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## Returning to Work after Cancer: Quantitative Studies and Prototypical Narratives

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### Abstract

**Objective**—A combination of quantitative data and illustrative narratives may allow cancer survivorship researchers to disseminate their research findings more broadly. We identified recent, methodologically rigorous quantitative studies on return to work after cancer, summarized the themes from these studies, and illustrated those themes with narratives of individual cancer survivors.

**Methods**—We reviewed English-language studies of return to work for adult cancer survivors through June, 2008, and identified 13 general themes from papers that met methodological criteria (population-based sampling, prospective and longitudinal assessment, detailed assessment of work, evaluation of economic impact, assessment of moderators of work return, and large sample size). We drew survivorship narratives from a prior qualitative research study to illustrate these themes.

**Results**—Nine quantitative studies met 4 or more of our 6 methodological criteria. These studies suggested that most cancer survivors could return to work without residual disabilities. Cancer site, clinical prognosis, treatment modalities, socioeconomic status, and attributes of the job itself influenced the likelihood of work return. Three narratives - a typical survivor who returned to work after treatment, an individual unable to return to work, and an inspiring survivor who returned to work despite substantial barriers - illustrated many of the themes from the quantitative literature while providing additional contextual details.

**Conclusion**—Illustrative narratives can complement the findings of cancer survivorship research if researchers are rigorous and transparent in the selection, analysis, and retelling of those stories.

### Keywords

Cancer; oncology; survivorship; work function; quality of life; qualitative research; narrative medicine; review

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Conflict of Interest

The authors state that there are no financial or personal relationship conflicts of interest.

## Introduction

Over 40% of the 10 million cancer survivors in the United States are of working age [1]. Their capacity to return to work has implications for their own quality of life and financial well-being, as well as for their families and society as a whole [2]. In the last five years, several large, well-designed studies have provided important new information about the likelihood of returning to work after cancer treatment, the socio-demographic, clinical, and workplace considerations that affect work return, and the functioning of cancer survivors in the workplace [3-12].

Traditionally, the findings of research in cancer survivorship and other fields have been disseminated primarily within the academic community, through national meetings and scientific journals. This approach to scientific communication potentially overlooks many important “users” of that research, including cancer survivors and their families, employers, media, and policy-makers. Even if these audiences become aware of relevant research, their difficulty in interpreting quantitative findings poses an additional barrier to using that research in making clinical and policy decisions [13]. Evidence from cognitive psychology and health communications research suggests that individual narratives can complement quantitative data to inform hypothetical and actual health decisions [14-17]. In recognition of this effect, a recent National Cancer Institute (NCI)-sponsored working group suggested that researchers explore the use of individual narratives to facilitate research dissemination [18]. The NCI has also funded grants to test methods of using “compelling stories” to disseminate the findings of ongoing cancer control research [19].

Quantitative researchers are often instinctively reluctant to use narratives to illustrate the findings of their studies, because of concerns about subjectivity and bias. This issue has long been recognized by qualitative researchers, who have developed rigorous methods for identifying, recording, and analyzing narratives. In this paper, we draw upon both quantitative and qualitative research traditions to provide a “mixed method” review article on return to work after cancer. To accomplish this, we will update our prior review [20] of methodologically rigorous quantitative studies on this topic, then summarize the recurring themes in those studies, map those themes to individual survivorship narratives derived from our qualitative research [21], and recount three prototypical narratives that illustrate those themes.

## Methods

### Identification of rigorous quantitative studies

To identify high-quality, quantitative studies on return to work after cancer, we first updated our review of studies on this topic published prior to 2003 [20]. We identified newer potential studies for inclusion through a search of the MEDLINE electronic database using the search terms work, return to work, employment, neoplasm, and cancer. We identified secondary sources by searching the reference sections of relevant articles and reviews, as well as identifying papers that cited studies which met our inclusion criteria. We evaluated only original research studies, published in English, that included adult cancer survivors of working age ( $\geq 18$  yrs) and that included work outcomes after the diagnosis of cancer. Studies of adult survivors of childhood cancer were excluded, as were analyses of secondary data sets and qualitative studies. We also excluded studies that assessed work as part of a broad assessment of quality of life after cancer, because they often included unpaid work or assessed work only as a small component of the research question.

