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Prioritising the content and delivery of a work-focused intervention for women with breast cancer using the nominal group technique

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Abstract.

BACKGROUND: Increased breast cancer survivorship has prompted a focus on optimising quality of life for this cohort, including reintegration into employment. Despite this, there remains a lack of work-focused interventions to support work outcomes for women living with and beyond breast cancer.

OBJECTIVE: The aim of this study was to prioritise the content and delivery of a work-focused intervention for women living with and beyond breast cancer.

METHODS: Twelve stakeholders including women living with and beyond breast cancer, healthcare professionals, cancer support centre staff, and policy informers were invited to participate in an online discussion using the Nominal Group Technique (NGT) to determine priorities for a work-focused intervention. The NGT seeks consensus through four steps; (i) idea generation, (ii) discussion among the group, (iii) refining ideas, and (iv) ranking preference for ideas through anonymised voting.

RESULTS: Intervention content prioritised included managing cancer-related symptoms and work-specific factors. Consensus was made for a blended delivery format (mix of group and individual sessions), and blended delivery (face-to-face and online). Findings indicated a preference for a six-week intervention, with 90–120 minute sessions. Community-based settings were preferred over hospital-based services for the setting of a work-focused intervention. Zoom Video Communications Inc. was the preferred setting to deliver an online intervention.

CONCLUSION: Stakeholder priorities informed the content and delivery of a work-focused intervention for women with breast cancer. A pilot of the proposed intervention will be conducted to test for feasibility and acceptability.

Keywords: Consensus, employment, priorities, intervention development, return to work

1. Introduction

Breast cancer accounted for an estimated 2.26 million new cases worldwide in 2020 [1]. Increased survival has prompted focus on optimising quality of life for those living with and beyond cancer, including reintegration into work. Return to work (RTW) rates vary across cancer types, and are influenced by personal, societal, workplace, healthcare, and legisla-

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tive systems [2]. Typically, the one-year time point can be a milestone, where the average delay in RTW has previously been reported at 11.4 months, however varying timeframes have been reported [3, 4]. Factors which are known to impact RTW such as cancer-related fatigue, cognitive changes and anxiety can be amenable to change and could be targeted through a work-focused intervention [5, 6]. Indeed, addressing physical and psychological demands post-breast cancer surgery may help in reducing unemployment rates for women living with and beyond breast cancer who may be less likely to RTW if their role is more physically and/or psychologically demanding, or if they have undergone mastectomy or chemotherapy [7]. This is important as the ability to continue working during treatment or transition back to work following treatment can provide those living with and beyond breast cancer a sense of 'normalcy' [8], decreased social isolation, increased self-esteem [9], and an increased QoL [10].

In addition, impaired work ability has an economic impact on both the individual and society. For example, in 2009 productivity losses due to cancer-related morbidity accounted for approximately 83 million working days across the EU, equating to €9.43 billion. While these figures represent all cancers, breast cancer had the second highest economic cost to the EU however, accounting for 12% of all cancer costs in 2009 [11]. While more recent data does not provide detail by cancer type, the total productivity loss across Europe due to cancer morbidity in 2018 stood at €20 billion, more than doubling from 2009 levels [12].

While several interventions have been piloted, there remains a lack of evidence-based interventions to support women returning to work after a diagnosis of breast cancer [6, 13, 14]. This could be explained by a historical lack of focus on survivorship research, however in line with increase survival, research is evolving in the area particularly in the past decade [15]. A Cochrane review found it 'remarkable' that there remains a paucity of vocational interventions in cancer care [16]. This is echoed in a recent systematic review which observed interventions to support women living with and beyond breast cancer in RTW varying in content and delivery [15]. As a result, little is known on what content should be included in RTW interventions for this cohort, as well as how these interventions should be delivered.

In response to recommendations for further research in the area [6, 13, 16], we propose to develop a work-focused intervention to support work

outcomes for women with breast cancer. Intervention development is guided by the Medical Research Council (MRC) framework for developing and evaluating complex interventions [17]. It is acknowledged under the MRC framework, that a 'series of studies may be required to progressively refine the intervention before embarking on a full-scale evaluation' [17]. As part of the intervention development process, we conducted a consensus-building study on a proposed intervention using the Nominal Group Technique (NGT) as reported in this paper. The aim of this study is to prioritise among key stakeholders the content and delivery of a work-focused intervention for women living with and beyond breast cancer.

