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'An interpretative phenomenological analysis of the meaning of work to women living with breast cancer'.

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Introduction:

Most The majority of breast cancer cases occur among women of working-age and older [1]. Despite this, there is a lack of research that directly examines the role of the key stakeholders (individuals, health care professionals (HCPs) and key individuals within organisations) and the interplay over time between diagnosis and treatment (decisions and experience), individual adaptation and organisational accommodations for working women diagnosed with breast cancer.

In providing an overview of existing literature, it is important to acknowledge that-different levels of focus e.g. type of cancer, type of question related to work, type of methods used, geographical context and key stakeholder groups. There is an established literature around the experience of being diagnosed with a cancer and around individual and organisational perspectives on the management of, engagement with and return to work (2–7). A smaller set of studies have focused solely on women diagnosed with breast cancer. Few studies have looked at the role of health care professionalsHCPs in women's return to work following a diagnosis—of cancer (2,8–12). Little has been done on the combined role of different stakeholders on individual adaptation, supportive care (HCP)—and organisational behaviour from point of diagnosis onwards.

Often, diagnostic and treatment protocols omit discussion and advice on work engagement while discussions at work around breast cancer can prove challenging. Most of the broadly relevant studies have either taken a medical perspective on diagnosis and treatment and failed to include work engagement and employment status(13–15) as important factors in a persons' cancer journey. One possible outcome is that critical decisions around treatment, care and working life are uninformed, unsupported and often poorly made.

The larger focus has been on assessment of return-to-work, absenteeism, work disability and the financial consequences following diagnosis of breast cancer without due consideration of the role of supportive care and appropriateness of decisions around readiness and functional ability (16–23). An underlying struggle to resolve competition between cancer and economic survival may influence the decisions women make about work and readiness and ability to return to work. Less is known about how the meaning of work may change over the cancer

journey and what the needs of the individual may be in response to any changes and how healthcare professional HCPs and employing organisations contribute to meeting the needs of the individual (16,24,25).

The aim of this study was to explore these issues by focusing on the lived experience of work after a breast cancer diagnosis and treatment amongst a group of professional working women within the UK.

Methods

This is a qualitative study with 15 women who took part in semi-structured interviews exploring their experience of work engagement and breast cancer. Interview transcripts were subjected to IPA and the study followed the procedures of IPA as elucidated in Smith *et al* (26). IPA is an experiential approach whose epistemological underpinnings are rooted in phenomenological philosophy and hermeneutic theory. This dual focus speaks to IPA's commitment to understanding the lived first hand world that we are immersed in and which is lived, felt, understood and made sense of by a conscious actor (See (27)_for further discussion of IPA principles).

A varied research team aims to advance the transference of knowledge across health related disciplines. The first three authors have a wide range of experience in health and occupational health psychology and the fourth author is a university based qualitative researcher with expertise in phenomenological approaches, predominantly IPA. During the project, the team worked closely with a consultant oncologist specialising in breast cancer.

Participants and data collection

39 professional (as defined by occupational classification) working women with breast cancer were invited to participate in this study during a routine consultation at [blinded - a hospital in the UK]. Eligibility criteria included native British women who: had received a diagnosis of primary breast cancer within the last five years; who were receiving or had received treatment for breast cancer; were aged between 30 and 60 years old; were working at the time of diagnosis, and; were in a professional occupation. Those who expressed an interest met with one of the research team to discuss the study in more detail. A study information

pack (letter of invitation, participant information sheet, consent form, and short demographic questionnaire) was given to interested parties. Women were asked to contact the research team to confirm whether they wished to participate within 14 days of invitation. See Table 1 for participant information.

[INSERT TABLE 1]

Interviews

In-depth qualitative interviews were conducted with participants, either face-to-face or over the telephone. Both options were offered to each participant to fit around their medical and general life commitments and their work. There was no difference between the length of time women spoke for or the richness of the data gathered using the two approaches. The interviews commenced with an open question inviting women to share their experience of being diagnosed with breast cancer, and how they managed work and their working lives thereafter. The interviews were designed to obtain women's experiences of breast cancer in relation to their knowledge of, and decisions on, work participation and cancer treatment, and to explore meaning attributed to such experiences in their cultural, psychosocial, work, and medical contexts. All interviews were audio-recorded and transcribed verbatim with an average time of 94 minutes. All participants were told that they could terminate their interview at any time. Nobody terminated their interview early. Written or verbal consent was obtained from all participants and recorded.

Data Analysis

The principles and analytic steps of -IPA are well documented and accessible (26,27). In brief, this includes reading and re-reading each transcript to allow immersion in the data before making initial notes which reflect participants' concerns which show up as things to be reflected on and made sense of. Initial noting ranges from descriptive comments to noting linguistic elements such as metaphor as well as recording well—as noting any early interpretative thinking. Through a reflective engagement—and 'dwelling', these exploratory notes are combined, collapsed and transformed into emergent themes which are subsequently clustered based on conceptual similarities. The end result is a thematic structure for each participant which captures the most salient experiential dimensions for

them. These idiographic analyses are then examined for convergence and divergence and a final thematic structure created which represents both shared and idiosyncratic features for all participants. This structure provides the scaffolding for the subsequent analytic narrative.

What is <u>sometimes</u> missing is a sense of how these steps are put into action and realised in the research. Limitations of space preclude any detailed description of this -but included: adopting a stance of "concernful involvement" (28) throughout-which recognizes that both the participant and the researcher are involved in reflecting and making sense of a world in which people, objects and events -matter; reminding ourselves that the steps of IPA are asking us to turn away from facts to meanings through the reflective process. In the early stages we worked independently being open to possible meanings and keeping emergent themes open and provisional. As we moved through the steps, we held several discussions where we reflected on this early sense-making, moving in an iterative fashion between the transcript and emergent themes. The final set of themes was reviewed and determined by all members of the research team.

Study Permissions

Ethical permission was granted by the NHS East of Scotland Research Ethics Committee (Ref No. 15/ES/0177). NHS Research and Development (R&D) permission was granted by NHS Grampian (Reference Number: 2015UA016).

Findings

Four main themes were revealed using IPA analysis. It was evident throughout all-of the key themes that their health was the priority for all the women interviewed. At the same time, work remained an important concern for themall of these women.

