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Lymphedema and psychosocial well-being: a mixed-methods exploration of resources and challenges in the Italian context

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Abstract

Introduction. Individuals affected by lymphedema, both primary and secondary, experience a significant reduction in quality of life and functional capacity. However, the impact of lymphedema on occupational life, specifically on return-to-work processes, remains largely unexplored.

Objectives. This study explores the psychosocial, occupational, and health-related challenges experienced by individuals with lymphedema, with a focus on work reintegration.

Methods. A mixed-method approach was adopted through the development of an online survey, which included both standardized psychometric scales and open-ended questions.

Results. The mediation analysis confirmed that return to work self-efficacy serves as a key mechanism through which optimism contributes to job satisfaction. Qualitative findings highlight the need for multilevel and systemic interventions. From an individual perspective, targeted self-efficacy training programs for workers with lymphedema appear crucial.

Conclusions. Considering a community and an organizational perspective, it is essential to implement training initiatives for healthcare professionals aimed at improving their knowledge and awareness of lymphedema.

Key words
- lymphedema
- return-to-work
- self-efficacy
- optimism
- job satisfaction

INTRODUCTION

Primary lymphedema is a chronic condition that can present from birth, especially in syndromic and/or hereditary forms, or it can progressively develop over the course of life. In both cases, individuals must shape their identity while living with lymphedema, surely facing significant social, occupational, and psychological challenges over time.

A slightly different situation is related to individuals with secondary lymphedema: impressive advancements in cancer treatment have significantly improved survival rates. However, a modest proportion of these survivors develop secondary lymphedema, with an estimated prevalence ranging from 10% to 30%, which may further increase depending on the type of oncological treatment received (surgery, radiotherapy, chemotherapy, or combinations thereof).

This twofold experience, surviving cancer and facing a lifelong physical burden as a lasting consequence of the cure, is a source of severe psychological distress, reduced quality of life, and challenges in personal, social, and occupational domains. The relief of cancer survival can be transformed into a daily struggle with physical limitation, altered self-perception and as a condition that is often misunderstood, underestimated, and insufficiently supported in both clinical and occupational settings.

What is particularly concerning and represents a serious and urgent issue from a multidisciplinary perspective, is the unexpected gap between the remarkable, and widely praised advances in cancer treatment and the limited attention given to lymphedema, from diagnosis to treatment, as well as in both community and individual management. Indeed, it was in 2012 when a

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qualitative exploration raised critical themes commonly reported by patients with secondary lymphedema, such as social marginalization, lack of support from healthcare professionals, impact on psychological well-being [1], which are still profoundly relevant today.

Despite the several studies on lymphedema across the years, the significant gap in psychosocial dimensions persists, even more concerning the professional lives of patients with lymphedema. Therefore, the aim of this mixed-method study is twofold:

- to explore the lived experience of individuals affected by lymphedema and the impact of this condition on their quality of life;
- to investigate whether individual and dispositional variables interact to support a successful return to work after lymphedema diagnosis.

The following sections of the manuscript present the theoretical framework related to psychological impact of lymphedema, dispositional optimism, job satisfaction and return-to-work self-efficacy.

LITERATURE REVIEW

According to our literature review, the first study examining lymphedema from a psychological perspective was conducted by Williams *et al*. [2]. Authors collected data from a very small sample of 15 individuals with different types of lymphoedema, exploring their experiences and perceptions. As a result, the theme of *uncertainty* emerged as a key major concern, as patients had very little information about lymphedema and it was a very disorienting factor.

Others critical psychological domains relevant to patients with lymphedema have emerged across several studies, mainly in United States (US), the most frequently reported difficulties were: body image disturbance, a negative perception of self, negative emotions such as fear, sadness, and loneliness, psychological distress, social isolation [1, 3-5].