2. Materials and method

2.1. Study design

The NGT is an adaptable consensus method that seeks consensus in groups of individuals through four steps; (i) idea generation, (ii) sharing of ideas, (iii) refining ideas, and (iv) ranking preference for ideas through anonymised voting [18]. While the design is typically conducted face-to-face, the study was adapted to an online format due to public health restrictions of Covid-19. The NGT can be a valuable approach in developing a work-focused intervention as it facilitates key stakeholders to express views on key components of the intervention, as well as how to best approach implementation. It was chosen over the Delphi Consensus technique for pragmatic reasons; results were captured in real-time, and the research team were able to use results to inform the intervention immediately. Full ethical approval was granted in July 2020 by the Faculty of Health Sciences Research Ethics Committee, Trinity College Dublin [REF: 2020403].

2.2. Participants and sampling

Key stakeholders including women living with and beyond breast cancer, occupational therapists with clinical experience in working with women living with and beyond breast cancer and/or supporting individuals with health difficulties to return to work, occupational therapy managers, directors/co-ordinators of cancer support centres, and policy informers were invited to participate in the online discussion (Table 1) that took place in August 2020. While definitions of cancer survivorship vary, more

Table 1
Inclusion criteria

Women living with and beyond breast cancer	Occupational therapists	Occupational therapy managers	Directors of cancer support centres	Policy informers in cancer survivorship
Age 18–66 years (working age)	Have clinical experience in providing vocational rehabilitation interventions to individuals with cancer and/or have clinical experience in oncology	Work in a health-related service providing occupational therapy services to individuals with cancer and have responsibility to occupational resource allocation in oncology services in any Irish setting	Have experience in overseeing/co-ordinating a variety of cancer survivorship programmes (1 : 1, group, mixed)	Have experience in developing and/or influencing cancer-related policy in Ireland
Returned to work following a breast cancer diagnosis in the past two years (to address recall bias)				

recently it is regarded to commence at the time of diagnosis and continue until death regardless of how long post-diagnosis this may occur [19]. For the purposes of this paper, the term ‘living with and beyond cancer’ is used which also align with terminology more recently adopted in Ireland [20]. Purposive sampling was used in participant selection and involves choosing a sample based on similar or identical traits; in this case, key stakeholders who have experience (across different perspectives) in RTW during and after cancer. While NGTs typically vary between two to fourteen members [21], a maximum of seven is recommended to manage group dynamics [22]. However, because a range of stakeholders were represented at this workshop, it was aimed to recruit up to three of each key stakeholder via social media (Twitter). This number was set to account for any potential attrition while still ensuring representation of each cohort. All participants were required to be able to attend a group-based online discussion via Zoom Video Communications, Inc. software.

2.3. Data collection

An online workshop using the NGT was facilitated by the first author. As part of the process, participants were posed a question, asking them to generate ideas around a particular topic, share and refine them, and then rank in relation to preference. The facilitator did not prompt any ideas during discussion and did not participate in anonymous voting. Questions posed included:

- What content should be included and prioritised for a work-focused intervention?
- What format should the intervention adopt? (e.g., group-based, one-to-one etc)
- How should a work-focused intervention be delivered? (e.g., online, face-to-face, telephone, etc)

- If face-to-face, in what setting should the intervention be delivered?
- If online, where would the intervention be best set?
- What length should each individual session be?
- What overall length should the intervention be?

