et al, 2010; Taskila & Lindbohm, 2007). These findings were consistent in the breast cancer literature as well where RTW numbers are usually higher (Ahn et al, 2009; Bouknight et al, 2006). Spelten et al. (2002) also found that a change in attitude to work, i.e.: decreased aspirations and increasing age were associated with poor RTW outcomes. In their study, Sanchez, Richardson, and Mason (2004) report that gender, ethnicity, age, education and partner status have not been found to be significantly associated with delayed RTW for colorectal cancer

survivors. Psychological issues like depression and anxiety are, however, highly correlated with problems in employment during or after cancer (Calvio, Feuerstein, Hansen & Luff, 2007; Dunbrack, 2009; Steiner et al., 2008). It is difficult to separate some of the individual characteristics from cancer related factors, as the research does not indicate whether these issues predated the diagnosis.

Cancer /Health Factors.

Some of the most significant impediments to successful RTW for cancer survivors involve disease, treatment, as well as side effects and long-term effects of cancer and its treatment (Macmillan Cancer Support, 2008; Steiner et al., 2002). Advanced disease stage, disabling cancer and/or treatment, depression, fatigue, and cognitive impairment present as major barriers in the first year post diagnosis but may decrease thereafter. Issues that arise after RTW include greater number of sick days, decreased ability to perform job duties, and lack of energy. In their research on the long term effects of cancer on work, Bradley & Bednarek (2002) found that out of 253 cancer survivors who were working at time of initial diagnosis, 24% of the patients who stopped working did so due to poor health. Surveys of cancer survivors consistently show that individuals with fatigue, depression, anxiety and cognitive limitations 4 years post diagnosis report greater work limitations, indicating the serious impact of symptom burden on work. Fatigue is often cited as the major factor (Hansen, Feuerstein, Calvio, Olsen, 2008; Sanchez et al., 2004; Taskila et al, 2010).

Disease-related barriers to RTW are site, treatment and severity specific. Individuals with head and neck cancers, lung cancer, lymphoma, leukemia, multiple myeloma and brain tumours tend to have poorer RTW outcomes, due to the often greater severity in disease and treatment (Farley-Short, Vasey, & Tunceli, 2005; Feuerstein et al., 2007; Spelten et al., 2002; Taskila-

Abrandt et al., 2005). Feuerstein (2007) found that individuals with brain tumours experience greater levels of work limitations than their control group comparisons, dealing with a host of challenges including fatigue, depression, anxiety, cognitive limitations, decreased physical activity and poorer sleep. Chemotherapy and its often debilitating effects are also correlated with delayed or problematic RTW experiences for individuals with different types of cancer including breast, prostate, and lymphomas (Sanchez et al;, 2004; Razavi, Delvauz, Bredart, Autier, Bron, Debusscher, Strychkmans, 1993; Taskila et al., 2005). In their 2009 report, the CBCN survey of BC survivors showed that those who had chemotherapy as part of their treatment experienced a significantly greater decline in household income than those who had only radiation therapy (Dunbrack, 2009). Those survivors treated with chemotherapy also required more time off work and were forced to quit their jobs than those who did not receive chemotherapy (Dunbrack, 2009). In a recent study from Saskatchewan, Quinlan and her colleagues found that women with breast cancer who suffered from range of motion limitations and arm pain were more than twice as likely to lose productivity at work compared to counterparts without arm morbidity (Quinlan, Thomas-MacLean, Hack, Kwan, Miedema, Tatemichi, Towers, & Tilley, 2009). As the authors point out, such results make a compelling argument for the need for rehabilitation services to be provided at crucial times in the recovery process in order to be impactful in the work-life trajectory of cancer survivors (Quinlan et al., 2009).

Other factors include psychosocial symptoms such as anxiety, depression, and feeling useless, (Steiner et al, 2008). Some of these problems have been linked to a lack of communication with doctors regarding RTW needs including vague medical advice re time to RTW**,** i.e.: **“** when you feel ready..” (Amir et al, 2008; Pryce et al, 2007). Sometimes these

issues are associated with a reduction in hours or change in job due to a premature or unrealistic RTW for an individual struggling with fatigue and/or nausea (Pryce et al., 2007).

Vocational Rehabilitation Interventions

Research.

