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Work stress and cancer researchers: An exploration of the challenges, experiences and training needs of UK cancer researchers

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Abstract

Work stress is a significant issue for many UK healthcare professionals, in particular those working in the field of oncology. However, there have been very few attempts to explore the challenges, experiences or training needs of researchers working in cancer research. In doing so, we will be better positioned to support and develop these researchers.

18 UK oncology researchers from a variety of backgrounds took part in a semi-structured interview. Interviews were transcribed and analysed using thematic analysis.

The analysis identified two overarching themes: logistical research issues (workload, accessing/ recruiting participants, finances) and sensitive research issues (emotional demands, professional boundaries, sensitivity around recruitment). One cross-cutting theme, supportive strategies (support and training, coping mechanisms), was seen to influence both logistical and sensitive research issues. While further research is needed to fully understand the causes and impact of work stress on cancer researchers, three specific issues were highlighted: emotional demands are relevant to quantitative and mixed methods researchers as well as those engaged in qualitative research; the researchers' background (experience; clinical/non-clinical) was influential and an exploration of effective coping strategies is required; and there is a clear need for adequate support systems and training to be available, particularly for early career researchers.

Keywords: cancer, researchers, work stress, emotional labour, support, coping

Introduction

Work stress is a significant issue for many healthcare professionals. Large-scale research has found significantly higher rates of stress and stress related absence per worker among those working in health and social care than all other industries (Health and Safety Executive, 2012). The Health & Safety Executive (HSE) defines work stress as "the adverse reaction people have to excessive pressures or other types of demand placed on them at work" (Health and Safety Executive, 2011). Many theories of work stress have been proposed but most agree it is caused by an interaction between the person and their environment (Mackay et al, 2004). A recent study of work stress conducted within a multi-disciplinary group of oncology staff (primarily nurses, radiographers and support staff) in the UK found that over a third of staff reported significant distress (Jones et al., 2013). A variety of organisational factors were found to be related to distress and satisfaction in this study, in particular that a lack of perceived control over work contributed towards work stress in oncology settings. In contrast, support from managers and co-workers was related to increased satisfaction.

'Burnout' has been defined as involving emotional exhaustion, depersonalisation and low personal accomplishment (Graham and Ramirez, 2002) and cancer physicians, nurses and support staff have been shown to experience high levels of burnout (Książek et al. 2011; Kovács, Kovács and Hegedűs, 2010; Trufelli et al. 2008; Girgis, Hansen and Goldstein, 2009; Grunfeld et al, 2005; Ramirez et al, 1996). In a nationwide study with members of the Clinical Oncological Society of Australia burnout was related to dissatisfaction with leave arrangements to prevent/recover from work stress, increased patient contact and perceived need for communication skills training (Girgis, Hansen and Goldstein, 2009). Therefore, work stress may be influenced by general factors such as workload, time pressures and inadequate staffing, but also emotional aspects such as patient dependency, and exposure to physical/emotional suffering and death (Turner, Kelly and Girgis, 2011; Graham and Ramirez, 2002; Grunfeld et al, 2005; Ramirez et al, 1996; Barnard et al, 2006). Studies have indicated that these 'emotional demands' significantly influence the experience of stress and burnout in oncology staff (Le Blanc et al, 2001). These are not unique to oncology, but they may occur more frequently than in many other specialities (Graham and Ramirez, 2002). Kovács, Kovács and Hegedűs (2010) found that compared to non-oncology workers, those dealing with cancer patients had significantly higher levels of 'emotional dissonance' in terms of needing to conceal and suppress negative emotions (e.g. sadness, anger), whilst showing understanding and expressing sympathy to their patients. This illustrates the concept of *emotional labour* which is defined as the act of displaying

appropriate emotion (Hochschild, 1983) and can involve faking, hiding or managing emotions in order to meet environment expectations (Zapf, 2002). Engaging in emotional labour is considered to be an important skill for many health professionals, especially in nursing (Mann, 2005; Howard and Timmons, 2012); it can be favourable for patients if a nurse or researcher disguises a buoyant or bad mood or hides their distress when another patient has passed away, and it also allows professionals themselves to protect their own emotional stability (Mann, 2004; Henderson, 2001). However, engaging in emotional labour and experiencing emotional dissonance can also be a source of both personal and work-related stress (Mann, 2005), resulting in reduced work satisfaction (Pugliesi, 1999) and emotional exhaustion (Zapf, 2002; Zammuner and Galli, 2005). Mann (2005) presents a health care model of emotional labour and discusses how it is important for managers to help their workforce to moderate the negative consequences (e.g. stress, exhaustion) of engaging in emotional labour, whilst retaining the positive outcomes for both patients and the health professional themselves. They emphasise that this requires the availability of educational and training initiatives that recognise and specifically focus on the importance of emotions and how to cope with them within health care work.