The existing literature on the psychosocial impact of lymphedema is relatively extensive but remains largely focused on narrowly defined populations, particularly breast cancer survivors. One of the earliest and rare studies to explore perceptions and experiences in the work environment was conducted by Fu [6], their results highlighted a lack of support in the workplace and difficulties in performing specific physical tasks, featuring the occupational challenges faced by individuals with lymphedema [6].

Several subsequent studies investigated the psychosocial consequences of lymphedema, primarily in the context of breast cancer survivors [7-9]; a constant pattern emerged: patients with lymphedema reported significantly poorer general well-being compared to cancer survivors without lymphedema. These findings confirm a distinct psychological level associated with the lymphedema condition, more demanding of the experience of cancer alone.

A hypothetical complementary perspective is offered by Ridner *et al*. [1], who emphasized the critical role of nursing professionals in patient education and interdisciplinary training. Their study, which also focused on breast cancer survivors with lymphedema in the US, highlighted the importance of providing both patients and healthcare providers with knowledge about the physical and psychosocial challenges associated with lymphedema.

With regard to social consequences, such as work reintegration or employability concerns, research has demonstrated that lymphedema can cause negative measurable consequences in terms of reduced productivity [10], changing work roles [11], or career abandonment [10, 12]. The majority of studies considered women with post breast cancer lymphedema, thereby framing work-related challenges primarily in relation to physical limitations deriving from the impaired arm function.

Moreover, literature shows as workplace relationships with both colleagues and supervisors are affected by the lymphedema condition, making the return to work even more demanding because of the risk of stigmatization, a general lack of knowledge of the lymphedema among colleagues and supervisors, and the reduced perceived social support [13].

However, some studies also documented evidence of supportive interpersonal relationships at work, which can be a key resource enhancing a successful return to work. Perceived social support in the workplace has been also associated with improved quality of life among workers with lymphedema [14]; these research findings indicate that occupational health professionals can play an important role in raising awareness about lymphedema, and in facilitating a more inclusive and supporting return to work process [14, 15].

In the broader context of return to work after chronic illnesses or cancer diagnoses, there is an extensive literature on breast cancer survivors and only a portion of studies includes specifically individuals affected by lymphedema. What emerges as a recurrent and common theme across different conditions is the multidimensionality of the return-to-work experience. It is a process influenced by clinical dimensions, psychosocial factors, occupational and social environments and relationships [16, 17]. The return to work is also a rich symbolic phase, it cannot be reduced to a mere functional need of individuals who desire to overcome the physical consequences of the chronic condition, such as pain, fatigue, or swelling due to lymphedema. Returning to work represents a crucial stage in regaining a sense of personal control, identity and quality of life [18]. With a specific attention to return to work after diagnosis of lymphedema, the available evidence from the literature suggests a series of interrelated both positive and negative factors, which can be categorized into two main categories: individual or dispositional variables and contextual or environmental variables.

The latter ones, the contextual factors, include workplace relationships, policies, and dynamics that can either facilitate or threaten a successful return to work; these factors include positive dimensions such as perceived support from employers and co-workers, the flexibility of tasks and workstation as well. Conversely, those work contexts that lack adaptability or open communication, may enhance exclusion and feeling of psychological distress [19].

Moreover, the contextual elements are able to deeply impact a successful reintegration process, which should be meant as a profound social and psychological change and challenge, not a merely functional or logistical issue.

With regard to individual variables, there are demanding and objective physical constraints derived by the lymphedema condition, such as swelling, reduced mobility, or pain [17]. In addition, some psychological dimensions have been identified as potential barriers to an effective reintegration, and they are anxiety, reduced self-esteem, or depression [17, 18]. The positive side of psychological factors is represented by coping strategies, proactive attitude, self-efficacy, or resilience; for instance, individuals with higher levels of resilience and self-efficacy, reported a more effective return to work [18]. Moreover, evidence shows how coping strategies can be developed and learnt through experience, in particular when facing a challenging task as it is a new functional and physical status [13].