There is a dearth of well-designed outcome research on intervention-based work in psychosocial oncology (deBoer et al, 2010; Stanton, 2006). Our search unearthed hundreds of studies, reports and anecdotal evidence demonstrating the seriousness of the impact of cancer and its treatment on work life. Epidemiological studies continuously revealed the decrease in hours of work, financial compensation and productivity in the work force caused by cancer. In the recent CBCN report on the economic burden of breast cancer in Canada, only 19% of respondents reported having received any physical, psychological, or educational rehabilitation service (Dunbrack, 2009). The literature strongly suggests the need for increased clinical intervention, education and research (deBoer et al, 2010).

The recent Cochrane review of RTW-enhancing interventions identified eleven intervention studies; all completed in medical settings. Of the four medical interventions, only the study on hormone treatment in thyroid patients reduced the length of sick leave. One intervention included a combination of psychological, physical, and vocational intervention provided by a specialist nurse and enhanced RTW rates among breast cancer patients. Four interventions incorporated psychological and educational counselling of which one was effective in improving employment rates in men with prostate cancer. Three studies focused on physical rehabilitation and one intervention was a mix of psychological and physical rehabilitation. However, none of them was effective (de Boer et al, 2010).

Hoving et al, (2009) systematically reviewed breast cancer studies conducted between 1970 and 2007 that had work as an outcome. They found only four relevant studies out of 100, three of which were published before 1990. The intervention programs focused on physical, psychological and social recovery with 75% -85% of these patients returning to work. Work outcome was one of other outcomes measured (i.e.: social adjustment, mental state, quality of life and pain) and therefore not the prime focus of the studies. Only one study reported the use of a control group, thus the actual impact on work outcome cannot be established.

In our search, however, we were able to locate further six articles that focused on work - based interventions in cancer care, and they are reviewed here. A recent review in the U.S. by Chan et al. (2008) found that unemployed cancer survivors represented 0.4% of the total population that received state vocational rehabilitation services. They found that the following increased the odds for employment: 1.Counseling (1.33 times more likely to be employed); 2. Miscellaneous training (1.6 times more likely to be employed); 3. Rehabilitation technology services (1.22 times more likely to be employed; 4. Job placement (2.37 times more likely to be employed); 5. Job search assistance (1.43 times more likely to be employed); 6. Maintenance services (1.92 times more likely to be employed); and 7. Other services (1.43 more likely to be employed). Thus it is evident that vocational interventions have a positive impact on the RTW experience.

Also from the U.S., Sherer and his colleagues conducted a smaller study where they offered post acute brain injury rehabilitation. Service was provided by psychologists, speech/language pathologists, occupational therapists and vocational specialists to patients with primary malignant brain tumours. Participants' mean time from diagnosis to admission to the program indicated a lengthy work absence. Therapy was provided in the clinic as well as in the

community setting and included targeted vocational assistance. Although all the patients were assessed with cognitive impairment, eight out of 13 participants significantly improved productivity (Sherer, Meyers, Bergloff, 1997).

In the Netherlands, Verbeek and his colleagues found that when there was face to face assistance and follow-up from occupational physicians, cancer patients were able to have better communication with and between doctors and employers, thus facilitating better RTW outcomes (Verbeek, Spelten, Kammeijer, Sprangers, 2003). However, their study showed that too often, the occupational physician had not seen the patient and their knowledge of cancer and treatment was poor (Verbeek et al., 2003). They proposed four essential factors related to the management of RTW of cancer survivors, namely: 1) Medical knowledge of the disease and treatment; 2) Continuity of care; 3) Interventions for cancer related complaints; and 4) Interventions to improve relations at work (Verbeek et al., 2003). Similar findings were reported by Amir, Wynn, Whitaker, and Luker (2008) in their U.K. study of Occupational Health Physician's (OHP) experiences with cancer survivorship and RTW. OHPs reported having less communication with oncologists, general practitioners and employers of cancer survivors as well as limited knowledge of cancers and their treatment. Amir and his colleagues (2008) state that OHPs felt that managers treated referrals to occupational health for employees with cancer differently than those with other diagnoses. They reported that managers waited too long to make a referral that could adequately assist a person with cancer in returning to work (Amir et al., 2008). In Canada, OHP services tend to be present in Workers' Compensation areas and therefore are not readily available in oncology. However, given the particular complications of cancer and its treatment being so varied, the European and British studies suggest the need and benefit for such specialization in the OHP field.