The first theme illustrated how a cancer diagnosis was a distressing experience for these is sample of professional women. They used words such as 'frightening', 'devastating' and 'surreal' to convey how they felt about their situation. The nature of their experience is made evident in the existing literature (e.g. (29–31) and therefore we concentrate in this paper on the other threetwo novel themes that focused on the complex dynamic between living with the reality of cancer, its treatment and work engagement.

The first of these three-novel themes addressed the *changing meaning of work* for the women involved and is the more existential in nature emphasising issues of relationality and selfhood. The second of the two novel themes described how more 'concrete' issues such as the advice and support available in relation to return to work and judgements of readiness and functional ability and work ability._The third theme illustrated the role of employers in women's experience of working. This described how employers behaviour impacted on the women involved and shaped their decisions not only to work but also how to manage the nature of work.

Theme 1: "Why would I do all of this again? What should I do now?" Rethinking the meaning of work

The professional women interviewed expressed a variety of views about the meaning of work following a diagnosis of cancer. These views appeared to be fluid and over the course of time since diagnosis were modified in response to factors such as the attitudes of their healthcare professionals HCPs, employers and work colleagues. The views of both healthcare professional HCPs and employers were important in this consideration of the meaning of work and women's understanding of their abilities and limitations. In particular, these views reflected a tension between wanting to say positive things about treatment, work, and their employers and describing negative experiences and events around supportive care, information and work.

Prior to being diagnosed with cancer, work was valued by the our sample of professional women and shaped a significant part of their identity. This persisted for only three of the women across their cancer journey as exemplified by Helen:

"I still need to work ... I need to have a little bit of something meaningful outside of home life and the family". (Helen, Healthcare Worker)

Work also appeared important, in part, because it enabled these women to feel that they were coping and that their lives were returning to normal:

"Going back to work was almost in some ways burying my head in the sand ... this wasn't happening to me ... work was me back at normality again. Returning to work was a coping mechanism". (Sam, Healthcare Worker)

However, on returning to work after cancer treatment, twelve of the women felt less engaged with their job and with their work. This loss of engagement appeared associated with a number of individual factors including, for example, their re-evaluation and rebalancing of priorities and increased emphasis on self and work-life balance. Their illness provided room for reflection on the value of work overall and its place in their lives:

"I just kept thinking if my cancer comes back and I'm working like this, I'm not going to be happy ... I'll die unhappy". (Anna, Business and Research Professional)

At the same time, a sense of loss over the diminished importance of work was felt by others; the cancer had forced a change and left them feeling uncertain and somewhat redundant:

"It's still in my mind that I'm not, I'm not there, that 'there' is not my future anymore." (Louise, Education Professional)

As a result of their changing perceptions about work having been diagnosed with cancer, all the women interviewed contemplated changing their roles or careers or taking early retirement. There were some who acted on this and who had <u>already</u> changed their jobs or profession:

"I've got a part-time job now ... No stress, nothing, and that's what I needed ... I want to be happy in life without the worry and stress of something else ... I do know that if I hadn't had the cancer, I would still be working in my old job". (Anna, Business, Research Professional)

Anna reflected on how having been diagnosed with cancer had disrupted and transformed her approach to work. As a result of her diagnosis, any job that she takes on in the future will

have to match a new set of expectations and be stress and responsibility free. In contrast, Fiona's wish to reduce job-related stress was achieved through a plan to move sideways:

"I still wanted to work in a similar area ... It is clear-cut and doable ... but I just felt there could be less stress in a new job... I didn't want the stress of starting to learn a whole new job with a whole set of new skills ... a sideways move in the same kind of area, I think is what I needed to do." (Fiona, Public Services Professional)

For these women, returning to their old job did not feel possible and they revised their expectations of what sort of work they wanted to do. The main driver of such decisions appeared to be reducing work-related stress. A career, as opposed to working, became less important after being diagnosed with cancer. This is perhaps somewhat surprising among this sample of professional women, many of whom had worked hard to obtain a high-level of achievement in their job.

"Life's too short and you ... this isn't really where you thought you would be careerwise at this point in time. This isn't quite how it was meant to be ... you need to take stock and stop". (Maggie, Business Professional)

Maggie's observations highlight how significant health-related events such as diagnosis and treatment of cancer can derail not only one's established goals but the overall *taken-for-granted* trajectory of life. The seemingly trite comment that *life is too short* is anything but. Rather it emphasises the need for clearly defined support for people navigating the complex and longer term dynamic of work and cancer and who have been forced to face their vulnerability and recognise their mortality.

Thisis second first theme illustrates how having a diagnosis of cancer impacted on how the professional women in the sample thought about work and careers and their meaning as result of being diagnosed with cancer. Two contrasting lines of thought were obvious in their reports. The first was that having breast cancer and dealing with it required them to change the importance that they placed on their work and careers reducing the demands and stress that they placed on them so that they could better cope with having cancer and with its

treatment. The second was that continuing to work would offer a distraction from cancer and help them maintain some sort of normality especially leading up to treatment. Of course, these two lines of thought were not mutually exclusive and could change across their cancer journey.

Theme 2: "You decide. It's entirely up to you" Making decisions about work ability and taking advice on work.

The changing meaning of work appeared intimately entwined with decisions about when and how to work including the questions whether to work on following their diagnosis and, if not, when to return to work. At diagnosis, most the majority of the women in the sample decided to stay off work for the duration of their treatment. They reported feeling that they would not be able to cope with combining the responsibilities of work with cancer treatment. By staying off work, women believed that they would allow themselves time and space to adjust to the diagnosis and focus on their health.

"I had no intention of attempting to work during chemotherapy as I didn't find that was the biggest priority in my particular situation. I wanted to focus on my health". (Rachel, Education Professional)

"... work was becoming far too much for me ... I was coming to work trying to be really all things for all people ... eventually I was like "Actually I can't do this"... I wanted to put myself and planning first. I wanted to ... make sure I had food in my freezer so if I wasn't able to cook I would have that... I must do all these things before my surgery ...". (Sophie, Protective Services Professional)

Three women chose to continue working up until the point of breast cancer surgery. Work appeared to provide themese women with a much needed distraction from 'having cancer' and gave them a sense of normality during this challenging period.