In the specific context of conducting 'people research' various challenges that could contribute to work stress have been previously identified, such as managing emotions of participants and research staff, overprotective gatekeepers, recruitment difficulties, and participant-researcher interactions (Kidd and Finlayson, 2006; Kendall et al, 2007; Gibson, 1996; Chiang et al, 2001; Lalor et al, 2006). A qualitative study by Dickson-Swift et al. (2007; 2009) with 30 Australian public health researchers (some in cancer) illustrated the potential for researchers to be affected both physically and psychologically. However, several authors have argued that the focus in sensitive research is often on protecting participants, without considering researchers own emotions and experiences (Dickson-Swift et al, 2007; Gilbert, 2001; Rager, 2005). Therefore, similar to the work discussed above researchers are equally vulnerable in terms of the potentially negative consequences of engaging with cancer patients and managing emotions in the research environment.

Reflective accounts have been written by cancer researchers (Rager, 2005; Cannon, 1989; Johnson, 2009), but little in-depth research has specifically explored the experiences of oncology researchers in the UK. Two studies that involved cancer researchers identified various emotional challenges (Kendall et al, 2007; Johnson and Macleod Clarke, 2003). While both studies were either exclusively or mainly focused on UK researchers, they also included some non-cancer

researchers such as those exploring HIV/AIDS and death/dying in general, and Kendall et al's (2007) objective was focused on researching end-of-life issues, which would only apply to some oncology researchers. However, the studies highlight the importance of training for researchers working in sensitive research areas such as cancer. Some of the senior participants in Kendall et al (2007) felt it was important to recruit experienced researchers for sensitive end-of-life research and were concerned that the research could place undue stress on junior researchers who should be offered appropriate support. Furthermore, Johnson and Macleod Clarke (2003) suggest that the age and life experience of the researcher may influence how they handle difficult issues arising during data collection.

Using a qualitative approach, the current study aims to explore the challenges and work experiences of UK oncology researchers, including identifying the sources of work stress and highlighting the implications for training and support.

Methods

Participants

Eighteen UK oncology researchers were recruited, including PhD students and researchers with (e.g. research nurses) or without clinical experience (e.g. research fellows). Participants were approached through universities, email lists, conferences and professional bodies. Participants were active researchers in oncology whose experience in this field ranged from between 1-8½ years. Recruitment was deliberately broad to ensure a wide diversity of experiences. Participants used a variety of research methods: 5 quantitative, 3 qualitative, 10 mixed methods. Table 1 presents the participant's characteristics. For reasons of confidentiality, specific research topics are not disclosed but they included the psychosocial impact of cancer, clinical trials of treatment (some with a quality of life component), survivorship lifestyle interventions and palliative care projects.

Table 1 about here

Procedure

Ethical approval was obtained from the University's ethics committee. All participants were given the study information sheet and provided written informed consent in advance of the interview. Participants took part in a semi-structured interview with one member of the research team. Sixteen were conducted over the telephone and lasted around 45 minutes. The remaining two were conducted by email in various stages. An interview schedule was used to explore issues relating to their work, including challenges and stressors, support and coping mechanisms, positive aspects and their advice to new researchers. Recruitment continued until data saturation was reached (Mason, 1996).

Analysis

All interviews were transcribed verbatim, maintaining anonymity. Thematic analysis was used, as outlined by Silverman (2000). Each transcript was first read several times to ensure familiarity with the content. An emergent coding structure was then established and transcripts were reviewed using the preliminary coding structure. To ensure reliability of the analysis, three members of the research team separately reviewed three transcripts using the preliminary coding structure. Agreement and disagreements were discussed and following this discussion, a final coding structure was agreed including two over-arching themes and one cross-cutting theme. The transcripts were reviewed a final time to ensure all themes had been captured.