Also from the Netherlands, a pilot study involving the provision of an educational leaflet to survivors prior to RTW and treatment plan letters from oncologists sent to OHPs showed promising results. Half of the OHPs reported that they were influenced by the rehabilitation intervention, and the majority of cancer survivors adhered to the steps of advice in the booklet, with the exception of creating a back-up return to work plan (Nieuwenhuijsen, Bos-Randsorp, Uitterhoeve, Sprangers, & Verbeek, 2006).

In Canada, the Breast Cancer Survivorship Program at the Princess Margaret Hospital created and studied a blended learning (in class and on-line) program called Survivorship Transition to Employment Project (STEP) designed to assist breast cancer survivors in reintegrating into the workforce. Results have not yet been published (Personal communication, Robert Luke, 2010).

We also received word that several relevant studies are currently in process and/or being reviewed by journals. In the Netherlands, de Boer and her colleagues are in the process of conducting a randomized controlled trial intended to improve work participation though a multimodal intervention (Personal communication, de Boer, 2010).

Almost every epidemiological study makes strong recommendations for vocational rehabilitation interventions based on the evaluation of patient needs. As early as 1992, Mundy, Moore, and Mundy strongly urged that oncology case management must include vocational rehabilitation due to employment discrimination and lack of awareness. Our review suggests that methodologically sound intervention studies involving work outcomes and cancer are lacking.

Practice in Canada.

As our review was focused on published literature which tends to be more research focused, we expect programs may be underrepresented here. We did attempt to contact experts

in the field in Canada by email to identify programs that existed or may have existed (see Appendix A). The following represents the responses we received regarding ongoing Canadian programs or services for vocational assistance in oncology settings.

Hospital Settings.

In Canada work focused programs are starting to be developed with the health care and community settings. Within a hospital setting, the B.C. Cancer Agency offers vocational rehabilitation counseling within the Patient Family Counselling Department. A full-time professional vocational rehabilitation counsellor provides the service. Individualized services include vocational counseling, assessment, case management, job search assistance, resource referral, and education. The vocational counsellor is on-site at two cancer centres and available by phone consultation to patients and professionals for the remaining three cancer centres in British Columbia. While the service is open to all cancer patients, those identified by the patients and health care team as needing the greatest assistance (i.e. physical and cognitive barriers) are typically seen more frequently.

The Regional Cancer Program of the Hôpital régional de Sudbury Regional Hospital provides a Women's Return to Work Support Group when they have sufficient registration. The program is offered beyond the geographical area by having participants teleconference in from other locations. Their program consists of four psycho-educational and support sessions led by professional social workers who have expertise in this area.

As part of their interdisciplinary psychosocial support and rehabilitation for cancer patients at Ottawa Hospital Cancer Centre, RTW support is provided by an occupational therapist. This includes assessment of functional abilities to educate the health care team and employers about work capacity. The intervention also includes education related to fatigue

management and compensatory strategies for cognitive limitations; guidance on how to increase capacity for work; recommendations for symptom management; and referral to other members of the rehabilitation and psychosocial team. Additionally, the McGill University Health Centre, as part of an interdisciplinary rehabilitation program, provides for patients with complex rehabilitation needs. Some return to work guidance is provided by an occupational therapist.

Community Programs.

Within the non profit sector, two community programs exist. Wellspring, which represents a network of community- based cancer support centres (Toronto, London, Niagara and Calgary) provides two professionally led vocationally-oriented programs. The first is the Return to Work Program which is an eight-week educational and support Program for those not working. The Back at Work program is a pilot eight-week group program to address work related challenges and provide a forum to share with others on these issues for those back to work. In addition to the core program, two work-oriented educational sessions (government services, employment law, and long term disability) are offered to all Wellspring participants. Hope and Cope, which is primarily a volunteer based organization affiliated with the Jewish General Hospital in Montreal, has also started a weekend workshop that includes RTW issues

Programs for Childhood Cancer Survivors.