In our original review, we proposed six methodological criteria to assess these studies: enrollment of a population-based sample of cancer survivors; prospective and longitudinal

assessment of an inception cohort of cancer survivors; detailed assessment of work intensity, role, and content; assessment of the impact of cancer on the economic status of the individual and the family; assessment of multidimensional moderators of work return and work function; and adequate sample size for multivariate analysis. We described the rationale for these criteria, which are based on established criteria for the validity of observational studies, in our prior paper [20]. For the current review, we refined the final criterion (sample size) to include a requirement that the response rate for cross-sectional surveys should be  $\geq 60\%$ . We included papers from our prior review that met at least 4 of these 6 criteria and were published after 1996, and added papers published between 2003 and June, 2008.

For papers included in the review, we then identified common themes, including the proportion of cancer survivors who returned to work; the time course of work return; several socio-demographic, clinical, and work-related characteristics that moderated work return, and the proportion of individuals who returned to work but noted impairments in work functioning.

### Mapping themes to individual survivorship narratives

As a source of individual narratives about work return after cancer, we used data from a qualitative research study that we conducted in 2002–3. The method of subject selection and our interview guide have been described previously [21]. In brief, we used the Colorado Central Cancer Registry to identify 240 individuals aged 21–66 from the metropolitan Denver, Colorado, area who were working at the time of their cancer diagnosis, spoke English or Spanish, and who agreed to participate. The sample was stratified on the basis of average household income, age, and prognosis of the primary cancer. We contacted the treating physician to identify patients whom we should not contact or who had died, and sent study materials to the remaining 147 individuals, of whom 89 were contacted. Forty five of these individuals were interested in participating, 35 met eligibility criteria, and 28 completed qualitative interviews. The final sample of cancer survivors was 50% male, with a median age of 45 years. Eight respondents were Latino (of whom 3 were interviewed in Spanish). We completed the interviews an average of 32 months after diagnosis of cancer. This study was approved by the Institutional Review Boards of the Colorado Department of Public Health and Environment and the University of Colorado Denver, and all participants provided informed consent.

Subjects were interviewed in person by trained qualitative researchers using a semi-structured interview guide that prompted participants to express their ideas and experiences on a range of topics related to returning to work after cancer, including the impact of cancer on relationships with employers, co-workers, family, and health care providers. Interviews generally required 60 to 90 minutes to complete. All interviews were transcribed verbatim and translated into English as necessary.

For the current paper, two experienced qualitative researchers (CTN and DSM), including one who conducted many of the initial interviews (CTN), reviewed the transcripts of all 28 interviews and identified several that exemplified many of the themes from the quantitative literature and were particularly compelling as narratives. A third researcher (JFS) then read each transcript and identified whether that interview addressed each of 13 specific themes from the quantitative literature. For example, since quantitative evidence suggested that older workers are less likely to return to work after cancer, the transcript of either a younger worker who returned to work or an older worker who did not return to work confirmed that theme, while a younger worker who did not return to work was rated as not confirmatory of that theme.

## Selecting and summarizing narratives

We identified illustrative narratives based on an observation of the cognitive linguist George Lakoff, who has suggested that members of any category (such as working-aged cancer survivors) can be related to an abstract prototype of that category in three ways [22]. Typical cases can be used to draw conclusions about normal category members since they are most representative of the category. “Nightmare” cases are cautionary tales which exemplify outcomes that one would hope to avoid. “Ideal” or “inspirational” cases can be used as standards or benchmarks that show what may be possible under exceptional circumstances. JFS selected one transcript that fit each prototype, and prepared brief narratives with a consistent time sequence and form, using 7 topics as appropriate: clinical information, work before cancer, work after cancer, financial concerns, family issues, workplace issues, and reflections on work. These narratives omitted the individual's exact age and details about the clinical diagnosis and worksite in order to preserve confidentiality. The summaries were then reviewed and edited by CTN and DSM to assure their fidelity to the original interview.