2.4. Study procedure

The study was advertised via social media in July 2020, where retweeting was encouraged. Potential participants were invited to contact the researcher by email or telephone to express interest in the study. The researcher then issued the participant information leaflet, consent form, and participant pack for the potential participant to consider. The participant pack included the agenda for the consensus workshop, as well as questions to be posed during the workshop, for the participant to reflect on. Signed consent forms were returned via email. The consensus workshop was hosted using the Zoom Video Communications, Inc. platform and voting/ranking conducted using the Mentimeter platform (www.mentimeter.com). Mentimeter is a third-party platform specialising in online interactive voting and ranking. The first author of this paper facilitated the workshop and is an occupational therapist by background with a Master’s in Clinical Research. Seven questions were posed throughout the workshop. Once a question was posed, participants were invited to complete a ‘silent generation of ideas’, where they wrote down ideas to address the question posed. Once complete, the facilitator completed a ‘round-robin’, asking the group to share their ideas, until all ideas were exhausted. All ideas were written up onto a Microsoft® Word document and shared with participants in real-time online. Participants were then asked to discuss all ideas and group items together into more targeted themes of which they could vote on. Once topics/themes were

refined, participants then prioritised items by ranking them anonymously using the Mentimeter platform. The number of items that participants rank depends on the topic, with ranking of five topics common in the literature [18, 22] however, this can be increased. Results were available in real-time, where the participants could see the results to each question posed. All steps were completed for each question before moving onto the next question. The workshop was not recorded however fieldnotes were taken throughout.

2.5. Data analysis

Voting responses were captured by Mentimeter and automatically populated onto an Excel spreadsheet which weighted and ranked each item based on preferences. Higher scores indicate higher preference as per Delbecq & Van de Ven (1975) guidance [18]. For example, if a question included five items for ranking, the highest ranked item scores five, and the least preferred of the five, scores one point.

3. Results

Twelve key stakeholders participated in the workshop; two women living with and beyond breast cancer who had returned to work in the past year, three directors of cancer support centres based in rural and urban Ireland, three occupational therapists across acute hospital and community settings, three policy informers in cancer survivorship in Ireland, and one occupational therapy manager in an acute hospital setting. Participants voted only on items that they

perceived as suitable. As such, on some occasions, not all items were voted on by all participants. The workshop took place over two hours and 45 minutes in August 2020.

3.1. Content

Several categories for content were generated by participants and refined into six superordinate categories following discussion. Six topics were generated by participants as core components for a work-focused intervention (Table 2).

3.2. Format and delivery

Participants were posed two NGT questions; the format and delivery of an intervention. The highest ranking preference was for a blended format (group-based with an individual one-to-one component) with nine first preference votes (Table 3). The second highest preference was for a group-based intervention, followed by an individual (one-to-one) intervention which had no first preference votes. Most participants preferred a blended approach to the intervention delivery i.e., face-to-face and online (Table 4). This was followed by face-to-face, online, and via telephone, as second, third and fourth preference, respectively. Nine of the twelve participants voted a blended approach as their first preference for delivery. Every participant ranked the use of a telephone as their lowest preference. Face-to-face format received three first preferences and eight second preferences, whereas an online format received one second preference and eleven third preferences.

Table 2
Ranked preferences for intervention content

Content	Individual rank scores	No. of votes	Total group rank scores
Developing an RTW plan: a personal roadmap	6,6,6,6,5,5,5,5,4,2,1,1	12	52
Employment legislation, rights, and entitlements	6,6,6,6,6,4,4,4,3,3,2,1	12	51
Managing psychological side-effects in the workplace	6,5,5,4,4,4,4,3,3,3,2,2	12	46
Managing cancer-related fatigue and cognition in the workplace	6,6,5,5,3,3,3,3,2,2,2,1	12	41
Communicating with employers and colleagues	5,5,5,4,4,4,3,2,2,1,1,1	12	37
Managing physical side-effects in the workplace	4,4,3,3,2,2,2,1,1,1,1,1	11	24

Highest ranked preference = 6 points, second highest ranked preference = 5 points, etc.

Table 3
Ranked preferences for intervention format

Format	Individual rank scores	No. of votes	Total group rank scores
Group and individual	3,3,3,3,3,3,3,3,2,2,2	12	33
Group	3,3,3,2,2,2,2,2,2,1,1	11	23
Individual	2,2,1,1,1,1,1,1,1,1,1	10	12

Highest ranked preference = 3 points, second highest ranked preference = 2 points, etc.