There are also two employment programs designed for childhood cancer survivors in Canada. The first is the Successful Academic and Vocational Transitions Initiative (SAVTI) that has been in existence since 2002 and was developed by the Pediatric Oncology Group of Ontario. Their mandate is to help those who have developed learning difficulties as a result of their disease and/or treatment that interfere with achievement of educational and career goals. SAVTI counselors help with the transition out of high school by providing support and guidance

to survivors regarding appropriate educational and employment goals for those who are 16 years and older. The VoCo (Vocational Counsellor) program from B.C. Women's and Children's Hospital is a pilot program modeled after SAVTI to support those 15-19 year olds with appropriate educational and vocational support. It is being provided by a vocational rehabilitation counsellor and with a focus on higher risk populations.

Policies and Programs

Given the ongoing changes in treatment for cancer it remains difficult to precisely predict the duration of residual impairment that could impact employability. The effects of cancer and the side effects of treatment may be transient for some, but for many there can remain ongoing changes in function such as fatigue, cognitive impairment, reduced limb function, loss of limbs, communication impairment, and psychological reactions (Steiner et al., 2008). Current federal, provincial and local government and private wage replacement programs have not yet fully recognized and adapted to the unpredictability of short, medium and long term late effects of cancer. In some cases a condition of eligibility for the benefits requires a significant degree of illness and disability beyond the effects of cancer. Eligibility can also require a withdrawal from the workforce initially and likely include some financial discouragement for those who want to remain at work as long as possible despite disabling effects. Most private and government programs that provide incentives to reintegrate back to work do so by including compensation for hour by hour working. Therefore the programs may not provide support for those who either work at a slower pace or are not competitive.

Canada's Health care system

Health care resources are largely directed at the provincial level and each province determines their priorities for services. Basic rehabilitation services (i.e. physiotherapy,

occupational therapy, speech therapy, neuropsychology) can be helpful in restoring maximum function in cancer patients and thus have important influence on work readiness. There is a lack of consistency across Canada regarding access to basic rehabilitation services. In some cases, those with a cancer diagnosis are denied access to these services based on cancer diagnosis and/or prognosis (Annable, Stienstra, Chochinov, 2010). In other cases cancer patients are simply under-referred to such services that they might benefit from. There exist some oncology oriented basic rehabilitation services offered at a number of Canadian hospitals. Services may also be available at rehabilitation hospitals/centres falling under the mandate of the hospital (i.e. spinal cord, brain injury, arthritis). In many cases, however, basic rehabilitation services are not integrated with vocational rehabilitation.

There are only a few cancer-focused health care or hospital based services that offer vocational rehabilitation assistance. Some oncology counselling or psychosocial departments attempt to address this area but with no specialization. While resources may exist through other programs in the community or with other federal, provincial and local government and community agencies, there lacks consistency in transferring patients from health care agencies to these other potentially helpful resources.

Federal Programs.

Currently, the Employment Insurance (EI) program is mainly designed to recognize short-term unemployability from work. The Canadian Pension Plan (CPP) Disability program is designed to meet the needs of long –term unemployability. Both Employment Insurance (EI) and Canada Pension Plan (CPP) Disability programs are contingent on paying into the program for prescribed time periods and therefore not available to all cancer patients whose employability

has been impacted. Neither program is designed to address medium term unemployability. A large proportion of cancer survivors fall into this category.

Employment Insurance.

Sick leave employment insurance (EI sick leave) only lasts for 15 weeks and is insufficient for those who have extensive treatment (i.e. radiation, chemotherapy) or prolonged recovery where the benefit does not last for the duration. One can apply for EI sick leave if earnings have dropped more than 40%, and therefore allow one to remain in the workforce part-time.

Canada Pension Plan Disability (CPPD).

CPPD is available to those who have "severe and prolonged" disability that prevents them from performing any job and who have met the eligibility requirements for contributions to the program (servicecanada.gc.ca/English/isp). One typically does not qualify for this benefit if one is working at the time of application. The plan may provide some vocational rehabilitation supports to the CPP recipients. In addition, the plan has now developed several new incentives for recipients to undertake gradual return to work or work trial including earning up to a certain amount before the case is reviewed to determine future eligibility. There is usually a waiting period to obtain the CPP Disability benefits adding a delay to the access of early vocational rehabilitation intervention. Once on the benefit, it also allows the beneficiary to volunteer and attend school.