## Results

### Identification of rigorous quantitative studies

Nine quantitative studies met at least 4 of our 6 methodological criteria [3-12,23-25]. Relevant findings from three studies were presented in multiple publications, and are summarized here [4,6,7,8,11,12,25]. An additional cross-sectional study that met 4 criteria was excluded on the basis of a 41% survey response rate [26]. The findings of these studies are summarized in Table 1.

### Summary of recurring themes

In these 9 studies, between 64% and 84% of cancer survivors returned to work. Two of the three studies that assessed individuals at multiple time points suggested that the rate of work return increased over the first 12–18 months after treatment [5,8]. One large study found that individuals with hematological malignancies were less likely to return to work, while those with breast or prostate cancer were more likely to return to work than those with other primary sites [8]. A population-based study in Finland found that individuals with cancers of the lung, stomach, nervous system or hematological malignancies were less likely to return to work [3]. Individuals with advanced stages and/or more intensive cancer treatment such as chemotherapy were less likely to return to work than those with early-stage cancer [5,8,9,25].

These studies assessed moderators of return to work using widely different methods. Despite this, several socio-demographic characteristics predicted an inability to return to work: older age [6,9,25], female gender [8], lower income [6], lower education [3,8] and minority race [9]. Clinical factors associated with not returning to work included worse baseline health status [9], the presence of co-morbid chronic health problems at the time of diagnosis [8], depression [25], and development of a second or recurrent malignancy after treatment of the index cancer [4,8]. Work characteristics such as a job with high physical demands [3,8,9,23,25] or patient self-report of physical limitations [23,25] predicted failure to return to work. Several logistical and workplace factors were associated with not returning to work including difficulty with transportation [23], union membership [6], and employers who were unaccommodating or discriminatory [9]. Among those who returned to work, 16%–30% reported work-related disabilities [5,8,10] most commonly problems with physical effort, heavy lifting, stooping, concentration, and keeping up with the work pace set by others.

## Mapping themes to individual survivorship narratives

The summary narratives for the three prototypical cases are presented in Table 2. Survivor A, a young white man who underwent surgery and chemotherapy for testicular cancer, was typical of the majority of cancer survivors who are able to return to work without residual disability. Survivor B, a young English-speaking Latino man of lower socioeconomic status with a germ cell tumor, illustrated the “worst case” of an individual who intended to return to work but could not do so. Survivor C, a young Spanish-speaking woman with chronic leukemia treated by chemotherapy, represents an inspirational case of overcoming substantial barriers in order to return to work despite residual fatigue and work disability. Table 3 shows how each story “mapped” to 13 major themes identified in our review of the quantitative literature. Survivor A, the typical case, had 9 of the 13 attributes associated with returning to work. Survivor B, the worst case, had only 5 of 13 attributes that predicted returning to work. Survivor C, the inspirational case, returned to work despite exemplifying only 4 attributes of individuals who were likely to do so.

## Discussion

In our review of the quantitative literature on return to work after cancer, we identified 9 studies from the United States, Canada and Europe that met most methodological criteria for validity and provided important and generally consistent information about the likelihood of returning to work and the moderators of work return among cancer survivors [3-12,23-25]. In aggregate, these studies suggest that most cancer survivors can return to work, and that relatively few of those who do return experience residual disabilities that impair their work performance. The prognosis of the cancer, the modalities of treatment, several indicators of socioeconomic status, and certain attributes of the job itself and the work environment appear to be important moderators of work return.

These studies focused on the most easily quantifiable aspects of the problem of returning to work after cancer, and produced statistical summaries of the experience of groups of cancer survivors. A recent NCI working group suggests that narratives may help many potential audiences find meaning in quantitative research findings and more easily incorporate those findings into clinical or policy decisions [18]. Following the suggestions of this panel, we used a “mixed method” approach to illustrate the findings of our quantitative review of the literature through three prototypical, individual narratives. We drew these narratives from rigorous qualitative interviews [21], and systematically explored the relationship between those narratives and themes from the quantitative literature.