Table 4
Ranked preferences for intervention delivery

Delivery	Individual rank scores	No. of votes	Total group rank scores
Face-to-face and online	4,4,4,4,4,4,4,4,3,3,3	12	45
Face-to-face	4,4,4,3,3,3,3,3,3,3,2	12	38
Online	3,2,2,2,2,2,2,2,2,2,2	12	25
Telephone	1,1,1,1,1,1,1,1,1,1,1	12	12

Highest ranked preference = 4 points, second highest ranked preference = 3 points, etc.

Table 5
Ranked preferences for intervention setting (face-to-face)

Setting (face-to-face)	Individual rank scores	No. of votes	Total group rank scores
Blended (>2 settings)	5,5,5,5,5,5,4,4,4,4,3	12	54
Cancer support centre	5,5,5,5,4,4,4,4,4,4,2	12	51
Community centre/parish hall	4,4,3,3,3,3,2,2,1,1,1	12	29
Primary care centre	3,3,3,3,3,3,2,2,2,2,2	10	26
Acute hospital	3,2,2,2,1,1,1,1,1,1,1	10	15

Highest ranked preference = 5 points, second highest ranked preference = 4 points, etc.

Table 6
Ranked preference for intervention setting (online)

Setting (online)	Individual rank scores	No. of votes	Total group rank scores
Zoom Video Communications, Inc.	6,6,6,6,6,6,4,4,4,4,3,1	12	56
Google Meet	6,6,5,5,5,4,4,3,3,2,2,1	12	46
Microsoft® Teams	6,6,5,5,4,4,4,3,3,2,2,2	12	46
WebEx	6,5,5,5,5,4,3,3,2,2,2,1	12	43
Skype	5,5,4,3,3,3,3,2,2,1,1,1	12	33
Attend Anywhere	6,5,4,3,2,2,1,1,1,1,1,1	12	28

Highest ranked preference = 6 points, second highest ranked preference = 5 points, etc.

Table 7
Ranked preferences for intervention length

Overall length	Individual rank scores	No. of votes	Total group rank scores
Six weeks	2,2,2,2,2,2,2,2,1,1	10	18
Four weeks	2,2,2,2,1,1,1,1,1,1,1	12	16

Highest ranked preference = 2 points, second highest ranked preference = 1 point.

3.3. Setting

Participants discussed the setting where the intervention should be delivered. Both face-to-face and online settings were explored. For a face-to-face setting, a 'blended setting' received the highest ranking with seven first preference votes and was defined by participants as a mix of at least two settings (e.g., cancer support centres and local community halls) to provide greater reach (Table 5). Cancer support centres were the second highest ranked setting for face-to-face interventions, receiving five first preference votes, and six second preference votes.

For an online setting, participants generated six settings to vote on (Table 6). Zoom Video Communications, Inc. was ranked highest. Google Meet and Microsoft® Teams earned equal points, however as Google Meet scored higher second preferences in

total, it was considered second ranked preference. The Attend Anywhere platform (used by Ireland's National Health Service) was the lowest ranked platform.

3.4. Intervention and session length

Participants discussed and voted on two temporal aspects of the intervention. First, the overall length of the intervention was discussed. Following brainstorming, only two options were generated for voting by participants: four or six weeks. Following voting, six weeks was prioritised for overall length of delivery with eight first preferences votes (Table 7). Second, the overall length of each session was discussed. Following brainstorming, three options for the length of each session were discussed and voted on: (1) 90–120 minutes (with tea break before or after), (2) 60–90 minutes (with tea break before

Table 8
Ranked preferences for session length

Session length	Individual rank scores	No. of votes	Total group rank scores
90–120 minutes (tea break before/after)	3,3,3,2,2,2,2,2,2,2	11	25
60–90 minutes (tea break before/after)	3,3,3,3,3,3,2,1,1,1,1	11	24
120–150 minutes (tea break in between)	3,3,3,2,1,1,1,1,1	9	16

Highest ranked preference = 3 points, second highest ranked preference = 2 points, etc.

or after), (3) 120–150 minutes (with tea break in between) (Table 8).