Results

The analysis identified two overarching themes: Logistical research issues and Sensitive research issues, and one cross-cutting theme focusing on Supportive strategies (Figure 1).

Figure 1 about here

Logistical research issues

Workload

Most researchers emphasised the challenge of their workload and the time required to undertake research. Work could build up in busy periods, such as during recruitment and data analysis:

> *Recruitment took a lot longer than we expected, which has meant a lot of the analyses and write up has had to happen outside my funded PhD…it was a big project, but it seems to be the way with every bit of research that I get involved with, they all end up taking twice as long (PhD student, 5 years, Mixed – mainly quantitative)*

Furthermore, some researchers were involved with other work or projects alongside their oncology research:

> *I have quite a heavy workload, especially working on two projects, because both could be full time jobs...the worst aspect of it is that you feel guilty a lot. Today I'm in the unit and I should go out and round the ward and see all the patients but I've got two publications to write, various other jobs [laughs]…And it's that balance that I find very difficult (Research Fellow, 7 years, Qualitative)*

Unsurprisingly, the heavy workload was seen to affect work/life balance, and some researchers found it difficult to switch off when at home or take a break:

> *Oh god, I can't take a holiday. I really could do with a holiday right now but I can't take a holiday because I've got to plan my life around when the ladies are coming in to get their chemotherapy…I've got to recruit people every week, there's not going to be a week where I have a week off. (PhD student, 1½ years, Mixed methods)*

Accessing and recruiting participants

The logistics of accessing and recruiting participants was a specific challenge. Although the need for the rigorous ethical approval and governance procedures was recognised, many researchers found this process very time consuming and complicated, especially if trying to recruit via the NHS. This was perhaps felt more keenly by PhD students or early career researchers who were facing these challenges for the first time:

> *The time investment to get all these different clinical teams recruiting in the right way, at the right time was phenomenal and something I really didn't expect…all these hoops and all this red tape, and I don't think there's any way that you can prepare somebody for the barriers that you're going to face trying to do work with cancer patients (PhD student, 5 years, Mixed – mainly quantitative)*

To access eligible participants, negotiations were often held with various 'gatekeepers', relied on busy healthcare staff to initially approach eligible patients and some researchers commented that they felt their research was not valued. One researcher described the suspicion and resistance she encountered from clinic staff in a project about complimentary therapies:

> *I've been thrown out of the breast cancer clinic…because they didn't want some sort of witch, or whatever, in the clinic. The major breast cancer guy said he didn't want hocus pocus rubbish on any of his patients (PhD student, 2 years, Qualitative)*

Despite these challenges, researchers felt that once they gained access to potential participants and explained the project to them using suitable terminology, most were happy to take part and found it to be a positive opportunity.

Financial constraints

Some researchers discussed the financial constraints involved in travelling to recruit and meet participants, and for some this required them to balance these expenses with their continuing professional development needs (e.g. training courses or conferences). It was also evident that limited budgets for resources such as translators resulted in some projects not fulfilling their full potential.

Sensitive research issues

Emotional demands

Most researchers highlighted the emotional pressure of conducting oncology research as one of the greatest challenges. Novice researchers with little experience in the oncology field could find the initial approach to eligible participants daunting:

> *At first I found approaching patients not difficult…I'd never really done it before, and I was frightened of, will I say the wrong thing to them, will I offend in some way? (Research Assistant, 2 years, Mixed – mainly qualitative)*

Although this issue was not identified by experienced researchers or those with clinical experiences in oncology, everyone agreed that as an oncology researcher you can become intensely involved in the lives of participants, which can have emotional implications:

> *It struck me that that's what …we do day in and day out…visiting patients and conducting interviews at home. So you smell what their house is like, you see pictures of kids or grandkids, or as a patient I interviewed on Friday with advanced breast cancer had her 10 year old daughter just wandering around. (Research Fellow, 5 years, Mixed – mainly quantitative)*

Furthermore, emotional distress could be experienced if researchers saw participants deteriorate over time:

> *One woman who I recently interviewed has quite a changed, disfigured face and when I met her she was a very stunning 42-year-old, so that's quite painful to watch actually because I really like her as well. I think my experience as a nurse allows me to stay there and not be horrified by how she looks, what she's talking about, because she's very frank and honest about dying (Research Officer, 4 years, Mixed methods)*

Importantly, this quote highlights the researcher engaging in emotional labour (despite feeling distress at the participants altered appearance she was able to 'stay there' and not be horrified) and in particular that previous clinical experiences may have prepared this researcher to effectively and emotionally cope during the research.