The term “mixed method” research can be applied to different combinations of qualitative and quantitative research. In a typology of mixed method evaluation designs proposed by Greene and colleagues [27], our study best exemplifies the approach of *complementarity*. In this approach, quantitative and qualitative methods are used to assess different but overlapping aspects of a research topic. Morgan [28] expanded this concept by suggesting that the relationship between qualitative and quantitative methods in a complementary research design could be understood in terms of both the priority of the methods and the sequence in which they were used. In our paper, identifying themes from a review of quantitative studies was our highest priority and, accordingly, the first research method we used. This quantitative review was followed by the use of qualitative data to illustrate these themes. While both Green and colleagues and Morgan focus their discussion on the collection of primary data [27,28], our paper demonstrates that a complementary, mixed-method design may be useful for illustrating the findings of a review article that summarizes the findings of multiple prior studies. Further, existing qualitative data may obviate the need to collect new prototypical stories to illustrate the themes from a quantitative study or review.

## Methods for complementing quantitative data with narratives

If researchers are to use narratives to aid in disseminating research findings, they must define methods of selecting, analyzing, and retelling those stories. This paper proposes approaches to all three components of this process.

The selection of narratives to aid in research translation inevitably includes both scientific criteria and aesthetic judgments. We selected cancer survivors for our original qualitative study from a population-based cancer registry, using purposive sampling to identify individuals across the age range, as well as from individuals with poor-prognosis cancer sites and lower socioeconomic status who had often been omitted from prior research. While this recruitment strategy clearly led to preferential enrollment of individuals who were willing and able to tell the story of their cancer treatment and its impact on work, the resulting stories remained more representative than those derived from a “convenience sample” of patients from an unidentified source, as is common in media reports [29], or from a qualitative study conducted in a single tertiary cancer treatment center, as is common in the research literature [30]. We then selected interviews that illustrated many of the themes from the quantitative literature, that represented the three prototypical cases (typical, worst, and inspirational) suggested by Lakoff [22], and that might be compelling to readers.

In our original paper [21], we employed standard methods of qualitative analysis to identify themes from these interviews. Experienced qualitative researchers elicited these stories using a semi-structured interview guide and recorded the entire interview for transcription, then used qualitative analytic software to complete an iterative, team-based ‘editing’ style of analysis. Our analytic approach in the current paper differed because we identified potential themes in the three narratives from a list of topics addressed in prior quantitative research rather than from the interviews themselves. Thus, the themes in Table 3 constitute only a subset of the issues that may in fact be important to cancer survivors. Although some of these themes (such as the effect of gender and age on work return) were not explored directly in the interviews, the participants described issues such as the physical demands of the job and the economic consequences of cancer in great detail.

The mapping process also allowed us to develop an operational definition for the three conceptual prototypes proposed by Lakoff [22], based on the number of themes exemplified by each case. A “typical” case should illustrate most if not all of the quantitative themes and should experience the most common outcome (returning to work), while the “worst case” should illustrate few if any of those themes and should not experience that outcome. An “inspirational case”, in contrast, should experience the outcome of the typical case despite exemplifying as few of the attributes conducive to work return.

Traditional qualitative studies present results in the form of quotations extracted from extensive interviews. In retelling these stories for the current paper, we opted instead to restructure the interviews into brief narratives in a standard form, “stories with a teller, a listener, a time course, a plot, and a point” [31, p. 330]. This approach facilitated comparison between the three cases as well as the process of mapping the cases to quantitative themes. Recognizing the inevitable subjectivity of this process, we took care to have multiple researchers confirm both the fidelity of the narratives to the original transcripts and the accuracy of the mappings in Table 3.

## The value of narratives to illustrate quantitative research

In addition to illustrating themes from the quantitative literature, the narratives provide information that is complementary to the quantitative studies. First, the stories demonstrate interactions between themes in ways that a quantitative study cannot. For example, Survivor C describes strong support from her work supervisor (theme: accommodating workplace),



who modified her job duties (theme: physical demands of the job) in response to her severe fatigue after chemotherapy (theme: impact of treatment modality). Survivor B vividly describes the tension between the physical limitations that restrict his capacity to work (theme: physical demands of the job) and the financial obligations that motivated him to try to resume working (theme: the relationship of income to work return).