Opportunities Fund (Vocational Program).

This fund is available for those with a permanent disability (not eligible for EI funding) that limits daily activities and/or is employed less than 20 hours a week. Depending where an individual lives, this may include assistance with self-employment, skills for employment and

services such as provision for assistive devices in order to enter the workforce. Many of the programs or services are offered at the provincial or local level.

Labour Market Development Agreement.

Recently a new Labour Market Development Agreement is resulting in a transfer of federal employment programs to the provincial level. It is uncertain as to how this change might impact those with disability and/or illness such as cancer. Currently, it is unknown as to what degree of services and support will be available from the provincial programs to those with disability and/or health concerns.

Provincial Programs.

Most provinces offer various employment support services although these services vary provincially. The services offered are generally directed at people who qualify based on the extent of disability or who are eligible for disability related benefits. As the criteria for disability coverage varies by province, and in many cases can be quite restrictive, some cancer survivors may be excluded from being eligible for vocational support.

Private Short Term Disability.

Short term disability benefits are not commonly provided. The service and benefits for short-term disability can vary depending on the employer or contract purchased. Some plans have the flexibility to provide wage replacement for time off and thus do not discourage leaving the workforce. Rarely do short-term disability benefits go beyond wage replacement and provide early intervention vocational rehabilitation support.

Private Long Term Disability.

Long term disability is available to those who have purchased the benefit (either paid by those self employed, employee or the employer). The qualification, benefits and services vary

depending on the contract. Qualification for long-term disability payments typically begins after satisfying a waiting period where one is unable to work. Some more progressive plans allow an individual to qualify if partially disabled or when work is interrupted for periods. Many long-term disability policies offer vocational rehabilitation services if there is the potential to offset costs. The focus is typically on returning someone to a former job or a modified job. Retraining is less common and usually short in duration. Occasionally, vocational rehabilitation includes coverage for basic rehabilitation services (i.e.: physiotherapy, occupational therapy, kinesiology, and neuropsychology) to optimize function. Some specialized services directly related to vocational rehabilitation like work-hardening programs have been made available but are not routinely offered. Given that the duration and intensity of both short and long term effects of cancer and treatment are hard to predict, historically long term disability companies often have implemented a "wait and let recover" approach to vocational rehabilitation. With greater numbers of cancer survivors that work, insurance companies are beginning to recognize the benefit of early rehabilitation (Parkinson, 2010).

Disability Management.

In some workplace settings disability management programs are emerging in Canada. These in-house programs are providing worksite based disability management programs in attempt to control disability costs and promote employment of workers with injuries and disability. Return to work coordination may be available to assist in ensuring medical/rehabilitation assessments have occurred; identifying barriers to work and identifying services to assist in rehabilitation; developing, implementing, adapting and evaluating a RTW plan at the workplace. This field is emerging as employers are increasingly recognizing the need

for RTW assistance at the work-site. In some cases there is a move toward early interventional rehabilitation services that are vocationally oriented.

The authors point out, however, from clinical experience, that employees can be reticent to access employer (Disability management) and insurance funded (Short and long-term disability) RTW assistance. This may be due to concerns regarding compensation, determination of job readiness, and employment security.

Non-profit Organizations.

Currently there are two non-profit organizations in Canada (Wellspring and Hope and Cope) that provide a RTW service specific to cancer patients although the extent of services offered varies. Some cancer patients may be eligible for RTW programs to support people with any/all work barriers that are available through non-profit organizations. However, there is no consistency in the service offered as it is often influenced by the resources available and the mandate of the particular organization.

Recommendations for Practice, Research, and Policy

Clinical Practice

The literature addressed in this scoping review suggests that multidisciplinary preparation for reintegration into the workplace combined with employer accommodations may have a positive impact on RTW for cancer survivors. Unfortunately, many employers and medical practitioners are not educated about the impact of cancer and its effects on work, and therefore are not familiar with these successful RTW strategies (Macmillan Report, 2008). Moreover, medical and psychosocial continuum of cancer care is not integrated with vocational rehabilitation. Most research on improving employment outcomes among cancer survivors was completed within hospital settings, and within the medical model of illness, in separation from

real life employment environments. Lack of integration between clinical interventions and occupational interventions constitutes a significant barrier in advancing both research and practice in the field.