In contrast, some researchers described seeing participants recover and undertake tasks that they previously had been unable to perform, which was an uplifting and rewarding aspect of the work:

> *One of the most touching things was I had a 60 year old lady with a family and she came in one week, absolutely bouncy. She said I made a cake this weekend…it's the first time I've made a cake since I had cancer. And her husband, who brought her in, said and it was absolutely delicious and it's like having her back. And now that is massive, isn't it? To me, to see somebody change (PhD student, 2 years, Qualitative)*

The emotional demands of the research were particularly challenging if researchers connected with a participant:

> *She was a similar age to me, had a similar background and interviewing her and hearing all her problems was quite tough, especially as she felt like there was nobody she could turn to and it was hard not to step into a 'friend' role instead of staying professional and I felt quite emotional afterwards (Research Assistant, 3 years, Mixed methods)*

Note that this participant discussed feeling emotional 'afterwards' – perhaps indicating that she engaged in emotional labour 'during' the interview in order not to show her inner feelings.

Some researchers also described having to work alongside patients' families, which could be challenging if their family did not agree with their loved one's involvement in the research:

> *It was a difficult conversation to have, but she made it clear to me during the time and afterwards that she'd also found it useful. But her family arrived home halfway through when she's sat there in tears, I was virtually in tears…And it was the family's distress that was the most difficult thing to deal with because the lady wanted to carry on, but they were trying to stop it and get me out of there (PhD student, 4½ years, Mixed – mainly qualitative)*

The intense emotionality of the research process is evident for both the participant and researcher, and many researchers felt that new oncology researchers should be aware of the emotional demands of this work and prepare and develop effective coping strategies early in their career.

Maintaining professional boundaries

Researchers carefully tried to maintain professional boundaries wherever possible, but this could be difficult when researchers were asked questions that were outside their remit:

> *I've come to understand what my goal is in the research and where my boundaries are, and that if people have other issues that I'm not qualified to deal with then we refer them …it's not something I can personally take on…initially doing that is difficult because you sort of dwell on it and think, ooh I want to be helping (Senior Research Fellow, 7 years, Mixed methods)*

This quote highlights how the researchers view on this conflict shifted over time as they became more confident and experienced in research. Furthermore, to balance the need for professionalism (and ensure rigour in the data) with more general moral obligations, some researchers discussed giving basic advice after the interview:

> *if I think someone actually needs advice, or there's something that would dramatically improve their quality of life, then when the interview's finished I'll say, you should really go to your GP about that [e.g. severe pain]…but I won't take responsibility for that, I leave that with them (Research Officer, 4 years, Mixed methods)*

In particular, some researchers with clinical experience identified a conflict between their current and previous roles:

> *As a nurse I would go to people's homes and they would tell me their stories, without the aid of a tape recorder, and I would work to improve their symptoms or get them help…So it was quite a challenge for me then to go into people's homes and that was not my role. I was there to collect data, and the richer the data the better (Research Officer, 4 years, Mixed methods)*

Sensitivity around recruitment

In addition to the general recruitment challenges, researchers also reflected on the sensitivity that was required in oncology research. This was especially identified by quantitative researchers that aimed to meet a specific sample size but who recognised that underneath the numbers and data in oncology research there are real people undergoing difficult experiences. Therefore, the conflict between obtaining a meaningful sample size, but not wishing people ill or pestering them could be difficult:

> *You can be in meetings where you're kind of far removed from the patients, and people can be talking about…how long are we going to have to wait until we get the sample size, and you think, wait a minute we're talking about 200 people dying here…to get that kind of balance is very hard (Research Statistician, 2 years, Quantitative)*

Researchers often agreed that they had to take a pragmatic approach to balance the research needs whilst also being empathic and sensitive to participant's needs:

> *I deal with this by expressing an understanding of their current circumstances, by demonstrating that the questionnaires can be done in their own time and at their own speed. This eases any guilt I may have (PhD student, 2½ years, Mixed methods)*