There are some specific psychological resources, which have received greater attention in the realm of specific theoretical models such as the social cognitive theory [20] that emphasizes the central role of self-efficacy in shaping personal goals and behaviours. Specifically, return to work self-efficacy refers to individuals' confidence in their ability to perform work related tasks in spite of physical or psychological limitations, or changes derived from a chronic illness. According to Bandura, self-efficacy is a powerful psychological mechanism able to produce an impact on wellbeing and general satisfaction with life; it is a significant predictor of motivation and successful occupational reintegration [21, 22].

Several studies have often suggested a relation between positive health outcomes and a personal characteristic, such as dispositional optimism. Research findings have linked optimism to some clinical and objective data, for example optimistic women resulted more likely to show a slower progression of carotid artery disease [23]; optimistic people with multiple sclerosis seem to have an easier pursuing life goal [24]; optimism has been associated also with a reduction of pain perception [25]. Thus, optimism has been shown in the literature to have a significant positive impact on psychological and physical well-being, but very few studies have investigated its role on return-to-work outcomes [26]. It seems to us particularly interesting to explore the potential interaction between these two key dispositional variables: return to work self-efficacy and optimism. They have a profound difference as the former can be trained and strengthened over time, as a dynamic factor. In contrast, optimism is considered as a stable personality trait, although in some conditions it may increase or decrease, depending on life events [27]. Some questions drove the hypotheses formulation: could a high level of optimism facilitate a more efficient and satisfactory return to work process? What can be the interplay between optimism and self-efficacy in the return to work after lymphedema diagnosis?

Based on these premises and framed by the theoretical approach defined by the social cognitive theory [28], this study proposes the following hypotheses (H).

H1. Dispositional optimism was positively associated with job satisfaction. Although this relationship has been supported in previous studies, we aimed to further test it in the specific context of return to work after lymphedema. Furthermore, dispositional optimism is thought to enhance individuals' belief in their ability to manage challenging situations, which aligns with the construct of return-to-work self-efficacy. Since optimistic individuals tend to approach setbacks with greater motivation and persistence, we hypothesized that dispositional optimism would be positively associated with return-to-work self-efficacy (H2).

Self-efficacy, in turn, is a well-established predictor of job attitudes. Employees who feel capable of performing their duties are more likely to experience positive emotions at work and report higher satisfaction. In line with previous literature on work reintegration and self-efficacy, e.g., [28, 29], H3 postulated a positive association between return-to-work self-efficacy and job satisfaction.

Finally, drawing from social cognitive theory, we expected that return-to-work self-efficacy would mediate the relationship between dispositional optimism and job satisfaction. This mediated model (H4) suggests that optimism indirectly enhances job satisfaction by fostering greater self-efficacy in managing work after lymphedema, highlighting a pathway through which personal traits influence work-related outcomes in the context of chronic illness recovery.

In addition, as the occupational life of individuals with lymphedema is still underexplored, this study also aimed to give voice to the personal and subjective dimensions of living with this chronic condition. To this end, a set of exploratory, open-ended questions was included with the specific aim of identifying key areas or themes that may inform the design and implementation of targeted future interventions.

METHODS

The study adopted a triangulated research design to ensure both the heuristic effectiveness of qualitative data and the reliability of quantitative techniques. In light of the methodological appropriateness paradigm [30], it was particularly important to investigate the research topic by a multidimensional approach as the phenomenon under investigation is complex and still partly unexplored.

Within this framework, an online *ad hoc* questionnaire was structured, including a brief section with open-ended questions and a survey with psychometric scales. The survey included the measures described below, followed by a series of open-ended questions to identify key areas or themes related to lymphedema experience.

Dispositional optimism was assessed using the 6-item scale developed by Chiesi *et al.* [31], an example of an item is: "In moments of uncertainty, I usually expect the best". Job satisfaction was assessed using the 3-item scale developed by Hackman *et al.* [32]; an example item is: "In general, I like working here". Return-to-work self-efficacy was assessed with the 11-item scale of Gjengedal *et al.* [33], an example item is: "I will be able to carry out my tasks at work." For each of these scales, a 5 or 7-point Likert scale (1="strongly disagree", 5 or 7="strongly agree") was used.