"... when I was diagnosed ... I had about a month before my appointment for surgery so ... I just went into work I just worked right up to then because I just felt I needed to keep busy and keep my mind off it". (Abby, Business Professional)

All of the women in the sample-sought advice from healthcare providers regarding the optimal time to return to work after radiotherapy or chemotherapy treatments were completed. A common response from some primary and secondary providers appeared to be "return to work when *you* feel ready". Most professionals did make it clear that it was important for the women not only to be *physically ready*, but also to *feel mentally strong enough* to achieve a successful work return. While this approach was intended to be supportive and give the person ownership of the issue, it was found challenging by some.

"I said to the [consultant] "You know ... Well, should I be going back to work now or should I stay off?" and they said, "It's entirely up to you. Entirely up to you. You decide. It's entirely up to you". (Maggie, Business Professional)

"When I was having my treatment, I'd asked for a ballpark figure as to when I'd be perhaps able to go back to work and both the breast nurse and the consultant had said eight weeks would be fine. But, in my opinion, there was no way could I have ever gone back after ... radiotherapy treatment ... after the initial five months...". (Helen, Healthcare Professional)

Interestingly, three women in the sample reported feeling pressured to return to work earlier than was recommended by their employers.

"It was like you were being cajoled into coming back to work by occupational health. It's about time you gave it a shot because you've been off long enough". (Louise, Education Professional)

"I felt a lot of pressure was put on me in terms of making decisions about work. I felt a bit backed into a corner. I thought maybe I should just leave my job and look for something I can cope with...". (Rachel, Education Worker)

In contrast, others in the sample were encouraged by their employers to return to work when they felt ready to, which was informed by their managers' understanding or personal experience of cancer.

"I felt I wasn't being pressured to return to work, that it was about me taking my time.

But I also thought that...because [my line manager] had had a diagnosis of breast cancer that she did really understand..." (Eva, Healthcare Professional)

The picture that this group of women painted regarding the advice that they were given about decisions on work engagement and return to work from the different stakeholder groups pointed up two important things. The first was that their healthcare professionaHCPIs often placed the key decisions with them – "you will know when you are ready" while most of the women, at least initially, looked to the former for that decision. It appeared that they did not always want to assume responsibility for making that decision; highlighting the importance of shared decision makingthat for these women, person-centred care meant working in partnership and being given advice when it was needed to help navigate their identity as patient and as worker. The second thing was that the advice_that_they received from their employing organisation, including occupational health, was mixed. Where their senior colleagues had some personal experience or understanding of cancer, they were felt to be supportive and echo the advice given by the healthcare professionalHCPs; otherwise they were felt to be less supportive sometimes to the point of appearing to 'bully' the women back to work. This provides two clear recommendations for healthcare professionalHCPs and employing organisations.

Theme 3: "Maybe just a little note ... to say how are you?" The value of continued engagement with employer from point of diagnosis and of workplace support.

The third theme that <u>derivemerged</u> from the analys<u>ised</u> concerned womens' experiences when returning to work. These were grounded in the nature and strength of their engagement with their employer and place of work from their diagnosis onwards. Those who had maintained contact with their employer, in particular contact that was initiated and

supported by the employer, tended to report more positive experiences of returning to work than those who had not received any such engagement or support. This was focused at the level of the immediate employer or line manager and may be grounded in trust and the social processes of the work environment.

Across the sample, contact and offers of support from the workplace varied during the women'ss' leave of absence with some women receiving much support while others received little or no no contact ander support. This was believed, in some cases, to be related to organisational or other workplace policies. Nevertheless, most women had expected their employer to initiate some form of contact during their leave of absence and viewed lack of contact negatively.

"... [during] the interim period when I had my treatment, um, I didn't hear anything from work, very disappointing, quite upset that ... not that you want people to be thinking about you and things like that but I just thought really maybe just a little note or a letter or a text or something to say how are you? ... I didn't receive that so that was a real disappointment". (Helen, Healthcare Worker)

Some women visited their workplace their leave of absence, which reduced some of their fears about returning to work.

"... when I did go back to work ... it wasn't quite so scary as I had imagined because I had been through the doors, I'd been up in the department, I'd seen a lot of the staff, they were now completely aware of what was going on with me ... so I thought that was a really good thing to have done...". (Emma, Education Worker)

The majority of women returned to work on a period of phased return following advice from occupational health. This was seen as helpful as it allowed them to readjust to work within their new capabilities and perspective.

"... it was a bit daunting having not worked for nine months, you know, just being dotting around the house and then to be back at work, it was quite, um, tiring to begin

with doing a full day ... it was useful having the phased return to sort of shorter days until you work back up to speed..." (Abby, Business Worker)

Many women received adequate support and work accommodations from their employer following their diagnosis and treatment. This included emotional and practical support, such as a phased return to work, reduced hours, and the provision of sick pay:

"... if there's a supportive environment at work ... from the start ... that kind of attitude ... then it's much easier to return". (Rachel, Education Worker)

However, this was not the case for all of the women we spoke to. A few women highlighted that their employer was not as supportive as they had expected them to be. This was attributed largely to their lack of understanding about the impact of cancer diagnosis and treatment and of the women's cancer journey. This ultimately led to difficulties for women in being able to effectively engage with work.

"... when you go back to work ... even though people are listening to what has happened to you ... they're still expecting that 100% or they think they are ... that's something that you have to be aware of. I certainly have been surprised at that...". (Sam, Healthcare Worker)

Many women were anxious about returning to work after cancer due to the often extended period of sick leave, and initially they found it difficult to adapt to work. These women reported that they struggled to concentrate at work and perform cognitive tasks whilst managing fatigue and pain as a consequence of cancer treatment or their emotional resilience had declined following their cancer experience.

"... I just find I can't cope with work ... I think I would if I hadn't had that trauma ... it's not that just on its own in isolation, the breast cancer ... it was all the little bits that have been added which haven't helped... You just haven't got that resilience behind you anymore ... well, not to the same extent." (Fiona, Social Services)

"... it was a really difficult time [at work] ... and I think because I'd been there so long everyone looked to me to keep things going it was useful to take that time out and just realise that there's other people as capable as me so they can all just share the load...". (Abby, Business Professional)

The contrasting experiences of the woman in this group demonstrate the complex interplay between the women's own adjustment to their cancer diagnosis, and the changing meaning of work, their readiness and ability to return to work and the behaviour of their employer (grounded in their own understanding of cancer). It is also clear that there is an important relational context with work colleagues in this meaning making. This further highlights the importance of clear communication and understanding between all the key stakeholders in the return to work process.

