**A HEALTH CARE WORKER WITH BREAST CANCER, THE IMPLICATIONS FOR WORK – A CASE STUDY**

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# Introduction

Returning to work following a diagnosis of cancer can often be an important part of the recovery, indeed Waddell and Burton (2006) stress that (good) work is health enhancing. Staying in employment should be a realistic option, and with appropriate interventions workers with cancer can be supported to remain in work (Taskila et al, 2013).

This case study examines the impact that breast cancer and its treatment had on Beryl (pseudonym), a health care worker on a medical unit in relation to a successful return to work (RTW). It highlights the impact of the pathophysiology of cancer, the assessment of Beryl’s fitness for work and planning a successful RTW is considered.

# The Client

Beryl was referred for an occupational health (OH) assessment by her manager following a diagnosis of breast cancer as Beryl was keen to stay in work ‘as long as possible’ but had concerns due to upcoming surgery.

Beryl’s job role involved working 12.5 hour shifts including rotational night shifts. Her role involved a significant amount of manual handling due to the speciality of the ward area.

Beryl had recently undergone an excision of a breast lump with axillary lymph node clearance. Histology confirmed a large carcinoma. Further treatment over the next seven months included chemotherapy and radiotherapy. Her physically demanding job role involving manual handling and microbiological hazard exposure necessitated her refraining from work until treatment completion. She attended for an OH review following 18 weeks of chemotherapy and two hospital admissions. She reported severe side effects associated with chemotherapy including sensory disturbances, affecting her hands, feet and head and neutropenia that required isolation treatment in hospital. Beryl was commencing five radiotherapy treatments per week over a period of three weeks. An OH assessment at this early stage was useful in planning an effective RTW. An OH review appointment followed completion of treatment: she reported that although her oncologist was happy with her progress she was still suffering from several side effects related to her treatments. She had been signed off work for a further two months. Beryl was keen to RTW after this time but had concerns about manual handling of heavier patients.

# The Pathological Process of Breast Cancer

The DNA within cell nuclei controls the tightly regulated cycle controlling growth, division, maturity and death of breast cells. Neoplasms occur should this mechanism be disrupted. Cells with damaged DNA are normally destroyed by the immune system. Faults within this system result in tumour development (Mandal, 2013). Several studies suggest an increased risk of breast cancer amongst women consistently working night shifts (Gray, 2010), further research is required to understand any links between occupation and breast cancer (Breast Cancer Fund, 2016).

In the UK, breast cancer is the most common cancer in women, with approximately 46,000 women diagnosed in the UK annually (Grimsey, 2011). There is a good prognosis if caught early. The classification of breast cancer relates to the tissue involved. Beryl developed the most common form of breast cancer; an invasive ductal carcinoma arising within the breast milk ducts which may break through the duct wall, spreading to other breast tissue. Over time it may spread to other body tissues including the lymph nodes (Breastcancer.org, 2015). Approximately 80% of breast cancers are invasive and usually present as a palpable lump. Surgery is usually the first treatment (Froyd and Harmer, 2011); patients are normally given the option of breast conserving surgery, such as a wide local excision of lump, or a mastectomy. Long-term survival is the same for breast conserving surgery followed by radiotherapy as for mastectomy (Breast Cancer Care, 2016); Beryl opted for a wide local excision surgery. Following such surgery RTW guidance for people undertaking manual work is six weeks (Palmer et al, 2013). Further treatment given six weeks postoperatively included eight full cycles of adjuvant chemotherapy delivered over eighteen weeks delaying Beryl’s RTW. Furthermore, Beryl experienced neutropenia resulting in two hospital admissions. Neutropenia, a common, potentially serious, side effect of chemotherapy affects bone marrow leading to a reduced neutrophil count which is normally lowest seven to ten days post chemotherapy and increases infection risk (Lymphoma Association, 2015). She was advised to avoid places/situations where risk of infection is heightened including busy shops, public transport and people with infections resulting in her being unable to undertake clinical work during her treatment. Furthermore Beryl was suffering from neuropathy affecting her hands, feet and head following chemotherapy. Sensory disturbances in her fingers affected her ability to perform tasks such as buttoning clothes and picking up small objects. Symptoms are expected to reduce once the treatment ceases (Macmillan Cancer Support, 2013).

Beryl experienced severe fatigue, a common side effect of radiotherapy. Fatigue usually peaks within two weeks of treatment completion but may continue for several months (Cancer Research UK, 2016). She also reported left arm pain. As surgery involved axillary lymph node excision she was at increased risk of developing lymphoedema due to damaged arm lymphatics (The Circulation Foundation, 2016). Although a diagnosis of lymphoedema had not been confirmed, she was advised to rest her arm and avoid significant manual handling reducing any future risk of lymphoedema. This had implications for her RTW as her job role included manual handling tasks.

# Return to work assessment

For breast cancer survivors returning to work can be important for recovery. An early, safe and sustainable RTW is therapeutic (Aw et al, 2007).