Supportive strategies

Support & training

Most researchers identified that adequate support networks were very important and acted as a buffer to both the logistical and sensitive research issues. A poor support network appeared to contribute to the experience of stress, especially amongst PhD students. The importance of 'picking a good supervisor' who had experience in working with cancer patients was emphasised:

> *I don't think my supervisor had much experience of actually conducting a study at a clinic with cancer patients. I think if she had that knowledge, it might give me a bit more confidence…she might understand things that I'm facing more (PhD student, 1½ years, Mixed methods)*

Furthermore another PhD student described feeling unsupported when the postal questionnaire data prompted emotional distress:

> *I spoke to my supervisors each time I got a comment along those lines [upset/angry]…he really didn't understand why that should cause me upset. He just saw this as research… whatever they've written we deal with it in a qualitative manner…But in terms of coping with the effect on me, as a researcher and leading this project…I could have really done with some emotional support (PhD student, 5 years, Mixed – mainly quantitative)*

Some students and other researchers reported receiving good support from their supervisors or managers relating to the logistics of the research and to offload emotional stress, and believed that this helped them cope with the sensitive research:

I have an excellent supervisor who provides a great deal of support. We will meet to discuss the practicalities of my work, but also to talk about feelings and emotions - it is surprising how much this can help - because I do so much talking with my supervisor, I tend not to get to a stage where I am overwhelmed by the emotional impact of this work (PhD student, 2½ years, Mixed methods)

Several researchers felt colleagues/peers were more beneficial than their supervisor/manager because they had more knowledge regarding the day-to-day tasks and experiences. However, a few researchers felt that on occasions peers could not support them because of the intense emotionality and sensitivity of their particular research, as a researcher exploring metastatic breast cancer patients explains:

We have our researchers but they're not necessarily doing the kind of research I'm doing…sometimes the stuff that I'm coming out with it is a bit too hard for most people to hear (Research Officer, 4 years, Mixed methods)

Most researchers agreed that organisations, particularly within universities, offered numerous courses on research design and the logistics of conducting research (e.g. analysis, statistics). However, the need for specific training courses to inform new researchers of the process of NHS ethics and other best practice was highlighted. Furthermore, most researchers reported no training on the emotional side of research and patient interactions, which was considered to be a crucial gap for researchers undertaking both quantitative and qualitative research with cancer patients:

The emotional side needs more training, certainly when first starting, and maybe it is something that all Trusts should consider. There doesn't seem to be anything in any department as far as I am aware. There seems to be a lot of focus on potential physical dangers but little on emotional (Research facilitator, 7 years, Quantitative)

Other networks involving experienced and novice researchers were also suggested as a way to share knowledge and tips on the logistical processes and the emotional impact.

Coping mechanisms

Many of the more experienced (clinical) researchers explained how over time they had developed ways of coping to protect themselves from the emotional nature of the research, including developing personal resilience, removing themselves from the stressful environment, engaging in recreational activities (e.g. exercise, chocolate), and offloading any emotional turmoil:

> *We work well together as a team, so always talking to colleagues about what's happening. I don't tend to talk about my work at home. It mostly stays at work but I do have things that I do outside, like yoga (Senior research nurse, 8½ years, Quantitative)*

However, one researcher described the adverse effects associated with using less positive coping strategies:

> *I am displaying behaviour associated with someone under duress…I have put on weight and I am drinking more alcohol than ever, although I don't consider this to be at harmful levels, but I am certainly more argumentative than before this work (Research facilitator, 7 years, Quantitative)*

Discussion

This study provides an insight into the experiences of UK researchers working in the area of oncology: it illustrates that this can be a rewarding yet demanding job which presents various challenges that could contribute to the experience of work stress.

In this study, these challenges were found to fall into two discrete themes: general logistical issues (workload, recruitment, finances) and those specific to researching a sensitive area such as oncology (emotional demands, professional boundaries, sensitivity in recruitment). A cross-cutting theme of support strategies was also identified. Oncology researchers are exposed to highly personal, sensitive information during their research and interactions with cancer patients, through this they may engage in emotional labour, but they do not often receive any guidance or advice about how to cope with the emotional impact of undertaking such work. While the logistical research issues could apply to many researchers and have been reported elsewhere (Kendall et al, 2007; Gibson, 1996; Chiang et al, 2001) and the sensitive research issues echo previous research (Dickson-Swift et al, 2007; Dickson-Swift et al, 2009; Kendall et al, 2007; Johnson and Macleod Clarke, 2003), to date the emotional labour literature has not been explored

from the perspective of researchers working in sensitive areas such as oncology. The support strategies used and identified by the researchers is a cross-cutting theme that seemed to influence their experiences of managing both the logistical and sensitive research issues and also highlight significant gaps in the training and support provision, especially for early career researchers.