Discussion

This study provides unique insight into the meaning of work following a cancer diagnosis for professional working women living with breast cancer in Scotland. In particular, it allows for a deeper understanding of the complex interplay between living with cancer, treatment and related work decisions and how advice and support shaped their work engagement. These findings are resonant with the current European and North American literature (e.g. (32,33) and build our knowledge in this area.

There was no prioritisation of work over health and treatment for these women. As might be expected from the existing literature, work was clearly important for them to these women before their diagnosis of breast cancer (34,35) and this appears to be tied in with both the meaning of work forto them and to their sense of identity. Cancer threatened their self-identity and often led to a felt loss of control and, subsequently, to a search for the meaning of work. Many women reappraised the role of work in their lives after receiving a diagnosis of breast cancer. While it is known that cancer can prompt a shift in priorities (16,33), the novel finding here is the nuanced understanding of why and how. A key theme for the women in this study was how the experienced loss of control led to a shift in identity and altered priorities. This was grounded in the need to protect their self-identity, and to recover from

feeling lost and diminished by their cancer. While work remained important to the majority of women in this study, for psychological as well as financial reasons, many desired a better work-life balance and way of working that would restore a sense of self and of control and would allow a focus on new priorities. A change in meaning has been reported in previous studies focused on change in work priorities and reduction / changes in working practice (11,24,36). For the women in the current study, the change in meaning marked a shift from pursuit of career and work as everything to self as important and work-life balance.

The second novel finding is the issue of work ability being handed back to the women to make a judgement and their feelings of not being prepared. Work ability has been much debated and studied within the broader cancer literature (20,22,37,38) but there is little in terms of how this judgement is made and whom this decision involves. The role of HCPsHealth Care Professionals has also been highlighted to a lesser extent (e.g. (8,39)) but with regards to meeting information needs and appropriate discussion of work rather than around judgements of work ability. Similarly, occupational health and occupational physicians have been highlighted as key stakeholder groups within the delivery of return to work interventions (e.g. (40)) and yet this study shows the negative impact of getting these decisions wrong and women feeling additional pressure from occupational health providers. This highlights that the importance of facilitating agreement between the individual, the health care provider and the organisation about readiness and ability to return to work (9,22) and also of achieving non-tokenistic person-centred care.

The third novel finding is the complex interplay between the individual level adaptation and the behaviour of the employer. The literature focuses on the role of large organisations and organisational behaviour (41) or the role of occupational health in making reasonable and practicable accommodations as a minimum requirement (42). This is directed in the UK by the Equalities Act (43). A highlighted gap in the literature is around what employers within organisations should be doing beyond their legal duty of care and how to facilitate implementation of recommendations (33,44–46). Current understanding within the cancer literature is framed within the context of North American and Northern European employment practices and healthcare systems (47–50). This study extended the debate around employer behaviour and demonstrates the importance of the individual line

manager's behaviour in determining the women's experience of return to work. Contact with the individual line manager, rather than the organisation, while undergoing treatment was felt to be a positive driver in remaining engaged with work. This allowed women to return to the workplace while managing the cognitive, emotional and existential aspects of living with and beyond breast cancer. This social contact, therefore, is a crucial element in the delivery of accommodations at work that support the person's needs. Hakanen & Lindbohm (51) also highlight the importance of social resources at work to support work engagement following a diagnosis of cancer. Our findings also make clear the importance of realistic and supportive advice given in relation to work and help provided in shaping work-related decisions across the women's cancer journey. Clear consensus and guidance is a recommendation echoed within the existing literature (11,20,25,34). It is also evident from our findings that there are multiple aspects of the meaning of work, which include the psychosocial work environment, that are important following a diagnosis of cancer. This requires further study.

In turn, the findings do imply a need to provide line-managers, occupational health and HCPs health care professionals with appropriate and up-to-date evidence-based knowledge and training to ensure that they can provide information and advice. Despite being highlighted in previous studies, there is still an acknowledged need for clear systems in place for the exchange of information between these groups and other stakeholders (2,11,34).

This study makes a strong contribution to knowledge. It is, however, important to recognise the limitations of this work. As was the intention, this is grounded within a UK context. Given the professional background of the women, the access they had to additional financial resources may have influenced the decisions that they subsequently made about work. There is a need to develop this novel research and also to explore the lived experiences of women working in non-professional and insecure occupations, to understand the unique challenges faced by this population. The interviews were conducted either face-to-face or by telephone raising the question of whether the method used effected the data collected. The data from the 15 participants were scrutinised to determine whether or not there were obvious and substantive differences by method. None were detected.

Conclusion

The findings from this e current study demonstrate the complex interplay between living with cancer, treatment decisions and work. The goal of research in this area is to develop recommendations for health care and work-based practice to support working women with breast cancer in relation to work engagement, in the way in which they desire. This e current study highlights two key areas for inclusion in practice: 1) support from healthcare professionals HCPs in managing the diagnosis of cancer and threats to self-identity and judgements of functional ability and work ability and 2) the role of others in managing cancer, treatment and work, in particular line managers and key contacts within the organisation.