4. Discussion

From the NGT consensus, a six-week group-based intervention with a single individual session was prioritised. Sessions lasting 90–120 minutes were preferred and consensus on content included a personalised RTW plan, employment rights and benefits, and managing common treatment side-effects. Community-based settings were the preferred delivery site over the acute setting for face-to-face interventions, with Zoom Video Communications, Inc. ranked the preferred online platform.

All content discussed by participants was work-specific. Despite employment and cancer being advocated as a key area for research, a Cochrane review observed that there are no specific work-focused interventions across any cancer cohort, citing the finding as ‘remarkable’ [16]. Instead, interventions are typically physical or psychosocial in nature and only sometimes include a work component as part of the overall content. Evidence suggests that interventions which are designed to target management of a specific concern, such as work, result in significant effects on that specified outcome [23]. Much of the content prioritised in this study was related to education around self-management of treatment- or disease-related symptoms, in the context of work. For example, cancer-related fatigue was prioritised as a topic, but content included recommendations for a phased RTW, work-life balance, and prioritising work tasks. Fatigue, cognitive changes, physical and psychological side-effects have all been shown to impact negatively on RTW yet are amenable to change and could be targeted in a work-focused intervention to enhance work outcomes [5, 6, 24]. Where there is lack of evidence for work-focused interventions, future studies can explore the impact and acceptability of such content on enhancing work outcomes. Findings of this study also indicated a higher preference for blended approaches in format (individual and

group sessions) and hosting (face-to-face vs. online) of a work-focused programme. However, O’Connor et al. [25] reported that, there is no one-size-fits-all approach to the delivery of survivorship programmes and therefore perhaps a blended approach may have been ranked highest by participants in this study out of uncertainty. Despite this, use of the NGT offers insight into subsequent preferences, where a group format with face-to-face delivery were favoured by participants. There are potential advantages in delivering a work-focused intervention in a blended format. It is widely acknowledged that group-based interventions can provide a platform for peer-support and learning [26], whereas adding an additional individual session to the intervention could overcome the complexities of specific job roles. While tested interventions have typically been either group-based or individual, the testing of blended approaches is warranted.

In this study, community-based settings were the preferred location for intervention delivery over a hospital setting. This is not always reflected in practice, where often previous interventions have been facilitated in the clinical setting. A Cochrane review exploring the impact of interventions on work outcomes among all cancer cohorts, reported that 13 of 15 interventions were based in hospitals [16]. The impact and implementation of community-based cancer survivorship interventions has been previously successful, demonstrating potential promise for delivery of work-focused interventions in the community setting [27, 28]. In recent times, however, the Covid-19 pandemic has necessitated health-related care to be delivered virtually. For this reason, participants in this study were also asked to consider preference for an online platform in which Zoom Video Communications, Inc. was the highest ranked. Zoom Video Communications, Inc., a cloud-based platform for video and audio conferencing, is relatively novel and has observed exceptional growth since the pandemic [29]. Because of the novelty of adopting Zoom Video Communications, Inc. as a telehealth platform, there is limited evidence into its acceptability and usability. Despite this, emerging

evidence suggests promise for the implementation of cancer survivorship programmes using Zoom Video Communications, Inc. One study observed a surge in participation having converted an interdisciplinary cancer survivorship wellness group programme to telehealth using Zoom Video Communications, Inc., however, did not report participant perceptions of Zoom Video Communications, Inc. itself [30]. Future studies for web-based interventions could consider the acceptability and usability of cloud-based platforms used.

The overall length of time for an intervention and sessions is also important to consider. Findings of this study indicated a preference for a six-week intervention with weekly sessions of 90-120 minutes each. In general, intervention and session length vary widely across cancer survivorship interventions and while overall programme length is regularly reported, specific sessions lengths can be underreported. Time-frames of sessions could be adapted depending on an in-person or online intervention. For example, there are several successful survivorship programmes hosted face-to-face over two and a half hours, but this could potentially be fatiguing if hosted in an online format [27, 28]. Online interventions, on the other hand, are typically shorter per session varying from 30 minutes to 1-2 hours [31–33]. The timing of programmes should be carefully considered based on the context in which they are hosted. Participant perceptions could also be captured to determine feasibility of session length online.