Three specific issues can be noted for further consideration. Firstly, the sensitive research issues are not only relevant to those actively engaged in qualitative oncology research, which the previous studies exploring researchers' experiences have generally focused on (e.g. Dickson-Swift et al; Johnson, 2009). Although the impact on support staff and supervisors who transcribe or read qualitative data has been acknowledged (Rager, 2005; Lalor et al, 2006), very little has been written about the impact on researchers conducting *quantitative* sensitive research (Titchener, 2010). Titchener (2010) emphasises this in her thesis which involved interviewing researchers who were involved in collecting quantitative survey data relating to violence and child abuse. Clearly, the findings presented here also illustrate that quantitative (e.g. clinical trials, questionnaires) and mixed methods researchers working in oncology research can also be emotionally affected and need effective support strategies. Many of these researchers are directly involved with patients on a regular basis: they recruit participants in clinics and follow them for extended periods throughout the diagnosis and treatment cycle. During this time they are witness to changes in their participants' physical and emotional states, may find themselves in situations where their professional boundaries are challenged and be emotionally affected by their contact with patients.

Second, the influence of previous experiences on the researchers' ability to cope with the emotional demands of oncology research requires further exploration. In the wider literature relating to burnout and emotion work, age and experience have been suggested alongside other risk factors (Maslach et al, 2001; Johnson and Macleod Clarke, 2003). In the current study more senior researchers discussed how they had changed the way they managed the emotional aspects of their work over time: they had changed how they viewed their role, found ways to positively interact with participants and manage negative emotions. For example, rather than dwelling on participants problems, they ensured strategies were in place to refer them to appropriate places for help and they found personal ways of reduce any stress (e.g. offloading, yoga). Some more experienced researchers also noted a number of negative coping strategies such as drinking more alcohol. A number of the participants in the current study were in the early stage of their oncology research career, either currently undertaking or recently completed a PhD. This period

of research training has been highlighted as an area that requires specific attention in terms of the potential for emotional stress (Nutov and Hazzan, 2011), and this may especially be the case in a sensitive research area such as cancer. In contrast to more senior researchers, some PhD or junior researchers reflected on how the initial approach to participants was daunting and that they would have benefited from more overall support from supervisors or peers who truly understood and appreciated the logistic and emotional challenges they were faced with. Furthermore, PhD students may have more of a challenge as they are often 'starting from scratch' in terms of building up the necessary relationships with the healthcare staff in order to make their research happen and the strategies to help cope with the emotional demands of the research. Thus junior researchers may feel they have less control over the day-to-day progress of their research, and lack of control has been seen to influence work stress in oncology workers (e.g. Jones et al. 2013). Furthermore, in the current study, some researchers had current or previous clinical experience, which at times influenced their experiences. Previous research has emphasised the complexities involved in being both a researcher and a health professional (Lalor et al, 2006; Kidd and Finlayson, 2006), but the extent to which it facilitates coping with the emotional nature of research work is unknown. These aspects require further large scale research, including an exploration of what coping strategies are effective to protect oncology researchers against work stress.

Finally, this research clearly highlights the need for adequate support systems and training to be available for researchers involved in oncology research. Previous oncology research has illustrated that a good support network increases job satisfaction (Jones et al. 2013) and that communication skills training is sought after, valued (Girgis et al. 2009) and has positive benefits (Fallowfield et al. 2003). In the current study, support and training was highlighted as especially important for early career researchers (Kendall et al. 2007), not only are these junior researchers grappling with the unfamiliar work demands of a research environment but also the emotional demands of working in an oncology environment that requires the development of sensitive communication and emotional labour skills (Mann, 2005). Recognition of this is also important for more experienced researchers who may be involved in the supervision of junior researchers. Guidelines and appropriate training that protect all those involved in conducting emotional and sensitive research would be advantageous (Gilbert, 2001; Dickson-Swift et al, 2008). Specifically, the previous calls for professional supervision, policy development and minimum training standards for researchers working in sensitive areas (Dickson-Swift et al, 2008) should be considered for those working in oncology research in the UK.