Word count <u>4,995</u> excluding abstract, table and refs

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Table 1: Demographic characteristics

	Mean (SD) or n (%)
Age (years)	51.7 (5.3)
	Range 39-59
Marital Status	
Single	3 (20%)
Married or Civil Partnership	9 (60%)
Separated or Divorced	3 (20%)
Diagnosis	
Ductal Carcinoma in Situ (DCIS)	2 (13.3%)
Grade 1	2 (13.3%)
Grade 2	4 (26.7%)
Grade 3	6 (40.0%)
Missing	1 (6.7%)
Cancer treatment	
Lumpectomy	11 (73.3%)
Mastectomy	5 (33.3%)
Chemotherapy	8 (53.3%)
Radiotherapy	12 (80%)
Hormone Therapy	12 (80%)
Biological Therapy	1 (6.7%)
Educational Level	
Diploma/HND/HNC	7 (46.7)
Bachelor's Degree	6 (40)
Master's Degree	1 (6.7)
Professional Degree	1 (6.7)
Occupation*	
Healthcare	4 (26.7)
Education	4 (26.7)
Business and related research professionals	3 (20)
Marketing and sales	1 (6.7)
Protective services	1 (6.7)
Public services	1 (6.7)
Social services	1 (6.7)
Work status at diagnosis	
Working full-time	6 (40.0%)
Working part-time	5 (33.3%)
Self-employed	1 (6.7%)
Work continuation during treatment	,
Yes	2 (13.3%)
No	13 (86.7%)
Current work status	,
Working full-time	6 (40%)
Working part-time	4 (26.7%)
WOLKING DALL-HILLE	

Not currently working/on sick leave	3 (20%)
Retired	1 (6.7%)



Introduction:

Most breast cancer cases occur among women of working-age and older [1]. Despite this, there is a lack of research that directly examines the role of key stakeholders (individuals, health care professionals (HCPs) and key individuals within organisations) and the interplay over time between diagnosis and treatment (decisions and experience), individual adaptation and organisational accommodations for working women diagnosed with breast cancer.

In providing an overview of existing literature, it is important to acknowledge different levels of focus e.g. type of cancer, type of question related to work, type of methods used, geographical context and key stakeholder groups. There is an established literature around the experience of being diagnosed with a cancer and around individual and organisational perspectives on the management of, engagement with and return to work (2–7). A smaller set of studies have focused solely on women diagnosed with breast cancer. Few studies have looked at the role of HCPs in women's return to work following diagnosis (2,8–12). Little has been done on the combined role of different stakeholders on individual adaptation, supportive care and organisational behaviour from point of diagnosis onwards.

Often, diagnostic and treatment protocols omit discussion and advice on work engagement while discussions at work around breast cancer can prove challenging. Most of the broadly relevant studies have taken a medical perspective on diagnosis and treatment and failed to include work engagement and employment status(13–15) as important factors in a persons' cancer journey. One possible outcome is that critical decisions around treatment, care and working life are uninformed, unsupported and often poorly made.

The larger focus has been on assessment of return-to-work, absenteeism, work disability and the financial consequences following diagnosis of breast cancer without due consideration of the role of supportive care and appropriateness of decisions around readiness and functional ability (16–23). An underlying struggle to resolve competition between cancer and economic survival may influence the decisions women make about work and readiness and ability to return to work. Less is known about how the meaning of work may change over the cancer journey and what the needs of the individual may be in response to any changes and how

HCPs and employing organisations contribute to meeting the needs of the individual (16,24,25).

The aim of this study was to explore these issues by focusing on the lived experience of work after a breast cancer diagnosis and treatment amongst a group of professional working women within the UK.

Methods

This is a qualitative study with 15 women who took part in semi-structured interviews exploring their experience of work engagement and breast cancer. Interview transcripts were subjected to IPA and the study followed the procedures of IPA as elucidated in Smith *et al* (26). IPA is an experiential approach whose epistemological underpinnings are rooted in phenomenological philosophy and hermeneutic theory. This dual focus speaks to IPA's commitment to understanding the lived first hand world that we are immersed in and which is lived, felt, understood and made sense of by a conscious actor (See (27) for further discussion of IPA principles).

A varied research team aims to advance the transference of knowledge across health related disciplines. The first three authors have a wide range of experience in health and occupational health psychology and the fourth author is a university based qualitative researcher with expertise in phenomenological approaches, predominantly IPA. During the project, the team worked closely with a consultant oncologist specialising in breast cancer.

Participants and data collection

39 professional (as defined by occupational classification) working women with breast cancer were invited to participate in this study during a routine consultation at [blinded - a hospital in the UK]. Eligibility criteria included native British women who: had received a diagnosis of primary breast cancer within the last five years; who were receiving or had received treatment for breast cancer; were aged between 30 and 60 years old; were working at the time of diagnosis, and; were in a professional occupation. Those who expressed an interest met with one of the research team to discuss the study in more detail. A study information pack (letter of invitation, participant information sheet, consent form, and short demographic

questionnaire) was given to interested parties. Women were asked to contact the research team to confirm whether they wished to participate within 14 days of invitation. See Table 1 for participant information.

[INSERT TABLE 1]

Interviews

In-depth qualitative interviews were conducted with participants, either face-to-face or over the telephone. Both options were offered to each participant to fit around their medical and general life commitments and their work. There was no difference between the length of time women spoke for or the richness of the data gathered using the two approaches. The interviews commenced with an open question inviting women to share their experience of being diagnosed with breast cancer, and how they managed work and their working lives thereafter. The interviews were designed to obtain women's experiences of breast cancer in relation to their knowledge of, and decisions on, work participation and cancer treatment, and to explore meaning attributed to such experiences in their cultural, psychosocial, work, and medical contexts. All interviews were audio-recorded and transcribed verbatim with an average time of 94 minutes. All participants were told that they could terminate their interview at any time. Nobody terminated their interview early. Written or verbal consent was obtained from all participants and recorded.

Data Analysis

The principles and analytic steps of IPA are well documented and accessible (26,27). In brief, this includes reading and re-reading each transcript to allow immersion in the data before making initial notes which reflect participants' concerns which show up as things to be reflected on and made sense of. Initial noting ranges from descriptive comments to noting linguistic elements such as metaphor as well as recording well any early interpretative thinking. Through a reflective engagement, these exploratory notes are combined, collapsed and transformed into emergent themes which are subsequently clustered based on conceptual similarities. The end result is a thematic structure for each participant which captures the most salient experiential dimensions for them. These idiographic analyses are then examined for convergence and divergence and a final thematic structure created which

represents both shared and idiosyncratic features for all participants. This structure provides the scaffolding for the subsequent analytic narrative.