Goss et al (2014) refers to success in returning health care workers diagnosed with breast cancer back to work, 89% of them returning to work within 12 months. They found that almost all workers required workplace adjustments including reduced hours, workloads and limitations on physical activities including manual handling.

Beryl received OH support throughout her sickness absence. Case management of employees with chronic illnesses or disability is a proactive role for occupational health nurses (OHNs) assisting the employee to manage their condition aiming for a successful RTW. The OHN can facilitate collaborative, productive links between the employee, their care providers and their employer (Aziz, 2009).

Evaluating a person’s ability to carry out a job must be fair and rigorous (Murugiah et al, 2002). Many models are available to assess fitness to work and clinical assessments can combine several approaches.

The OH assessment used utilised the biopsychosocial flags concept introduced by Kendall et al in 1997 (cited in Watson, 2010). This model was adapted for use with Beryl as it holistically assesses factors affecting an individual’s RTW; including biological, psychological and social factors.

The red flags consider the biological element of the model. In Beryl’s assessment, barriers for a RTW (red flags) were her recent history of breast cancer and treatment side effects. Although these caused a delay in her RTW, she was recovering well and her outlook was good. A lasting side effect was fatigue although this was gradually improving; Beryl was preparing for a RTW by attempting to increase her energy levels through gentle exercises. Studies have found that cancer patients who carry out gentle exercise are less tired, less depressed and sleep better (National Comprehensive Cancer Network, 2016). Sensory disturbances and continued pain were further biological barriers but were subsiding facilitating an increase in her activities. Arm pain led to her avoiding significant manual handling. A functional assessment confirmed a good range of left arm and shoulder joint movement. Recent blood tests showed an increased white cell count, although no longer at risk of developing neutropenia Beryl was avoiding contact of people with known infections.

The yellow flag represents psychological elements of the model. Cancer and its treatments can negatively affect the sufferer’s psychological state. Many patients report that their RTW can be isolating, especially after a protracted absence as many lose confidence and colleague contact (Cuneen, 2013).

Beryl had many concerns regarding her RTW including:

* heavy manual handling within her job role;
* whether continued pain would affect her RTW;
* how chemotherapy associated hair loss would impact on how colleagues and patients would perceive her as she was unable to tolerate a wig.

The blue flag represents social elements of the model. Beryl was concerned whether she could manage her job demands within a very busy work environment as colleague support can reduce when co-workers become very busy and stressed (Cuneen 2013).

The black flag is the final flag of the model referring to more objective occupational factors affecting all workers equally. These include financial issues, policies concerning the conditions of employment including sickness policy and working conditions (Fawkes and Carnes, 2012).

Beryl wished to RTW as her pay was now reduced by 50%. This can often create dilemmas as some employees may resume work too early precipitating further absences (Baker-McClearn et al, 2010).

Beryl was due to attend a sickness absence meeting between herself, management and Human Resources (HR). She raised concerns about how her sickness absence level would be interpreted under the sickness absence policy. Beryl was reassured that the organisation adjusts non-attendance triggers in relation to long-term conditions.

# Return to work plan and implementation

A RTW plan assists employees RTW after an illness/disability and supports employees with chronic conditions stay in work. It should include a multi-disciplinary approach involving employers, employees, managers and OH working collaboratively, identifying solutions supporting those workers to stay in or RTW (Institution of Occupational Safety and Health, 2015). Beryl’s plan was underpinned by medical advice on her condition with the involvement of OHNs, Physicians and Physiotherapists, line management and HR. It incorporated an assessment of risks, a planned phased return including changes to hours, workload and start and finish times. Once agreed, the plan was kept under review.

Under the Equality Act 2010, employees diagnosed with cancer automatically meet the disability definition. Section 20 of the Equality Act 2010 stating “*employers are required to make reasonable adjustments for a disabled person at a substantial disadvantage*”.

Due to the complexity and lasting treatment side effects an OH physician and occupational physiotherapy reviewed Beryl. She was considered fit to RTW on a phased return incorporating appropriate adjustments, a well-designed phased RTW should assist a re‑adjustment to the work place (Fit for work, 2015). The phased RTW scheme within this organisation facilitates employees gradually increasing their hours over a four-week period, whilst receiving a full salary.

The recommended RTW plan for Beryl incorporated working 50% of her normal hours over a two week period gradually increasing her working hours for the following two weeks aimed at increasing her stamina and confidence. Beryl and her manager both agreed this plan.