Data were analyzed applying the principles of grounded theory methodology [34], specific attention was also given to metaphors, symbolic representations, and individuals' narratives, thus contributing to a data-driven theoretical interpretation.

All research procedures complied with international ethical standards, despite the inclusion of human participants the ethical approval was not necessary for this study, because of the absence of specialized procedures or treatments that might inflict stress or harm on the participants. The research adheres to the principles outlined in the Declaration of Helsinki (World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects, 2024). Additionally, participants were informed about the handling of personal data, and we ensured anonymity in accordance with European Union (EU) Regulation. All participants were informed about the nature and purpose of the research and voluntarily participated after giving informed consent, in accordance with the principles of the General Data Protection Regulation (EU Regulation 2016/679). Participants were also explicitly informed that the data would be anonymized and used solely for research purposes in their aggregated way.

RESULTS

Participants and procedures

The cross-sectional study presented here was conducted from September 2024 to April 2025. The data collection took place online through a questionnaire with closed and open questions, administered via the Qualtrics platform, which took about 15 minutes to complete. The study sample comprises 131 individuals, 9 of whom were excluded due to incomplete data, resulting in a final sample of 122 participants. Of these, 11 were men and 111 women, with ages ranging from 21 to 87 years (mean=53.90, standard deviation, SD=2.47). Participants came from various parts of Italy: 39% from the North, 17.1% from the Centre, and 43.8% from the South, reflecting a fairly heterogeneous geographical distribution. Regarding educational attainment, 49.2% had completed secondary school, 6.6% held a three-year bachelor's degree, 36.1% held a two-year master's degree, and 8.2% had a postgraduate master's qualification or a doctoral degree. Regarding marital status, 62.3% of participants reported being married or in a domestic partnership, 24.6% were single, 4.1% were widowed, and 9% were separated or divorced.

Concerning the clinical characteristics, 51 participants reported being affected by primary lymphedema and 71 by secondary lymphedema. In 44 cases, the condition affected the upper limbs, and in 78 cases, the lower limbs. The onset occurred less than one year prior in 6.6% of cases, less than five years prior in 24.6%, between five and ten years prior in 30.3%, and more than ten years prior in the remaining 38.5%.

Most participants (64.8%) reported returning to work within six months of diagnosis, while 7.4% were unable to do so due to the condition. Another 15.6% were no longer employed at the time of diagnosis. Overall, 77 participants were employed, 10 unemployed, 4 on leave or sabbatical, and 31 retired. The majority (77%) reported current or past employment involving direct contact with clients or the public, while only 40% had held leadership or coordination roles. Descriptive statistics, correlations, and Cronbach's alphas are reported in *Table 1*. All variables correlate in the expected direction.

The qualitative section was created according to the explorative aim of the study; some questions are reported as follows:

- Which is your personal experience living with lymphedema (in terms of clinical, social, occupational dimensions)?
- Can you tell us what are the major challenges that you are facing because of lymphedema?

Qualitative evidences

The triangulation approach was ensured through both data collection and data analysis of qualitative information [35], in order to raise trustworthiness of data, to fully capture and maximise the participants' impressions and perceptions, and to enhance the understanding of the phenomenon. This procedure is consistent with the Standard for Reporting Qualitative Research (SRQR) [36] and it follows the guidelines established by the Critical Appraisal Skills Programme [37] for qualitative research.

The explorative and bottom-up analysis was performed independently by two separate researchers, with subsequent accordance calculated, conforming to the Cohen Kappa (0.87). The research team adopted an iterative and reflexive process to analyse and interpret the textual material, this process implied full openness to participants' contributions. Through the identification of recurring themes or patterns expressed by individuals, a categorical tree was developed to systematically organize and interpret the qualitative findings.