Second, these stories provide contextual details that quantitative studies typically do not capture. All three survivors described their work as an integral component of their personal identity. None of the quantitative studies in this review assessed personal attitudes toward work, although they might be highly influential in work decisions. Survivor A's matter-of-fact tone suggests an emotional stability that may have helped him recover quickly, while Survivor C's frequent laughter during the interview implies a resilience that may have helped her overcome the many barriers she faced. Such details point out limitations of existing quantitative studies and suggest hypotheses for testing in subsequent research.

Third, narratives can describe the relationship between themes and outcomes in a tangible way. While a quantitative study can identify significant associations between work return and its socio-demographic, clinical, and workplace moderators, only a narrative that explicitly combines those moderators can show how multiple risk factors join over time to affect that outcome. For example, Survivor B demonstrates how chemotherapy can cause physical symptoms that in turn impair work function, leading him to fail in his attempts to return to work, and ultimately prompting him to obtain disability.

Finally, a long history of cognitive research suggests that the framing of experience as narrative enhances encoding and recall of information for readers or listeners [32,33]. This observation may explain why a combination of quantitative data and narratives may be more effective in changing health behavior than either information source alone [34]. While we have taken a first step toward combining quantitative and narrative sources of information, we did not assess the ability of mixed-method approaches such as this to help readers understand the state of the science or guide decisions. This area requires further research.

### Limitations and cautions

“Case reports” of individuals are devalued in quantitative health care research because of their susceptibility to bias [35]. Researchers who use narratives to enhance the dissemination of their research must be attentive to their own potential for bias in selecting narrators, collecting, summarizing, translating (as in the case of Survivor C), and presenting their stories. A transparent and rigorous process of selection and analysis can at least partially overcome the common concern that the narrators of stories used to illustrate research findings are merely “poster children” chosen to reflect the underlying opinions of the researcher. This approach will also distinguish such reviews from most media reports and testimonials by policy advocates, who rarely disclose how they chose their stories. For example, a 2008 *Newsweek* article on return to work after childhood cancer reported two stories of individual cancer survivors, but did not indicate how those particular survivors were chosen as exemplars [29].

Underlying value judgments or uncommon but important themes may not be exposed by stories that simply illustrate the findings of quantitative research. For example, quantitative studies typically assume that it is personally and socially desirable for cancer survivors to return to work after treatment. While many survivors, their families and employers would endorse this value, others may find that cancer provides an opportunity to quit a job that no longer aligns with their life priorities. Such important issues can only be explored in formal qualitative studies.

Although we used written narratives in this paper, other media such as audio or video recordings may be helpful in research translation [34]. The increasing use of the Internet to post such recordings raises the possibility that the work narratives of cancer survivors may be made directly available to many audiences beyond the traditional scientific community. The credibility of such narratives may be further enhanced by identifying narrators who are concordant with the culture or perspective of a specific audience [34]. For example, cancer survivors and their families may be interested in different stories or themes than employers or clinicians.

In summary, our review of recent, methodologically rigorous research on return to work after cancer suggests that most cancer survivors can return to work, although barriers such as comorbid medical conditions, low socioeconomic status, and the physical demands of the job itself are common. Novel approaches to research translation, such as a complementary, mixed-method combination of quantitative data with individual narratives, may be useful to enhance dissemination of research findings to potential “users” beyond the academic community. [37] If researchers intend to use individual narratives for this purpose, they must be scrupulous in their approach to selecting, analyzing, and recounting them. In turn, the audiences for such stories should critically appraise the sources of qualitative narratives and the methods of retelling them.