What is sometimes missing is a sense of how these steps are put into action and realised in the research. Limitations of space preclude any detailed description of this but included: adopting a stance of "concernful involvement" (28) which recognizes that both participant and researcher are involved in making sense of a world in which people, objects and events matter; reminding ourselves that the steps of IPA are asking us to turn away from facts to meanings through the reflective process. In the early stages we worked independently being open to possible meanings and keeping emergent themes open and provisional. As we moved through the steps, we held several discussions where we reflected on this early sense-making, moving in an iterative fashion between the transcript and emergent themes. The final set of themes was reviewed and determined by all members of the research team.

Study Permissions

Ethical permission was granted by the NHS East of Scotland Research Ethics Committee (Ref No. 15/ES/0177). NHS Research and Development (R&D) permission was granted by NHS Grampian (Reference Number: 2015UA016).

Findings

Four main themes were revealed using IPA analysis. It was evident throughout all themes that their health was the priority for all the women interviewed. At the same time, work remained an important concern for them.

The first theme illustrated how a cancer diagnosis was a distressing experience for these professional women. They used words such as 'frightening', 'devastating' and 'surreal' to convey how they felt about their situation. The nature of their experience is made evident in the existing literature (e.g. (29–31) and therefore we concentrate in this paper on the other three novel themes that focused on the complex dynamic between living with the reality of cancer, its treatment and work engagement.

The first of these novel themes addressed the *changing meaning of work* for the women involved and is the more existential in nature emphasising issues of relationality and selfhood. The second of the two novel themes described how more 'concrete' issues such as the advice and support available in relation to return to work and judgements of readiness and functional ability and work ability. The third theme illustrated the role of employers in women's experience of working. This described how employers behaviour impacted on the women involved and shaped their decisions not only to work but also how to manage the nature of work.

Theme 1: "Why would I do all of this again? What should I do now?" Rethinking the meaning of work

The professional women interviewed expressed a variety of views about the meaning of work following a diagnosis of cancer. These views appeared to be fluid and over the course of time were modified in response to factors such as the attitudes of their HCPs, employers and work colleagues. The views of both HCPs and employers were important in this consideration of the meaning of work and women's understanding of their abilities and limitations. In particular, these views reflected a tension between wanting to say positive things about treatment, work, and their employers and describing negative experiences and events around supportive care, information and work.

Prior to being diagnosed with cancer, work was valued by the women and shaped a significant part of their identity. This persisted for only three of the women across their cancer journey as exemplified by Helen:

"I still need to work ... I need to have a little bit of something meaningful outside of home life and the family". (Helen)

Work also appeared important, in part, because it enabled these women to feel that they were coping and that their lives were returning to normal:

"Going back to work was almost in some ways burying my head in the sand ... this wasn't happening to me ... work was me back at normality again. Returning to work was a coping mechanism". (Sam)

However, on returning to work after cancer treatment, twelve of the women felt less engaged with their job and with their work. This loss of engagement appeared associated with a number of individual factors including, for example, their re-evaluation and rebalancing of priorities and increased emphasis on self and work-life balance. Their illness provided room for reflection on the value of work overall and its place in their lives:

"I just kept thinking if my cancer comes back and I'm working like this, I'm not going to be happy ... I'll die unhappy". (Anna)

At the same time, a sense of loss over the diminished importance of work was felt by others; the cancer had forced a change and left them feeling uncertain and somewhat redundant:

"It's still in my mind that I'm not, I'm not there, that 'there' is not my future anymore." (Louise)

As a result of their changing perceptions about work, all the women interviewed contemplated changing their roles or careers or taking early retirement. There were some who acted on this and who had already changed their jobs or profession:

"I've got a part-time job now ... No stress, nothing, and that's what I needed ... I want to be happy in life without the worry and stress of something else ... I do know that if I hadn't had the cancer, I would still be working in my old job". (Anna)

Anna reflected on how having been diagnosed with cancer had disrupted and transformed her approach to work. As a result of her diagnosis, any job that she takes on in the future will have to match a new set of expectations and be stress and responsibility free. In contrast, Fiona's wish to reduce job-related stress was achieved through a plan to move sideways:

"I still wanted to work in a similar area ... It is clear-cut and doable ... but I just felt there could be less stress in a new job... I didn't want the stress of starting to learn a whole new job with a whole set of new skills ... a sideways move in the same kind of area, I think is what I needed to do." (Fiona)

For these women, returning to their old job did not feel possible and they revised their expectations of what sort of work they wanted to do. The main driver of such decisions appeared to be reducing work-related stress. A career, as opposed to working, became less important after being diagnosed with cancer. This is perhaps somewhat surprising among this sample of professional women, many of whom had worked hard to obtain a high-level of achievement in their job.

"Life's too short and you ... this isn't really where you thought you would be careerwise at this point in time. This isn't quite how it was meant to be ... you need to take stock and stop". (Maggie)

Maggie's observations highlight how significant health-related events such as diagnosis and treatment of cancer can derail not only one's established goals but the overall *taken-for-granted* trajectory of life. The seemingly trite comment that *life is too short* is anything but. Rather it emphasises the need for clearly defined support for people navigating the complex and longer term dynamic of work and cancer and who have been forced to face their vulnerability and recognise their mortality.

This first theme illustrates how having a diagnosis of cancer impacted on how the women thought about work and careers and their meaning as result of being diagnosed with cancer. Two contrasting lines of thought were obvious in their reports. The first was that having breast cancer and dealing with it required them to change the importance that they placed on their work and careers reducing the demands and stress that they placed on them so that they could better cope with having cancer and with its treatment. The second was that continuing to work would offer a distraction from cancer and help them maintain some sort of normality especially leading up to treatment. Of course, these two lines of thought were not mutually exclusive and could change across their cancer journey.

Theme 2: "You decide. It's entirely up to you" Making decisions about work ability and taking advice on work.

The changing meaning of work appeared intimately entwined with decisions about when and how to work including the questions whether to work on following their diagnosis and, if not, when to return to work. At diagnosis, most of the women decided to stay off work for the duration of their treatment. They reported feeling that they would not be able to cope with combining the responsibilities of work with cancer treatment. By staying off work, women believed that they would allow themselves time and space to adjust to the diagnosis and focus on their health.