Table 1

Descriptive statistics for gender, Cronbach's alphas, and correlations among the variables

	2	3	Mean female	Mean male	SD female	SD male	Cronbach alfa
Satisfaction	0.534**	0.339**	5.00	5.71	1.31	0.98	0.91
RTW self-efficacy		0.336**	4.32	4.98	0.67	0.69	0.81
Dispositional optimism			3.67	4.64	1.02	0.54	0.80

SD: standard deviation; RTW: return to work self-efficacy; **the correlation is significant at the 0.01 level (two-tailed).

Four main themes emerged, each of which was related to others through both meaning and life implications:

1. personal and social identity: most participants (36 occurrences) reported feelings of discomfort, shame, and isolation. For instance, one participant stated: “I feel constantly observed and uncomfortable when I am around others”; others explicitly mentioned perceptions of shame or embarrassment. These narratives tell that lymphedema is not only a medical condition, but the physical manifestation is a threat to the expression of identity and self-confidence, and it directly impacts patients’ ability to maintain their professional roles. The cycle starts with physical symptoms and aesthetic changes, affecting self-image, which in turn undermine occupational identification;
2. occupational or professional challenges: several participants (28 occurrences) refer to work and the professional sphere. In particular, 9 participants talk about work-related difficulties due to physical symptoms (pain, swelling, fatigue, posture). Some examples are: “At the end of the working day I no longer have the strength to do anything”, “It is no easy to manage this condition: you must steal time from everyday life, family and work”, “Certain jobs are detrimental for lymphedema”. 9 participants refer to work limitations and adjustments after lymphedema diagnosis, including economic costs, such as: “I requested part-time work to allow more time for care” or “I was reassigned to lower-level tasks that are more compatible with the disease”. 8 participants declare a lack of protections and recognition of disability (e.g., “Those with secondary lymphedema are not considered unfit for work by the national social security system”; “It is unfair that it is not officially recognized as a disabling condition”). Finally, only 2 participants underline resilient work experiences (“I am lucky to work from home, which allows me to manage this condition” and “I have been able to maintain a decent quality of life thanks to workplace adjustments”). These experiences reveal how the workplace can amplify social exclusion and reduce autonomy, and highlight the compelling need for organizational policies more sensitive to chronic conditions like lymphedema;
3. psychological well-being: 42 participants refer to the concept of overall well-being, articulating the discourse in different ways, reflecting the complex and multifaceted nature of living with lymphedema. The most frequently represented aspects were psychological well-being and self-acceptance (14 occurrences). Participants described the emotional difficulty of accepting the illness and its visible consequences, often referring to psychotherapy or personal reflection as crucial steps toward adaptation. Statements such as: “I don’t accept myself physically”, “I had to start psychotherapy”, and “I’m beginning to find some balance” highlight the ongoing process of rebuilding one’s identity and emotional stability. References to quality of life and daily functioning (10 occurrences) reflect the profound impact of lymphedema on daily living. Respondents write that the disease “changes one’s life completely” and “transforms everyday routines”, making simple actions more complicated. Mentions of physical well-being, health, and symptom management (9 occurrences) revealed how much effort is invested in maintaining bodily functionality. Participants stressed the importance of exercise, compression garments, and adherence to medical advice “I try to keep my leg active”, “I’m forced to use compression aids”, or “I manage it autonomously following physiotherapists’ guidance”. A smaller number of participants address relational well-being and social support (6 occurrences), emphasizing how understanding from relatives or contact with other patients could sustain motivation and psychological balance. For instance, “The people around me understand my difficulties” or “Talking with other patients helped me overcome my limits”;
4. lack of knowledge about lymphedema: one of the most meaningful metaphoric statements was: “we are totally groping in the dark”. Several participants (30 occurrences) reported that they experienced a profound knowledge gap since post oncological interventions, where healthcare professionals often do not inform patients about the potential onset of lymphedema. Moreover, participants revealed a sense of frustration and disorientation for the diagnosis: “Doctors need to be trained to avoid delayed diagnoses and prevent mistakes”.