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**Table 1**  
Methodologically high-quality studies of return to work among cancer survivors

Study (N employed at time of diagnosis)	Criteria met*	Cancer site(s)	Returned to work (time after diagnosis)	Moderators of failure to return to work or reduced work capacity	Reduced work capacity <sup>†</sup>
Satariano [23] (296)	A,B,E,F	Breast	72% (2–4 months)	Need for transportation assistance, reduced upper-body strength, physical demands of job	N/A
Bradley [24] (253)	A,D,E,F	Breast, colon, lung, prostate	67% (5–7 years)	None identified	23%
Spelten [12,25] (235)	B,C,E,F	Multiple	64% (18 months)	Cancer site, chemotherapy or radiotherapy (vs. surgery alone), increased age, physical workload of job, physical complaints, depression	N/A
Taskila-Abbrandt [3] (12542)	A,B,E,F	Multiple	82% (2–3 years)	Cancer site, lower education, physically demanding occupation	N/A
Maunsell [6] (646)	A,B,C,D,E,F	Breast	79% (3 years)	Older age, new breast cancer, lower income at diagnosis, union membership	N/A
Bradley [5] (267)	A,B,C,E,F	Prostate	72% (6 months) 81% (1 year)	Advanced cancer stage, surgery, chemotherapy or radiation therapy (vs. hormonal therapy, 6 months only)	22–30% with disabilities
Short [8,11] (1433)	A,B,C,E,F	Multiple	73% (1 year) 84% (5 years)	Cancer site, advanced cancer stage, new or recurrent cancer, female gender, lower education, other chronic conditions, physical demands of job	21% (women) and 16% (men) at 32 months 32% (women) and 27% (men) at 46 months
Bouknight [9] (416)	A,B,C,E,F	Breast	82% (12 months) 83% (18 months)	Advanced cancer stage, worse baseline health status, unaccommodating employer, jobs requiring heavy lifting, employer discrimination (12mo)	N/A
Gudbergsson [10] (430)	A,C,D,E	Breast, Prostate, Testicle	N/A (all respondents were working)	Older age, black race, worse baseline health status, unaccommodating employer (18 mo)	20% (women) and 19% (men) with moderate physical work capacity or less 21% (women) and 14% (men) with poor to moderate mental work capacity

\* Out of 6 methodological criteria: A (population-based sample); B (longitudinal assessment of inception cohort); C (detailed assessment of work); D (assessment of economic impact of cancer); E (assessment of moderators of work return); F (adequate sample size).

<sup>†</sup> Proportion among individuals who returned to work

**Table 2****Three illustrative narratives of work return in cancer survivors****Survivor A: A young man who is able to return to work – typical case**

Clinical information: Treated for testicular cancer with surgery and chemotherapy

Work before cancer: Telecommunications. I loved that. We handled servers in 14 states and we had a small group of people, and we got along really well. I was going from...IT administrator... to another position and this all [cancer] happened at the same time; so I hadn't even quite learned how to do my new job when I got diagnosed.

Work after cancer: I completely stopped for 4 months. After chemo I felt really different. Plus, my hair went out and now I just keep it shaved. After my chemotherapy I probably could have come back, but I waited another month and I really didn't want to come back. When I did, this new position had very odd hours. It wasn't really a 40 hour work week, but I was on salary. My manager was at another office, so he couldn't keep tabs on me and often times I would just go home. I started going on hikes and doing stuff with my roommate and that sort of thing. I got better pretty quickly. My work has always been at a desk. Typing away. So, it [cancer] didn't really affect my work at all. When I came back, I did want to be productive. I wanted to start school and I really wanted to get some things done I wanted to accomplish something...

Financial concerns: I was receiving worker's compensation and I think I was receiving about 90% of my salary. Well, I had to go back. I had a mortgage to pay, I had to work. My parents can't really offer me any kind of support at all.

Family issues: It was my mom who took care of me [during treatment and recovery].

Workplace issues: They were pretty cooperative. Yeah. I told my new boss and he was really good and he directed me to speak with somebody in Human Resources and they handled everything. It was really difficult because I didn't know if I wanted them [coworkers] to know or not. Especially 'cause then they would ask what kind and I had testicular cancer, but at the same time, I didn't have any symptoms except that my back hurt, which wasn't a big deal, but...I was kind of embarrassed having to say it was testicular cancer so I didn't really want to go into all of the explanations so I'd just say I had cancer.

Reflections on work: My roommate came from a wealthy family- I came from a really poor family - so my attitude had always been to get a higher paying job. To get the best job I could and just to work whether I liked it or not. His attitude was get a job that you love. You never have to work. I thought 'Oh, that's impossible.' So with this cancer, I think I really started to think along those lines more and getting into something that I wanted to do instead of something that I have to do for money. I would take a position that pays less if it was just fun or more fulfilling in some ways. I want to get my Bachelor's Degree and I still want to stay in the computer field, but something a little more fun I think.