"... work was becoming far too much for me ... I was coming to work trying to be really all things for all people ... eventually I was like "Actually I can't do this"... I wanted to put myself and planning first. I wanted to ... make sure I had food in my freezer so if I wasn't able to cook I would have that... I must do all these things before my surgery ...". (Sophie)

Three women chose to continue working up until the point of surgery. Work appeared to provide them with a much needed distraction from 'having cancer' and gave them a sense of normality during this challenging period.

"... when I was diagnosed ... I had about a month before my appointment for surgery so ... I just went into work I just worked right up to then because I just felt I needed to keep busy and keep my mind off it". (Abby)

All of the women sought advice from healthcare providers regarding the optimal time to return to work after radiotherapy or chemotherapy treatments were completed. A common response from some primary and secondary providers appeared to be "return to work when *you* feel ready". Most professionals did make it clear that it was important for the women not only to be *physically ready*, but also to *feel mentally strong enough* to achieve a

successful work return. While this approach was intended to be supportive and give the person ownership of the issue, it was found challenging by some.

"I said to the [consultant] "You know ... Well, should I be going back to work now or should I stay off?" and they said, "It's entirely up to you. Entirely up to you. You decide. It's entirely up to you". (Maggie)

"

Interestingly, three women in the sample reported feeling pressured to return to work earlier than was recommended by their employers.

"It was like you were being cajoled into coming back to work by occupational health.

It's about time you gave it a shot because you've been off long enough". (Louise)

"I felt a lot of pressure was put on me in terms of making decisions about work. I felt a bit backed into a corner. I thought maybe I should just leave my job and look for something I can cope with...". (Rachel)

In contrast, others were encouraged by their employers to return to work when they felt ready to, which was informed by their managers' understanding or personal experience of cancer.

"I felt I wasn't being pressured to return to work, that it was about me taking my time.

But I also thought that...because [my line manager] had had a diagnosis of breast cancer that she did really understand..." (Eva)

The picture that this group of women painted regarding the advice that they were given about decisions on work engagement and return to work from the different stakeholder groups pointed up two important things. The first was that their HCPs often placed the key decisions with them – "you will know when you are ready" while most of the women, at least initially, looked to the former for that decision. It appeared that they did not always want to assume responsibility highlighting that for these women, person-centred care meant working in

partnership and being given advice when it was needed to help navigate their identity as patient and as worker. The second thing was that the advice they received from their employing organisation, including occupational health, was mixed. Where their senior colleagues had some personal experience or understanding of cancer, they were felt to be supportive and echo the advice given by the HCPs; otherwise they were felt to be less supportive sometimes to the point of appearing to 'bully' the women back to work. This provides two clear recommendations for HCPs and employing organisations.

Theme 3: "Maybe just a little note ... to say how are you?" The value of continued engagement with employer from point of diagnosis and of workplace support.

The third theme that derived from the analysis concerned womens' experiences when returning to work. These were grounded in the nature and strength of their engagement with their employer and place of work from their diagnosis onwards. Those who had maintained contact with their employer, in particular contact that was initiated and supported by the employer, tended to report more positive experiences of returning to work than those who had not received any such engagement or support. This was focused at the level of the immediate employer or line manager and may be grounded in trust and the social processes of the work environment.

Across the sample, contact and offers of support from the workplace varied during the women's leave of absence with some women receiving much support while others received little or no contact and support. This was believed, in some cases, to be related to organisational or other workplace policies. Nevertheless, most women had expected their employer to initiate some form of contact during their leave of absence and viewed lack of contact negatively.

"... [during] the interim period when I had my treatment, um, I didn't hear anything from work, very disappointing, quite upset that ... not that you want people to be thinking about you and things like that but I just thought really maybe just a little note or a letter or a text or something to say how are you? ... I didn't receive that so that was a real disappointment". (Helen)

Some women visited their workplace their leave of absence, which reduced some of their fears about returning to work.

"... when I did go back to work ... it wasn't quite so scary as I had imagined because I had been through the doors, I'd been up in the department, I'd seen a lot of the staff, they were now completely aware of what was going on with me ... so I thought that was a really good thing to have done...". (Emma)

The majority of women returned to work on a period of phased return following advice from occupational health. This was seen as helpful as it allowed them to readjust to work within their new capabilities and perspective.

"... it was a bit daunting having not worked for nine months, you know, just being dotting around the house and then to be back at work, it was quite, um, tiring to begin with doing a full day ... it was useful having the phased return to sort of shorter days until you work back up to speed..." (Abby)

Many women received adequate support and work accommodations from their employer following their diagnosis and treatment. This included emotional and practical support, such as a phased return to work, reduced hours, and the provision of sick pay:

"... if there's a supportive environment at work ... from the start ... that kind of attitude ... then it's much easier to return". (Rachel)

However, this was not the case for all of the women we spoke to. A few women highlighted that their employer was not as supportive as they had expected them to be. This was attributed largely to their lack of understanding about the impact of cancer diagnosis and treatment and of the women's cancer journey. This ultimately led to difficulties for women in being able to effectively engage with work.

"... when you go back to work ... even though people are listening to what has happened to you ... they're still expecting that 100% or they think they are ... that's something that you have to be aware of. I certainly have been surprised at that...". (Sam)

Many women were anxious about returning to work after cancer due to the often extended period of sick leave, and initially they found it difficult to adapt to work. These women reported that they struggled to concentrate at work and perform cognitive tasks whilst managing fatigue and pain as a consequence of cancer treatment or their emotional resilience had declined following their cancer experience.

"... it was a really difficult time [at work] ... and I think because I'd been there so long everyone looked to me to keep things going it was useful to take that time out and just realise that there's other people as capable as me so they can all just share the load...". (Abby)

The contrasting experiences of the woman in this group demonstrate the complex interplay between the women's adjustment to their cancer diagnosis, the changing meaning of worktheir readiness and ability to return to work and the behaviour of their employer (grounded in their own understanding of cancer). It is also clear that there is an important relational context with work colleagues in this meaning making. This further highlights the importance of clear communication and understanding between all the key stakeholders in the return to work process.

Discussion

This study provides unique insight into the meaning of work following a cancer diagnosis for professional working women living with breast cancer in Scotland. In particular, it allows for a deeper understanding of the complex interplay between living with cancer, treatment and related work decisions and how advice and support shaped their work engagement. These findings are resonant with the current European and North American literature (e.g. (32,33) and build our knowledge in this area.