Several caveats of the current study should be considered. This was a small exploratory study and it is possible that the participants who volunteered were prompted by their particular challenging experiences. Furthermore, over half of the participants had less than 5 years' (n=10) experience of oncology research and there were several PhD students (n=7), indicating that the sample had relatively limited experience. For this exploratory study a broad range of researchers were recruited (PhD, clinical, non-clinical) involved in qualitative, quantitative and mixed methods research, but within these groups there were small numbers and without further research, including quantitative study designs, it is not possible to determine the influence of these factors.

Conclusion

This study provides an important insight into oncology researchers' experiences. The potential emotional impact of the work needs to be recognised by researchers, supervisors, managers, research centres, funders and ethics committees. Provision of appropriate support and training should be made available and utilised by all researchers working in sensitive areas such as oncology.

References

Barnard, D., Street, A. and Love, A.W. (2006) Relationships between stressors, work supports, and burnout among cancer nurses. *Cancer Nursing*, **29**(4), 338-345.

Cannon, S. (1989) Social research in stressful settings: difficulties for the sociologist studying the treatment of breast cancer. *Sociology of Health & Illness*, **11**(1), 62-77.

Chiang, V.C., Keatinge, D. and Williams, A.K. (2001) Challenges of recruiting a vulnerable population in a grounded theory study. *Nursing and Health Sciences*, **3**, 205-211.

Dickson-Swift, V., James, E.L., Kippen, S. and Liamputtong, P. (2007) Doing sensitive research: what challenges do qualitative researchers face? *Qualitative Research*, **7**(3), 327-353.

Dickson-Swift, V., James, E.L., Kippen, S. and Liamputtong, P. (2008) Risk to researcher in qualitative research on sensitive topics: issues and strategies. *Qualitative Health Research*, **18**(1), 133-144.

Dickson-Swift, V., James, E.L., Kippen, S. and Liamputtong, P. (2009) Researching sensitive topics: qualitative research as emotion work. *Qualitative Research*, **9**(1), 61-79.

Fallowfield, L., Jenkins, V., Farewell, V. and Solis-Trapala, I. (2003) Enduring impact of communication skills training: results of a 12 month follow-up. *British Journal of Cancer*, **89**(8), 1445-1449.

Gibson, V. (1996) The problems of researching sensitive topics in health care. *Nurse Researcher*, **4**(2), 65-74.

Gilbert, K. (2001) *The emotional nature of qualitative research.* CRC Press LLC: Boca Raton.

Girgis, A., Hansen, V. and Goldstein, D. (2009). Are Australian oncology health professionals burning out? A view from the trenches. *European Journal of Cancer*, **45**(3), 393-399.

Graham, J. and Ramirez, A. (2002) Improving the working lives of cancer clinicians. *European Journal of Cancer Care*, **11**, 188-192.

Grunfeld, E., Zitzelsberger, L., Coristine, M., Whelan, T.J., Aspelund, F. and Evans, W.K. (2005) Job stress and job satisfaction of cancer care workers. *Psycho-Oncology*, **14,** 61-69.

Health and Safety Executive (2011) *What is stress?* Available from: http://www.hse.gov.uk/stress/furtheradvice/whatisstress.htm Accessed 7 Nov 2011.

Health and Safety Executive (2012). *Health and Social Care Sector.* www.hse.gov.uk/statistics/industry/healthservices/index.htm Accessed 2 August 2013

Henderson, A. (2001) Emotional labor and nursing: an under-appreciated aspect of caring work. *Nursing Inquiry*, **8**(2), 130-138.

Hochschild, A.R. (1983) *The managed heart.* University of California Press: Berkeley.

Howard, A. and Timmons, S. (2012) Emotional labour: the challenges of working with children and cancer. *Nursing Children and Young People*, **24**(5), 14-18.

Johnson, B. and Macleod Clarke, J. (2003) Collecting sensitive data: the impact on researchers. *Qualitative Health Research*, **13**(3), 421-434.

Johnson, N (2009). The role of self and emotion within qualitative sensitive research: a reflective account. *ENQUIRE*, **4**, 23-50.