**Survivor B: A young man who is unable to return to work – worst case**

Clinical information: Treated for a malignant germ cell tumor with chemotherapy and surgery

Work before cancer: I worked at a factory making pottery and stuff. 40, 50 to 60 hours per week. It was easy work, but a lot of lifting.

Work after cancer: After my cancer, I had to stop work 'cause that's when I started chemo. A lot of pain and you get tired real fast. After the operation I tried to do things, you know, but it just sucks the energy out of me. If you stand on your feet too long you're going to start hurting. If you sit down too much, your butt starts hurting... your feet, your hands. After I did my chemo, I did go back awhile and then I couldn't work. I got another part-time job. It was like 20 [hours] per week. Price systems, figuring out how much and stuff, mostly sitting down, but like I said, it goes into your butt and your back. That got to be hard too. Then I tried another manufacturing job after I did chemo, so I was there about a year. It was easier.

Financial concerns: I just had a lot of bills, so I had to get something to...catch up, cause I got a big family. I had a social worker...who helped me out with my bills 'cause that was mostly what I was thinking about. They paid off my furniture. I had rental furniture and I was almost done paying for it, so they just paid off the remaining balance I had. 'Cause we kept hiding from them [rental center]. Every time we seen a rental center truck I would have my kids at different windows and they'd say, there goes a...[name of rental company] truck and I'd pull this window down. It's affected us money-wise a lot. I've got some social security and disability. That was what covered my Medicaid. I wasn't on health insurance through my company, I wasn't there long enough yet. Disability was only \$249 a month though. I couldn't pay nothing really with that. Thank God we were living in [public housing] because ... if you didn't make no money, your rent would go to exempt and so we were paying like \$25 for rent. Then the surgery, well I got a bill right now for \$20,000 and I can't pay that. So that's why I'm still in low-housing. They just give me bad phone calls and tell me I need to pay that. It's going to go to a collection agency and I said well, you can't get blood out of a turnip.

Workplace issues: I told them at work that I couldn't work, but they held my job for a few months, but then I told them I couldn't come back because you couldn't hold my job for over a year. The coworkers were sending me money to pay my bills and stuff. 5–10 bucks. They just told me, if you don't feel good enough to work, you shouldn't go to work. The chance of you getting hurt and stuff like that is greater.

Reflections on work: [When I stopped working] it got harder and then it just seemed like it was more stress than it was good. I like to work. I would like to go back to work. I feel like that is what a man is supposed to do – be working all the time. Providing for his family. I've been a carpet cleaner and I'd like to go out and clean people's carpets once in awhile when people need it – for extra money and stuff. But see, that's only for about an hour, so I can do that. Work for a little while, then take a break and work for a little bit more. If I got an inheritance and I was able to work, I would still want to work. It's just in me that you need to do that. It makes the world go around.

**Survivor C: a young woman who returns to work despite substantial barriers – inspirational case\***

Clinical information: Treated with chemotherapy for chronic leukemia

Work before cancer: I worked in a warehouse. Moving boxes. I was putting prices on the clothes, and I would check the quantity of clothes that arrived. Everything would come in there and we would send it all out to the stores. Eight hours - full-time.

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**Survivor C: a young woman who returns to work despite substantial barriers – inspirational case \***

Work after cancer: When they got the results from the bone marrow, then they gave me chemotherapy. The doctor told me that I shouldn't work for a year. When I had a little more energy, I asked the doctors, 'Can't I go back to work?' And they told me that no, that my defenses were still bad, because they told me that at any job, there was a lot of dust, that a lot of people would be sick, that I wouldn't be able to tolerate it. And [the doctor] said, 'Where do you want to be? At home or in the hospital?' He said, 'When I feel that you are able to return to work, I will tell you.' And still, I went. [My supervisor] said, 'Come on back.' I worked three days. But I felt worse and I got scared. She said, 'Maybe you should wait until the doctor tells you.' [I didn't tell] the doctor that I went back.