In addition to the identified specific categories, an interesting theme emerged from some participants: someone expressed gratitude toward the researchers for the collecting data initiative. This expression of gratitude is perfectly coherent with the feeling of being lost or confused among the healthcare sector and it also coexists with the declared limited knowledge about lymphedema.

Thus, qualitative data call for a more holistic and patient-centered approach, where invisible consequences of the disease need to be addressed in order to protect personal identity, psychosocial well-being and occupational or social roles. The specific interest toward occupational context and the return-to-work personal resources, was investigated through the quantitative section of the study, as illustrated in the following paragraphs.

Quantitative results

We tested the hypotheses of this study by running the mediation model in PROCESS for SPSS [38]. *Figure 1* shows that dispositional optimism was positive but not significantly related to job satisfaction (B=0.22; p=0.08), thus disconfirming H1. In contrast, dispositional optimism was positively and significantly associated with return-to-work self-efficacy (B=0.25; p=0.002), confirming H2. The relationship between return-to-work self-efficacy and job satisfaction was positive and significant (B=0.78; p=0.000), confirming H3. The mediation hypothesis (H4), according to which dispositional optimism relates through job satisfaction with return-to-work self-efficacy, was confirmed (B=0.20; p=0.07).

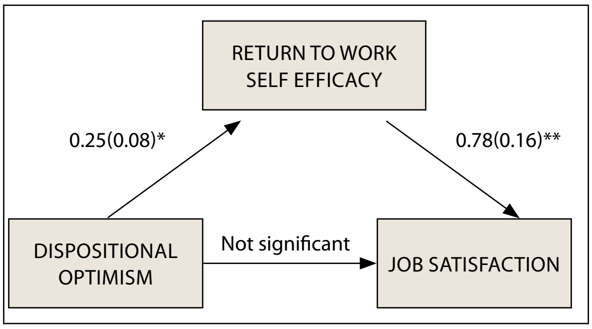

Figure 1
Conceptual model of the hypothesized mediation.
(*): p<0.05; (**): p<0.01.

DISCUSSION

The findings of this study offer important insights into the psychological factors that may facilitate return to work among individuals living with lymphedema. Contrary to our expectations, dispositional optimism was not significantly directly associated with job satisfaction, suggesting that optimism alone may not directly translate into more positive evaluations of one's work experience following a chronic condition. This result contrasts with previous research linking optimism to workplace wellbeing [26] and may reflect the specific challenges and constraints faced by individuals coping with a chronic and visible condition like lymphedema, which can moderate the impact of general positive expectations.

However, optimism did show a significant and positive relationship with return-to-work self-efficacy, supporting the idea that optimistic individuals are more likely to believe in their capacity to manage the transition back to work after illness. This aligns with the self-regulatory role of optimism in coping with adversity [39] and highlights its value as a resource for promoting confidence in work-related functioning despite physical limitations.

As predicted, return to work self-efficacy was strongly and significantly related to job satisfaction, reinforcing existing evidence on the central role of self-efficacy beliefs in shaping work attitudes and motivation, particularly in rehabilitation contexts. Importantly, the mediation analysis confirmed that return to work self-efficacy serves as a key mechanism through which optimism contributes to job satisfaction. This indirect effect suggests that optimism enhances satisfaction at work not by directly altering perceptions of the job itself, but by increasing individuals' belief in their ability to effectively re-engage with work demands. Taken together, these results underscore the importance of fostering psychological resources – especially self-efficacy beliefs – during the return-to-work process for individuals with lymphedema. Interventions aimed at enhancing optimism and, more critically, return to work self-efficacy, may be particularly effective in improving work reintegration outcomes and subjective well-being at work in this population.

Moreover, it is reasonable to question whether there may be a difference in the level of awareness and perception of the condition between individuals who enter the workforce already living with primary lymphedema, and those who, having developed secondary lymphedema later in life, face the challenge of returning to work after the diagnosis.