4.1. Strengths and limitations

This study offers a novel insight into stakeholder perspectives when informing a future work-focused intervention. To our knowledge, the NGT has not been used as a method to prioritise a work-focused intervention for cancer until now. The NGT can offer a number of strengths; it increases the likelihood of equal participation for all groups members and limits researcher bias in analysis. Limitations were also identified. For pragmatic reasons, one workshop was hosted to determine priorities for a work-focused intervention across five cohorts. However, it may have added value to conduct independent workshops for each cohort which could have highlighted comparison of priorities between groups and could have provided a wider perspective with a larger number of participants. Despite this, previous phases of the study were conducted which explored perceptions of women with breast cancer, healthcare profession-

als and employers on the content and delivery of a work-focused intervention. Therefore, this phase finalised preferences. Furthermore, additional topics could have been explored such preference for multi-disciplinary input however were not included due to time constraints.

4.2. Impact on future research

Recommendations for future research include pilot and feasibility testing of a work-focused intervention for women living with and beyond breast cancer. According to the MRC framework, following the development stages of an intervention, the next stage should be feasibility and piloting [17]. In this case, testing procedures, estimating recruitment and retention, and determining acceptability prior to evaluation and implementation of an intervention. A manual of procedures will be developed to enhance intervention fidelity [34]. This includes (but is not limited to) a detailed version of the study protocol, procedures for the administration of outcome measures, and data management practices. The use of online workshops using the NGT for group decision-making for research is promising and could be considered for other cancer cohorts in the future.

4.3. Impact on clinical practice

This study adds clarity on preferences amongst key stakeholders in Ireland towards a work-focused intervention for women living with and beyond breast cancer. Clinicians interested in addressing work outcomes could consider work-specific content in the areas of fatigue, cognition, physical and psychological side-effects, education around employment rights and benefits, and communication strategies to manage employers and colleagues. Zoom Video Communications, Inc. could be offered as a telehealth platform, pending local policies, due to overall familiarity with the medium. Community-based locations could be more conducive to survivorship programmes than the acute setting although the acute setting is imperative in co-ordinating a clear survivorship pathway for those living with and beyond cancer.

5. Conclusion

The focus of this online meeting was to prioritise the preferred content and delivery of a work-focused intervention for women living with and beyond breast

cancer. A six-week predominantly group-based programme was codesigned with key stakeholders. A pilot of the proposed intervention will be conducted to test for feasibility and acceptability.

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Conflict of interest

The authors declare that they have no conflict of interest.

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Ethics approval

This study was performed in line with the principles of the Declaration of Helsinki. The study was approved in July 2020 by the Faculty of Health Sciences Research Ethics Committee, Trinity College Dublin (REF: 2020403).

Author contributions

All authors contributed to the conception and design of the research. Data collection and analysis were completed by NA. The first draft of the manuscript was written by NA. All authors contributed to subsequent versions and approved the final manuscript.

References

- [1] GLOBOCAN. All cancers fact sheet [Internet]. World Health Organization; 2020 [cited 2021 July 16]. Available