There are numerous clinical targets that can be gleaned from our review. These include: fatigue; lack of support; poor communication amongst medical personnel, cancer survivors and employers; lack of job accommodations; emotional strain and cognitive difficulties. Our review found a consistently strong message regarding recommendations for practice in vocational rehabilitation and oncology. Researchers and practitioners alike are unequivocally calling for the development and evaluation of effective interventions for cancer survivorship and work. Key issues that were highlighted include the need to interface with physicians and medical personnel to get accurate information about realistic RTW factors; identify high risk individuals; assess beyond RTW into maintenance and retention; assist with symptom management; interface with employers; educate survivors about their rights and resources; intervene early on in the process; and maintain contact with individuals in the work force months after their RTW (Feuerstein, 2009; Macmillan Report, 2008). To facilitate this process, it may be beneficial that every member of the oncology clinical team ask patients about work. There is a need for increased education and communication regarding the impact of cancer on work in order to provide informed and expedient advice.

Issues facing cancer patients in the workplace differ depending on the type of cancer, the severity, and the type of employment (Spelten et al, 2002; Steiner et al., 2008). For individuals whose work involves a high level of physical labour, their RTW may be more compromised than others. Individuals with cancer may be at greater risk for work- related problems that may be treatable including depression, anxiety, fatigue, and cognitive impairment. These individuals,

therefore need to be assessed and treated as early in the process as possible (Feuerstein, 2009). Some potentially remediable risk factors such as pain, functional impairment, and concurrent conditions are of critical importance for assessment and treatment. Alterations in cancer treatment may be necessary to minimize impeding work. Physical rehabilitation may also be an essential part of the process and therefore a multi-modal approach to vocational intervention is recommended (van Weert, Hoekstra-Weebers, Grol, Otter, Arendzen, Postema, Sanderman, & van der Schans, 2005).

Cancer may be a catalyst to retirement or a change from an undesirable job or line of work due to reassessment of goals (Steiner et al, 2004). These factors suggest the need for assessment, appropriate education and intervention to assist survivors with a satisfying and realistic RTW experience. This may include education and awareness regarding legal safeguards and financial support; referral to rehabilitation; evaluation of capacities; training in job search and analysis; trial work experience; and interface with employers (Farley-Short & Vargo, 2006).

Researchers and clinicians emphasize the importance of timely and appropriate advice regarding work capacity (Amir et al, 2008, Bradley et al, 2005; Steiner et al., 2008). One essential role of vocational rehabilitation is to assist with better communication between physicians and patients in terms of continuity of care (Verbeek et al, 2003, Pryce et al, 2007). Stanton (2006) states that medical personnel need to inform patients about support services and be involved with realistic planning for RTW including exercise regimes and resolution of issues such as fatigue, cognitive limitations, and pain. It is in these areas that rehabilitation services that specialize in oncology are still lacking. Vocational specialists who know and understand cancer and treatment issues have the ability to assist patients with strategies needed to assess, reduce, and/or cope with the psychological and physical symptom burden (Steiner et al, 2004).

Gudbergsson (2006) points out the danger of the "Protection hypothesis" whereby a cancer survivor may be desperate to hold on to a job after diagnosis that could have deleterious effects over time. Vocational interventions here would involve education, counselling, interface between physicians and employers, as well as retraining, and/or funding options. Medical and psychosocial interventions need to be linked with occupational interventions that provide a holistic continuum of care.

On-site work support, education and consultation need to be incorporated to ensure a smooth transition to RTW as well as job maintenance (Franche, Cullen, Clarke, Irvin, Sinclair, Frank, 2005). In general, clinicians, employers and survivors must be vigilant in noting changes in sleep, fatigue, cognitive limitations immediately and several years post diagnosis (Verbeek et al, 2003). There is a need for the development of effective rehabilitation procedures and performance /outcome indicators that attend to the multiplicity of challenges faced by cancer survivors in their work-life. Feuerstein (2009) recommends that the last contact with vocational rehabilitation service providers should be less than half a year if a patient is not working, and that there needs to be repeated contact with individuals after sick leave episodes to address fatigue, consider a workload decrease, referral to specialist, workplace visits, and offer interface with supervisors and/or colleagues when problems arise. Chan and his colleagues provide a good outline of accommodations, sample letters and suggestions for clinicians and employers (Chan, de Silva Cardoso, Copeland, Jones, & Fraser 2009). Issues such as right to privacy, productivity and co-worker concerns are also of paramount importance and will certainly need to be addressed in any development of best practice guidelines.