In a more in-depth way, the qualitative evidence collected through patient interviews reveals the profound and multifaceted impact of living with lymphedema, both primary and secondary, on individuals' daily lives, psychosocial well-being, and occupational experiences, partly already confirmed in past literature [40]. Participants highlight recurring themes of physical limitations, and the persistent psychological strain associated with the condition. A significant number of individuals emphasized feelings of frustration and isolation, often exacerbated by the lack of awareness and understanding of lymphedema among healthcare professionals and the community in general. Another serious and critical barrier is represented by inadequate access to specialized care, high costs of care, and the scarcity of trained healthcare professionals. At the same time, some patients expressed resilience, reporting that consistent self-management, lifestyle adaptations, and lucky encounters with competent healthcare providers contributed to maintaining an acceptable quality of life. However, the psychological and emotional burden, difficulties in body image acceptance, high challenging return to work, and limited social recognition of the disease remain significant demanding tasks. From an organizational perspective, employers should adopt inclusive workplace practices and tailored support mechanisms, aligned with diversity and disability management principles [41].

STUDY LIMITATIONS

Despite offering valuable insights into the psychological and occupational experiences of individuals living with lymphedema, this study is not without limitations. First, the cross-sectional design does not allow for causal inferences: while mediation relationships were tested, the direction of the associations remains theoretical and should be confirmed through longitudinal research. Second, the sample size may limit the generalizability of the quantitative findings, particularly in capturing the heterogeneity of experiences between individuals with primary and secondary lymphedema. Future studies should aim to include larger and more diverse samples to strengthen external validity. Moreover, the reliance on self-report measures may have introduced bias due to social desirability or subjective interpretation of results, the depth and nuance of participants' experiences may be constrained by the format and length of questions.

Importantly, systemic issues such as healthcare accessibility, financial burden, and lack of professional training in lymphedema care – highlighted in the qualitative findings – suggest that individual-level interventions alone may not be sufficient to address return to work challenges.

FUTURE RESEARCH DIRECTIONS

Starting from the present findings, future research should adopt longitudinal designs to better capture the dynamic nature of psychological adjustment and return-to-work trajectories among individuals with lymphedema. Tracking changes in optimism, self-efficacy, and job satisfaction over time would allow for a more precise understanding of how these variables interact and influence each other throughout the rehabilitation and reintegration process. In addition, further studies should explore potential moderating variables, such as type of employment, workplace accommodations, severity of lymphedema, or access to healthcare services, that may affect the return-to-work experience. Lastly, intervention-based studies are needed to test the effectiveness of programs designed to enhance return to work self-efficacy and psychological resilience in this population.

CONCLUSIONS

According to our literature review, this study represents the first and, to date, the only research in Italy addressing a specific and targeted sample of individuals affected by both primary and secondary lymphedema. Even more significant, from our point of view, is the focus on effective reintegration, which remains largely unexplored, except for studies on samples of individuals with lymphedema related to specific types of cancer.

Our findings highlight the potential relevance of promoting interventions aimed at enhancing individuals perceived self-efficacy in relation to returning to work. Other key findings include the relevance of psychological dimensions in shaping the lived experience of people with lymphedema; moreover, participants strongly emphasize the widespread lack of awareness and clinical expertise regarding lymphedema within the healthcare system.

These findings underscore the urgent need for a systemic and coordinated approach at multiple levels, highlighting the lymphedema as a complex, disabling condition requiring integrated, and person-centered care. In particular, return-to-work processes for people living with lymphedema should not only focus on individual psychological resources, but also be embedded in broader organizational efforts to implement effective diversity management strategies. Creating supportive work environments that are responsive to the needs of employees with chronic and visible conditions can contribute to both personal well-being and organizational health.

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Authors' contributions

SF conceptualized and designed the study; TG and SF analysed the data; SF and TG wrote the first draft; CB and PZ critically reviewed the manuscript. All Authors have revised the manuscript and approved its final version.

Conflict of interest statement

None of the Authors declare competing financial interests.

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