- from: <https://gco.iarc.fr/today/data/factsheets/cancers/39-All-cancers-fact-sheet.pdf>
- [2] Parkinson M, Maheu C. Cancer and work. *Canadian Oncology Nursing Journal*. 2019;29(4):258-66.
- [3] Balak F, Roelen CAM, Koopmans PC, Ten Berge EE, Groothoff JW. Return to work after early-stage breast cancer: a cohort study into the effects of treatment and cancer-related symptoms. *J Occup Rehabil*. 2008;18(3):267-72.
- [4] Chaker L, Falla A, van der Lee SJ, Muka T, Imo D, Jaspers L, Colpani V, Mendis S, Chowdhury R, Bramer WM, Pazoki R, Franco OH. The global impact of non-communicable diseases on macro-economic productivity: a systematic review. *Eur J Epidemiol*. 2015;30(5):357-95. doi: 10.1007/s10654-015-0026-5
- [5] Todd BL, Feuerstein EL, Feuerstein M. When breast cancer survivors report cognitive problems at work. *The International Journal of Psychiatry in Medicine*. 2011;42(3):279-94. doi: 10.2190/PM.42.3.d
- [6] Sun Y, Shigaki CL, Arner JM. Return to work among breast cancer survivors: a literature review. *Support Care Cancer*. 2017;25(3):709-18. doi: 10.1007/s00520-016-3446-1
- [7] Wang L, Hong BY, Kennedy SA, Chang Y, Hong CJ, Craigie S, Kwon HY, Romerosa B, Couban RJ, Reid S, Khan JS, McGillion M, Blinder V, Busse JW. Predictors of Unemployment After Breast Cancer Surgery: A Systematic Review and Meta-Analysis of Observational Studies. *Journal of Clinical Oncology*. 2018;36(18):1868-79. doi: 10.1200/JCO.2017.77.3663
- [8] van Maarschalkerweerd PEA, Schaapveld M, Paalman CH, Aaronson NK, Duijts SFA. Changes in employment status, barriers to, and facilitators of (return to) work in breast cancer survivors 5–10 years after diagnosis. *Disability and Rehabilitation*. 2020;42(21):3052-8. doi: 10.1080/09638288.2019.1583779
- [9] Park J, Shubair M. Returning to Work After Breast Cancer: A Critical Review. *International Journal of Disability Management*. 2013;8:E1. doi: 10.1017/idm.2012.7
- [10] Schmidt ME, Scherer S, Wiskemann J, Steindorf K. Return to work after breast cancer: The role of treatment-related side effects and potential impact on quality of life. *European Journal of Cancer Care*. 2019;28(4):e13051. doi: 10.1111/ecc.13051
- [11] Luengo-Fernandez R, Leal J, Gray A, Sullivan R. Economic burden of cancer across the European Union: a population-based cost analysis. *The Lancet Oncology*. 2013;14(12):1165-74. doi: 10.1016/S1470-2045(13)70442-X
- [12] Hofmarcher T, Lindgren P, Wilking N, Jönsson B. The cost of cancer in Europe 2018. *European Journal of Cancer*. 2020;129:41-9. doi: 10.1016/j.ejca.2020.01.011
- [13] Hoving JL, Broekhuizen MLA, Frings-Dresen MHW. Return to work of breast cancer survivors: a systematic review of intervention studies. *BMC Cancer*. 2009;9(117):1-10. doi:10.1186/1471-2407-9-117
- [14] Cocchiara RA, Sciarra I, D'Egidio V, Sestili C, Mancino M, Backhaus I, et al. Returning to work after breast cancer: A systematic review of reviews. *Work*. 2018;61(2018):463-76.
- [15] Algeo N, Bennett K, Connolly D. Rehabilitation interventions to support return to work for women with breast cancer: a systematic review and meta-analysis. *BMC Cancer*. 2021;21(895). doi: 10.1186/s12885-021-08613-x
- [16] de Boer AGEM, Taskila TK, Tamminga SJ, Feuerstein M, Frings-Dresen MHW, Verbeek JH. Interventions to enhance return-to-work for cancer patients.