Jones, M.C., Wells, M., Gao, C., Cassidy, B. and Davie, J. (2013). Work stress and well-being in oncology settings: a multidisciplinary study of health care professionals, *Psycho-Oncology*, **22**, 1, 46-53.

Kendall, M., Boyd, K., Sheikh, A., Murray, S.A., Brown, D., Mallinson, I., Kearney, N. and Worth, A. (2007) Key challenges and ways forward in researching the "good death": qualitative in-depth interview and focus group study. *British Medical Journal*, **334**(7592), 521-526.

Kidd, J. and Finlayson, M. (2006) Navigating uncharted water: research ethics and emotional engagement in human inquiry. *Journal of Psychiatric and Mental Health Nursing*, **13**, 423-428.

Kovács, M., Kovács, E. and Hegedűs, K. (2010). Is emotional dissonance more prevalent in oncology care? Emotion work, burnout and coping. *Psycho-Oncology*, **19**, 855-862.

Książek, I., Stefaniak, T.J., Stadnyk, M. and Książek, J. (2011). Burnout syndrome in surgical oncology and general surgery nurses: a cross-sectional study. *European Journal of Oncology Nursing*, **15**, 347-350.

Lalor, J.G., Begley, C.M. and Devane, D. (2006) Exploring painful experiences: impact of emotional narratives on members of a qualitative research team. *Journal of Advanced Nursing*, **56**(6), 607-616.

Le Blanc, P.M., Bakker, A.B., Peeters, M.C.W., van Heesch, N.C.A. and Schaufeli, W.B. (2001) Emotional job demands and burnout among oncology care providers. *Anxiety, Stress & Coping*, **14**, 243-263.

Mackay, C.J., Cousins, R., Kelly, P.J., Lee, S. and McCaig, R.H. (2004) 'Management standards' and work-related stress in the UK: Policy background and science. *Work & Stress*, **18**(2), 91-112.

Mann, S. (2004) 'People-work': emotion management, stress and coping. *British Journal of Guidance & Counselling*, **32**(2), 205-221.

Mann, S. (2005) A health-care model of emotional labour: An evaluation of the literature and development of a model. *Journal of Health Organization and Management*, **19**(4/5), 304-317.

Maslach, C. Schaufeli, W.B.and Leiter, M.P. (2001) Job burnout. *Annual Review of Psychology*, **52**, 397-422.

Mason, J. (1996) *Qualitative researching.* Sage Publications: London.

Nutov, L and Hazzan, O. (2011) Feeling the Doctorate: Is doctorate research that studies the emotional labor of doctorate studies possible? *International Journal of Doctorate Studies*, **6**, 19-32.

Pugliesi, K. (1999) The consequences of emotional labor: effects on work stress, job satisfaction and well-being. *Motivation and Emotion*, **23**(2), 125-154.

Rager, K.B. (2005) Compassion stress and the qualitative researcher. *Qualitative Health Research*, **15**(3), 423-430.

Ramirez, A.J., Graham, J., Richards, M.A., Cull, A. and Gregory, W.M. (1996) Mental health of hospital consultants: the effects of stress and satisfaction at work. *The Lancet*, **347**, 724-728.

Silverman D. (2000) *Doing Qualitative Research: A Practical Handbook.* Sage Publications: London.

Titchener, S. (2010) *Entering unknown territory: exploring the impact on indigenous field researchers when conducting gender based violence and child abuse research in the Solomon Islands.* Unpublished MPhil Dissertation, Massey University: New Zealand.

Trufelli, D.C., Bensi, C.G., Garcia, J.B., Narahara, J.L., Abrao, M.N., Diniz, R.W., Da Costa Miranda, V., Soares, H.P. and Del Giglio, A. (2008). Burnout in cancer professionals: a systematic review. *European Journal of Cancer Care*, **17 (6),** 524–531.

Turner, J., Kelly B. and Girgis, A. (2011). Supporting oncology health professionals: a review. *Psycho-Oncology*, **5**, 77-82.

Zammuner, V.L. and Galli, C. (2005) Wellbeing: Causes and consequences of emotion regulation in work settings. *International Review of Psychiatry*, **17**(5), 355-364.

Zapf, D. (2002) Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, **12**, 237-268.