When my doctor told me that I could go back, but that I would have to use the mask all the time. Before, I could move things, carry things. I can carry some things, but not like before. I don't have the strength. When I went back to work, they told me that they knew I wasn't going to be able to work the same as before. That if I needed to take a rest, it was okay. In production, they put a person on the other side to do the same thing that I am doing. And we do the same amount. (Laughs.) Last year, when we started, we worked differently. And [now] I feel that I am equal. And the supervisor says [to my coworker], 'Look at her, she's ill and she still does more than you.' I think that I don't do as much work, but I do.

Financial concerns: Economically we missed the income. It helps for both [me and my husband] to be working.

Family issues: The children wanted that I return to work, so that I could leave them alone. (Laughs.) They said, 'Well, Mom we can do the cooking and everything. You won't have to do anything in the house.' And I got a lot of support from my husband. He said, 'I know that you can't do everything like you could before.' Before I didn't really expect help. Before, I could do everything that I had to do, but now I can't. Now when I get home and I'm a little tired, I have to sit down.

Workplace issues: I told my supervisor [when she first had symptoms] and she [supervisor] wanted to take me to the hospital because she had cancer before. She told me, 'Go to the clinic so that they can give you an exam.' And when I went to clinic, she called me and asked, 'What happened? What did they tell you?' And I told her that my white and red blood count was low. Then she started crying. She said, 'I'm afraid that you may have what I have.'

Reflections on work: I started working when I was 13 years old. I got married and at first I didn't work. But I said, 'I can't not do anything.' It was like I had to. When I was at home, I wanted to be working. My sister-in-law left her children with me. But I told her, I can't keep watching the children. (Laughs) When I'm at home too much, I get depressed. I would like to be able to do more heavy work, but I can't. My bones always feel like they're weakened.

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\* Interview translated from Spanish

**Table 3**

Relationship between themes from quantitative literature and individual stories

<b>Theme</b>	<b>Survivor A (testicular cancer, typical case)</b>	<b>Survivor B (germ cell cancer, worst case)</b>	<b>Survivor C (chronic leukemia, inspirational case)</b>
Most survivors are able to return to work	Yes (+)	No (-)	Yes (+)
Likelihood of work return increases over time	Returned quickly (+)	Unable to return despite multiple attempts (-)	Ultimately able to return (+)
Specific cancer sites have better prognosis for work return	Prognosis for testicular cancer not assessed in literature (-)	Prognosis for germ cell cancer not assessed in literature (-)	Returned despite poor-prognosis cancer site (-)
Individuals with less advanced cancer stage are more likely to return to work	Returned despite advanced stage cancer (-)	Unable to return after advanced stage cancer (+)	Returned despite advanced-stage malignancy (-)
Individuals not receiving chemotherapy or radiation are more likely to return to work	Returned after completion of chemotherapy (-)	Unable to return after chemotherapy (+)	Returned after completion of chemotherapy (-)
Younger workers are more likely to return	Younger (+)	Younger, unable to return to work (-)	Younger (+)
Men are more likely to return to work	Male (+)	Male, unable to return to work (-)	Female but returned to work (-)
Individuals with higher income are more likely to return to work	Higher income (+)	Low income, unable to return to work (+)	Low income but returned to work (-)
Individuals with higher education are more likely to return to work	Less education (-)	No information	No information
White workers are more likely than racial/ethnic minorities to return to work	White (+)	Latino, unable to return to work (+)	Latina but returned to work (-)
Workers with less physically demanding jobs are more likely to return to work	Job had low physical demands (+)	Job with high physical demands, unable to return to work (+)	Returned to work despite job with high physical demands (-)
Workers with accommodating employers are more likely to return	Helpful employer (+)	Unable to return despite helpful employer (-)	Helpful employer (+)
Residual work-related disabilities are uncommon in those who return	None (+)	Not applicable – did not return to work	Returned despite fatigue, weakness (-)
Number of themes represented (out of 13 total)	9	5	4
Overall theme of narrative	Illustrative of cancer survivors who return to work	Illustrative of cancer survivors who do not return to work	Inspirational survivor who returns to work despite barriers