- Cochrane Database Syst Rev. 2015;9(CD007569). doi: 10.1002/14651858.CD007569.pub3
- [17] Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ*. 2008;337(a1655). doi: 10.1136/bmj.a1655
- [18] Delbecq AL, Van de Ven AH, Gustafson DH. *Group Techniques for Program Planning: A Guide to Nominal Group and Delphi Processes*. Scott, Foresman and Company, Glenview IL; 1975.
- [19] National Cancer Institute. Cancer Survivorship [Internet]. National Cancer Institute; 2017 [cited 2021 October 12]. Available from: <https://www.cancer.gov/about-cancer/coping/survivorship>
- [20] Mullen L, Hanan T. National Cancer Survivorship Needs Assessment: Living with and beyond cancer in Ireland [Internet]. National Cancer Control Programme: Dublin; 2019. Available from: <https://www.hse.ie/eng/services/list/5/cancer/profinfo/survivorship-programme/living%20with%20and%20beyond%20cancer%20in%20ireland.pdf>
- [21] McMillan SS, King M, Tully MP. How to use the nominal group and Delphi techniques. *International Journal of Clinical Pharmacy*. 2016;38(3):655-62. doi: 10.1007/s11096-016-0257-x
- [22] McMillan SS, Kelly F, Sav A, Kendall E, King MA, Whitty JA, Wheeler AJ. Using the Nominal Group Technique: how to analyse across multiple groups. *Health Serv Outcomes Res Method*. 2014;14:92-108. doi: 10.1007/s10742-014-0121-1
- [23] Howell D, Harth T, Brown J, Bennett C, Boyko S. Self-management education interventions for patients with cancer: a systematic review. *Supportive Care in Cancer*. 2017;25(4):1323-55. doi: 10.1007/s00520-016-3500-z
- [24] Carlsen K, Jensen AJ, Rugulies R, Christensen J, Bidstrup PE, Johansen C, Huitfeldt Madsen IE, Dalton SO. Self-reported work ability in long-term breast cancer survivors. A population-based questionnaire study in Denmark. *Acta Oncol*. 2013;52(2):423-9. doi:10.3109/0284186X.2012.744877
- [25] O'Connor M, O'Donovan B, Drummond F, Donnelly C. The Unmet needs of cancer survivors in Ireland; A Scoping Review. National Cancer Registry Ireland, Cork; 2019.
- [26] Hu J, Wang X, Guo S, Chen F, Wu Y-Y, Ji F-J, Fang X. Peer support interventions for breast cancer patients: a systematic review. *Breast Cancer Research and Treatment*. 2019;174(2):325-41. <https://doi.org/10.1007/s10549-018-5033-2>
- [27] Boland L, Bennett K, Cuffe S, Gleeson N, Grant C, Kennedy J, Connolly D. Cancer survivors' experience of OptiMal, a 6-week, occupation-based, self-management intervention. *British Journal of Occupational Therapy*. 2019;82(2):90-100.
- [28] Gibbons M, Love D, Hanan T, Mullen L. Implementing cancer thriving and surviving: A Stanford model self-management programme. National Cancer Control Programme, HSE: Dublin; 2020.
- [29] Wall Street Journal. Zoom's pandemic-fueled boom continues [Internet]. 2020 [cited 2021 April 12] Available from: <https://www.wsj.com/articles/zooms-pandemic-fueled-boom-continues-11606772231>
- [30] Jhaveri K, Cohen JA, Barulich M, Levin AO, Goyal N, Loveday T, Chesney MA, Shumay DM. "Soup cans, brooms, and Zoom:" Rapid conversion of a cancer survivorship program to telehealth during COVID-19. *Psychooncology*. 2020;29(9):1424-6. doi: 10.1002/pon.5473
- [31] Bantum EO, Albright CL, White KK, Berenberg JL, Layi G, Ritter PL, Laurent D, Plant K, Lorig K. Surviving and thriving with cancer using a Web-based health behavior change intervention: randomized controlled trial. *Journal of medical Internet research*. 2013;16(2):e54-e54.
- [32] Grimmer C, Armes J, Breckons M, Calman L, Corner J, Fenlon D, Hulme C, May CM, May CR, Ream E, Richardson A, Smith PWF, Yardley L, Foster C. RESTORE: an exploratory trial of an online intervention to enhance self-efficacy to manage problems associated with cancer-related fatigue following primary cancer treatment: study protocol for a randomized controlled trial. *Trials*. 2013;14(184). doi: 10.1186/1745-6215-14-184
- [33] van den Berg SW, Gielissen MFM, Custers JAE, van der Graaf WTA, Ottevanger PB, Prins JB. BREATH: Web-Based Self- Management for Psychological Adjustment After Primary Breast Cancer—Results of a Multicenter Randomized Controlled Trial. *Journal of Clinical Oncology*. 2015;33(25):2763-71.
- [34] Persch AC, Page SJ. Protocol development, treatment fidelity, adherence to treatment, and quality control. *American Journal of Occupational Therapy*. 2013;67(2):146-53. doi: 10.5014/ajot.2013.006213.