Priorities for Research

Numerous reports from Canada, the U.S., Australia, Finland, Norway and the Netherlands urge the need for increased research in the area of vocation and cancer. Of primary consideration is the paucity of intervention-based research. Both qualitative and quantitative empirical research in psychosocial oncology that focuses on the impact of interventions on return to work, work retention and maintenance from the point of view of cancer survivors, employers and clinicians are long past due. From the email responses to our inquiry, it seems that a few such related studies are currently in process. We recommend that all survivorship intervention studies include a measure that assesses the intervention's impact on work. Longitudinal research that studies the work experience over time for cancer survivors is also necessary. Also, studies that conceptualize RTW enhancing interventions as transdisciplinary and integrating clinical and occupational aspects of care, by moving away from medical settings into the real world of work, are most likely to propel the field forward. From such research, the field will be able to develop an empirical base for theoretical and best practice models that are evidence-informed and effective in assisting people with cancer in their work lives. Further, interventions based on risk factors of return to work in cancer survivors need development and testing, using randomized control trials and other methodologically advanced designs (de Boer, 2010).

Policy Recommendations

- Expand or implement services to address the vocational needs of cancer patients and survivors.
- Ensure that basic rehabilitation services are provided without delay to optimize function for cancer patients

- Encourage basic rehabilitation services to develop more links and have increased job / work site focus
- Develop systems to allow liaison to any available system (community, provincial, federal, private) that can be helpful with vocational rehabilitation
- Provide education, guidance, advocacy and support to optimize work-site accommodations and job retention.