There was no prioritisation of work over health and treatment for these women. As might be expected from the existing literature, work was clearly important for them before their diagnosis of breast cancer (34,35) and this appears to be tied in with both the meaning of work for them and to their sense of identity. Cancer threatened their self-identity and often led to a felt loss of control and, subsequently, to a search for the meaning of work. While it is known that cancer can prompt a shift in priorities (16,33), the novel finding here is the nuanced understanding of why and how. A key theme for the women in this study was how the experienced loss of control led to a shift in identity and altered priorities. This was grounded in the need to protect their self-identity, and to recover from feeling lost and diminished by their cancer. While work remained important to the majority of women in this study, for psychological as well as financial reasons, many desired a better work-life balance and way of working that would restore a sense of self and of control and would allow a focus on new priorities. A change in meaning has been reported in previous studies focused on change in work priorities and reduction / changes in working practice (11,24,36). For the women in the current study, the change in meaning marked a shift from pursuit of career and work as everything to self as important and work-life balance.

The second novel finding is the issue of work ability being handed back to the women to make a judgement and their feelings of not being prepared. Work ability has been much debated and studied within the broader cancer literature (20,22,37,38) but there is little in terms of how this judgement is made and whom this decision involves. The role of HCPs has also been highlighted to a lesser extent (e.g. (8,39)) but with regards to meeting information needs and appropriate discussion of work rather than around judgements of work ability. Similarly, occupational health and occupational physicians have been highlighted as key stakeholder groups within the delivery of return to work interventions (e.g. (40)) and yet this study shows the negative impact of getting these decisions wrong and women feeling additional pressure from occupational health providers. This highlights that the importance of facilitating agreement between the individual, the health care provider and the organisation about readiness and ability to return to work (9,22) and also of achieving non-tokenistic personcentred care.

The third novel finding is the complex interplay between the individual level adaptation and the behaviour of the employer. The literature focuses on the role of large organisations and organisational behaviour (41) or the role of occupational health in making reasonable and practicable accommodations as a minimum requirement (42). This is directed in the UK by the Equalities Act (43). A highlighted gap in the literature is around what employers within organisations should be doing beyond their legal duty of care and how to facilitate implementation of recommendations (33,44–46). Current understanding within the cancer literature is framed within the context of North American and Northern European employment practices and healthcare systems (47–50). This study extended the debate around employer behaviour and demonstrates the importance of the individual line manager's behaviour in determining the women's experience of return to work. Contact with the individual line manager, rather than the organisation, while undergoing treatment was felt to be a positive driver in remaining engaged with work. This allowed women to return to the workplace while managing the cognitive, emotional and existential aspects of living with and beyond breast cancer. This social contact, therefore, is a crucial element in the delivery of accommodations at work that support the person's needs. Hakanen & Lindbohm (51) also highlight the importance of social resources at work to support work engagement following a diagnosis of cancer. Our findings make clear the importance of realistic and supportive advice given in relation to work and help provided in shaping work-related decisions across the women's cancer journey. Clear consensus and guidance is a recommendation echoed within the existing literature (11,20,25,34). It is also evident from our findings that there are multiple aspects of the meaning of work, which include the psychosocial work environment, that are important following a diagnosis of cancer. This requires further study.

In turn, the findings do imply a need to provide line-managers, occupational health and HCPs with appropriate and up-to-date evidence-based knowledge and training to ensure that they can provide information and advice. Despite being highlighted in previous studies, there is still an acknowledged need for clear systems in place for the exchange of information between these groups and other stakeholders (2,11,34).

This study makes a strong contribution to knowledge. It is, however, important to recognise the limitations of this work. As was the intention, this is grounded within a UK context. Given

the professional background of the women, access to additional financial resources may have influenced the decisions that they subsequently made about work. There is a need to also explore the lived experiences of women working in non-professional and insecure occupations, to understand the unique challenges faced by this population. The interviews were conducted either face-to-face or by telephone raising the question of whether the method used effected the data collected. The data from the 15 participants were scrutinised to determine whether or not there were obvious and substantive differences by method. None were detected.

Conclusion

The findings from this study demonstrate the complex interplay between living with cancer, treatment decisions and work. The goal of research in this area is to develop recommendations for health care and work-based practice to support working women with breast cancer in relation to work engagement, in the way in which they desire. This study highlights two key areas for inclusion in practice: 1) support from HCPs in managing the diagnosis of cancer and threats to self-identity and judgements of functional ability and work ability and 2) the role of others in managing cancer, treatment and work, in particular line managers within the organisation.

Word count 4,995 excluding abstract, table and refs

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Table 1: Demographic characteristics

	Mean (SD) or n (%)
Age (years)	51.7 (5.3)
	Range 39-59
Marital Status	
Single	3 (20%)
Married or Civil Partnership	9 (60%)
Separated or Divorced	3 (20%)
Diagnosis	
Ductal Carcinoma in Situ (DCIS)	2 (13.3%)
Grade 1	2 (13.3%)
Grade 2	4 (26.7%)
Grade 3	6 (40.0%)
Missing	1 (6.7%)
Cancer treatment	
Lumpectomy	11 (73.3%)
Mastectomy	5 (33.3%)
Chemotherapy	8 (53.3%)
Radiotherapy	12 (80%)
Hormone Therapy	12 (80%)
Biological Therapy	1 (6.7%)
Educational Level	
Diploma/HND/HNC	7 (46.7)
Bachelor's Degree	6 (40)
Master's Degree	1 (6.7)
Professional Degree	1 (6.7)
Occupation*	
Healthcare	4 (26.7)
Education	4 (26.7)
Business and related research professionals	3 (20)
Marketing and sales	1 (6.7)
Protective services	1 (6.7)
Public services	1 (6.7)
Social services	1 (6.7)
Work status at diagnosis	
Working full-time	6 (40.0%)
Working part-time	5 (33.3%)
Self-employed	1 (6.7%)
Work continuation during treatment	, ,
Yes	2 (13.3%)
No	13 (86.7%)
Current work status	
Working full-time	6 (40%)
Working part-time	4 (26.7%)
Self-employed	1 (6.7%)

Not currently working/on sick leave	3 (20%)
Retired	1 (6.7%)



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