Beryl‘s job role normally involved working 12.5 hour shifts including rotational night shifts, an initial allocation of day shifts was recommended. Beryl had raised concerns regarding heavier manual handling associated with patient care tasks on a medical ward.OH attempted to facilitate an early RTW by recommending temporary redeployment to a less demanding work area where heavy manual handling could be avoided. Management were unable to accommodate this modification as it was not operationally feasible, however, other adjustments were possible. She was considered fit to return to her work role, but would benefit from additional breaks to overcome her ongoing fatigue and avoiding manual handling of heavier patients. Both Beryl and her manager were happy with this recommendation but Beryl disclosed ongoing anxieties about returning to work. To address this, regular one-to-one support meetings with her manager were arranged allowing problems to be addressed. Labriola et al (2006) refers to an association of increased long-term sick leave with poor management quality and lower managerial support. Beryl expressed anxieties relating to hair loss and this affected her confidence. Consequently, her manager suggested she wear a head-scarf at work until her hair grew back.

Beryl was expected to make a full recovery; although would still require further follow-ups with her treating oncologist. A final recommendation made to management was that Beryl’s long-term condition should be taken into consideration when monitoring future sickness absences, and attendance at relevant follow up medical appointments should be supported.

Following Beryl’s RTW she reported reduced arm pain following OH physiotherapy, that the recommended adjustments had been initiated and she was receiving good support from all parties. Her fatigue was reducing and she felt more confident in the workplace allowing her to increase her workload.

No further OH reviews were planned as she felt able to sustain her attendance in the workplace.

# Conclusion

Returning to work following a diagnosis of cancer can often be very daunting for an individual, but can also be part of recovery. Using the biopsychosocial flag system as a basis, a holistic assessment was carried out to evaluate Beryl’s fitness to RTW. Although there are many different OH assessment models available, this system addressed many of the barriers that Beryl faced upon her RTW and allowed OH to provide advice and guidance to both Beryl and her manager relating to these barriers.

As cancer is recognised as a disability under the Equality Act 2010, the organisation was required to make adjustments. Collaborative working with the employee, employer, manager and OH team resulted in a positive outcome: a successful RTW.

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**CPPD activity: breast cancer**

**Quiz.**

1. Which surgical intervention did Beryl undergo?

a. Total mastectomy

b. Excision of breast lump with axillary lymph node clearance

c. Lumpectomy

d. Quadrantectomy

2) The case study refers to several studies suggesting an association between breast cancer and which of the following factors:

a. Manual handling

b. Exposure to biological hazards

c. Consistently working night shifts

d. Alcohol consumption

3) According to Grimsey, approximately how many women in the UK are diagnosed with breast cancer annually?

a. 16,000

b. 26,000

c. 36,000

d. 46,000

4) Which of the following is the most common form of breast cancer?

a. Invasive ductal carcinoma

b. Lobular carcinoma in situ

c. Angio-sarcoma of the breast

d. Tubular breast cancer

5) Approximately what percentage of breast cancers are invasive?

a. 80%

b. 90%

c.75%

d. 50%

6) A reduced neutrophil count (neutropenia) is normally at its lowest at what point post chemotherapy

a. 14-21 days

b. 12-14 days

c 7-10 days

d 2-3 weeks

7) Which of the following author(s) refer to the successful return to work of health care workers following treatment for breast cancer:

a. Waddell and Burton (2006)

b. Aw et al (2007)

c. Black and Frost (2011)

d. Goss et al (2014)

8) The biopsychosocial flags concept was introduced in 1997 by which authors:

a. Kendall et al

b. Watson

c. Murugiah et al

d. Clarke

9) Which flag considers the biological element of the biopsychosocial model

1. Yellow
2. Red
3. Blue
4. Orange

10) Which flag represents the psychological elements of the biopsychosocial model

a. Red

b. Green

c. Blue

d. Yellow

**Answers**

1) b. 2) c. 3) d. 4) a. 5) a. 6) c. 7) d. 8) a. 9) b. 10) d.

**Resources for your research needs**

* **Staging of breast cancer:**

https://www.youtube.com/watch?v=l2lRZuEK4Y0

[Accessed 6 June 2016]

* **NICE Guidelines for early and locally advanced breast cancer**

http://pathways.nice.org.uk/pathways/early-and-locally-advanced-breast-cancer

[Accessed 6 June 2016]

* **A Royal College of Surgeons publication providing information regarding what to expect following recovery including guidance on recovery times**

https://www.rcseng.ac.uk/patients/recovering-from-surgery/lumpectomy/docs/breast\_lumpectomy.pdf

[Accessed 6 June 2016]

* **What to expect following post-mastectomy breast reconstruction surgery**

http://www.nhs.uk/ipgmedia/National/Breast%20Cancer%20Care/assets/Breastreconstruction(BCC).pdf

[Accessed 6 June 2016]

* **Chemotherapy and breast cancer**

http://www.breastcancer.org/treatment/chemotherapy

[Accessed 6 June 2016]

* **Radiotherapy and breast cancer**

https://www.breastcancercare.org.uk/information-support/facing-breast-cancer/going-through-treatment-breast-cancer/radiotherapy-primary-breast-cancer

[Accessed 6 June 2016]

* Returning to work after cancer

<http://www.theworkfoundation.com/DownloadPublication/Report/332_FINAL%20Returning%20to%20work%20150313.pdf>

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