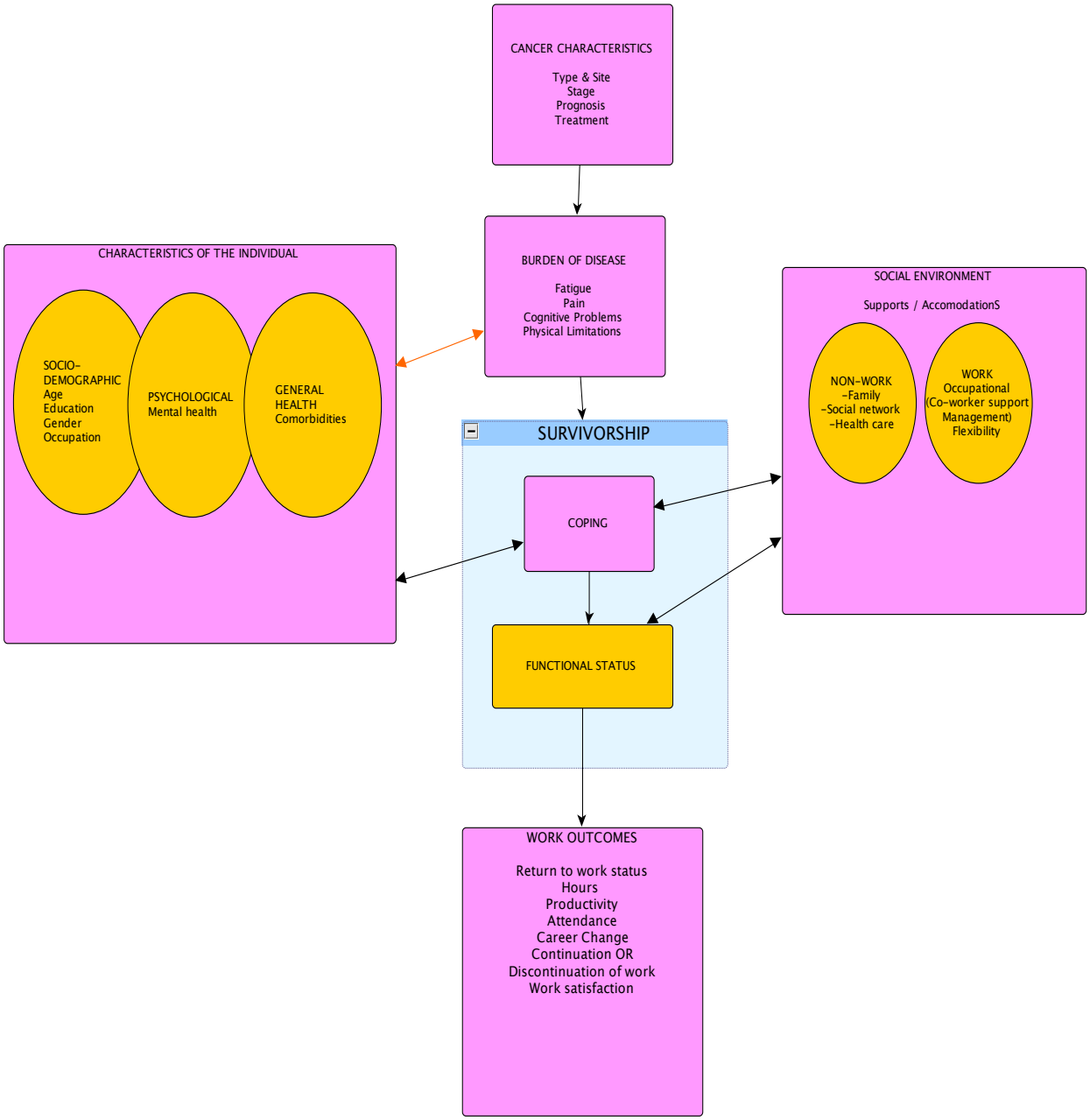
Limitations

Because of the nature of the scoping review model, our findings present an overview rather than an in depth and comprehensive review of the literature. It is intended to spur considerations for research, theory, advocacy, and clinical awareness. Additionally some important areas in the oncology domain have not been addressed due to the limited scope of our paper. In particular, we did not fully address childhood cancers and the impact of them on work and vocational development. This is an important and growing area requiring much attention. Finally, due to the confines of the scope of this review, we acknowledge that this paper does not provide a comprehensive representation of the programs and services available to cancer survivors and their work needs in Canada or internationally.

Conclusion

It is clear that there are broad reaching effects of having cancer on an individual's worklife. The development in the field of vocational rehabilitation and oncology is fragmented and limited, in part due to its infancy. Increases in programming, research and intervention are required to attend to this gap. There exists a need for an integrated biopsychosocial rehabilitation model to begin focused intervention research.

In an effort to represent the multifarious relationships between cancer and work outcomes, the authors have developed a working model that assists in comprehending the multi-layered process. We offer an integrative model that presents the various influences on the work life of an individual with cancer. We hope that this dynamic model focusing on changing reciprocal interactions among individual characteristics, cancer factors, disease burden, social environment , coping efficacy and functional and occupational outcomes will assist in better understanding the myriad influences and components of this complex and important aspect of cancer survivorship conceptualized from a coping and functional perspectives . This model is consistent with the key tenet underlying the new World Health Organization Model of Health (WHO, 2001); the dynamic interaction among individuals' capacities and their environment.



Relationship between Cancer and Work Outcomes Model
(Informed by Steiner et al, 2004; Fonnosli Institute, 2007; Lent, 2005)

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Appendix 1

Message sent out by e-mail to members of the Canadian Association of Psychosocial Oncology:

Return to Work and Interventions Research : The Canadian Association of Psychosocial Oncology/Association Canadienne d'Oncologie Psychosociale (CAPO/ACOP) is conducting a review of reports, research studies and psycho oncology services related to the impact of cancer on work, factors positively or negatively associated with return to work and interventions, policies and programs addressing the vocational needs of cancer patients in Canada. We are interested in learning from the CAPO members if you have done any research in the area related to work and cancer and/or developed programs and provided services to address the vocational needs of cancer patients. Our hope is to use this information to write a position paper, update our members and others on the state of the field and provide direction for the future.

About the Canadian Association of Psychosocial Oncology

CAPO/ACOP, is an organization of professionals trained to help patients and families cope with the emotional, psychological and social stresses that often surface in the course of cancer and its treatment.

CAPO is dedicated to the understanding, treatment and study of the social, psychological, emotional, spiritual and quality-of-life aspects of cancer.

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