Muna Alkhaifi *

Open Access Research Article

To Close the Gap of Survivorship Education: A Series of Breast Cancer Webinars in Collaboration with Wellspring

Malika Peera ^{1#}, Sanam Tabataba Vakili ^{2#}, Elwyn Zhang ², Samantha K. F. Kennedy ², Sarina Sadeghi ², Salwa Zaitoun ³, Jennifer Y. Y. Kwan ⁴, Shing Fung Lee ⁵, Henry C. Y. Wong ⁶, Edward Chow ⁷, Muna Alkhaifi ^{2*}

- ¹ Faculty of Health Sciences, Queen's University, Kingston, Canada.
- ² Department of Medical Oncology & Hematology, Odette Cancer Centre, Sunnybrook Health Science Centre, University of Toronto, Canada.
- ³ Department of Human Biology, University of Toronto St. George, Toronto, Canada.
- ⁴ Department of Radiation Oncology, University of Toronto, Toronto, Canada.
- ⁵ Department of Radiation Oncology, National University Cancer Institute, National University Hospital, Singapore.
- ⁶ Department of Oncology, Princess Margaret Hospital, Kowloon West Cluster, Hong Kong S.A.R, China.
- ⁷ Department of Radiation Oncology, Odette Cancer Centre, Sunnybrook Health Sciences Centre, Toronto, Canada.
- # Joint Co-first authorship.

*Corresponding Author: Muna Alkhaifi, Department of Medical Oncology & Hematology, Odette Cancer Centre, Sunnybrook Health Science Centre, University of Toronto, Canada.

Received date: July 18, 2024; Accepted date: July 31, 2024; Published date: August 09, 2024.

Citation: Malika Peera, Sanam Tabataba Vakili, Elwyn Zhang, Samantha K. F. Kennedy, Sarina Sadeghi, et al., (2024), To Close the Gap of Survivorship Education: A Series of Breast Cancer Webinars in Collaboration with Wellspring, *J. Obstetrics Gynecology and Reproductive Sciences*, 8(6) **DOI:**10.31579/2578-8965/230

Copyright: © 2024, Muna Alkhaifi. This is an open-access article distributed under the terms of The Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract:

Background and Aims: Breast cancer survivors face uncertainties post-treatment, requiring ongoing support and education. Digital media online training courses may be used to disseminate evidence-based cancer information. In this study, we hosted a series of webinars which aimed to empower survivors with evidence-based survivorship information.

Materials and Methods: A four-part weekly online webinar series (1 hour each) including expert presentations, survivor insights, and interactive question-and-answer sessions, was held in October 2023 during Breast Cancer Awareness Month, via the Zoom digital platform. Topics covered included surveillance, mental health, adjuvant antihormonal therapy, and sexual health. After the webinar series, participants completed a post-webinar survey electronically. The post-webinar survey assessed participant satisfaction, understanding of topics, and suggestions for improvement. Likert scales were used to measure self-reported changes in understanding of the discussed topics. **Results:** 99 participants took part in the Breast Survivorship and Surveillance webinar, 97 participated in the Mental Health in Breast Survivorship webinar, 108 participated in the Adjuvant Antihormonal Therapy for Breast Cancer webinar, and 74 participated in the Sexual Health after Breast Cancer webinar. 25 participants completed the postwebinar survey, administered after the final webinar (sexual health). Among the 25 survey participants, 96% (24/25) expressed that the information presented in the series of webinars was very useful or extremely useful. Furthermore, 80% (20/25) noted significant knowledge improvement.

Conclusions: This breast cancer webinar series effectively bridges the knowledge gap in survivorship, offering valuable insights, emotional support, and practical guidance. The results emphasize the importance of ongoing education and support for breast cancer survivors.

Keywords: breast cancer survivorship; webinar series; wellspring; patient empowering; knowledge; postwebinar evaluation

Introduction

Breast cancer currently constitutes 1 in 8 cancer diagnoses [1]. The prevalence of breast cancer was around 2.3 million globally in 2022 [2]. This global prevalence has been on the rise, especially in nations undergoing socioeconomic transition [3]. Breast cancer is a complex journey extending beyond active treatment, which necessitates a comprehensive approach to survivorship support [4]. Breast cancer survivors experience a wide range of long-lasting side effects, which may include physical, emotional, psychological, and cognitive health effects related to their cancer or cancer treatment [5,6]. This includes fertility issues in young women, impaired social and work integration, and risk of recurrence [5,6]. Alongside these, breast cancer survivors also face general health needs, such as management of chronic preexisting, or new health concerns [6]. Despite the progress made in treatments to improve the lives of breast cancer survivors, a persistent gap exists in education focused on breast cancer survivorship for survivors and those close to them. This leaves survivors without the necessary tools to navigate this intricate phase effectively [7–10].

Online webinars emerge as dynamic vehicles to bridge the survivorship education gap, providing real-time engagement and online accessibility. Webinars are a form of telehealth that refers to the delivery of educational or instructional material over the internet. Webinars can be accessed online via different devices such as a computer or smartphone, providing an accessible resource for acquiring information, support and education for people affected by cancer [11]. In the literature, various studies have investigated the effectiveness of webinars in disseminating breast cancer information. The Cancer Council Victoria (CCV) designed and evaluated a suite of webinars including four for people affected by cancer and two for healthcare professionals. A majority of participants (90.1%) indicated that the webinar content was relevant to their interests and needs. However, (63.9%) of participants indicated that they had not participated in a webinar before [11]. Furthermore, a systematic review focused on the use of telemedicine for post-treatment cancer survivorship care found evidence focused on the benefits of telemedicine for the management of psychosocial and physical effects [12]. This demonstrates that webinars are a feasible modality to deliver quality information on breast cancer treatment.

The goals of the Breast Cancer Webinar Series included delivering evidence-based information, offering practical strategies for survivors, and providing an effective and accessible option for breast cancer survivorship information. The goal of the webinar series was to reach a wider audience through active engagement. The aim of this study was to delineate the procedures and assess participant perception of this series of webinars.

2. Materials and Methods

This paper reports on the general processes and evaluation outcomes of four weekly webinars conducted by Wellspring in 2023 via the Zoom platform. The methods employed aimed to ensure accessibility, engagement, and effectiveness throughout the webinar series. The planning phase prioritized audience engagement. A variety of multimodal and targeted promotional strategies were deployed. The team leveraged the Wellspring platform by utilizing social media, email campaigns, and partnerships with relevant organizations to maximize reach. The webinars were open to the general public. Participants were encouraged to register in advance through the Wellspring website. This approach aimed to not only inform but also actively involve potential participants in the breast cancer survivorship discussion.

2.1 Registration and Delivery with Focus on Feedback Collection

The registration process was streamlined to cater to the preferences of the audience. Prior to each session, participants had access to the webinar timetables and could register through the Wellspring website. After registering, they received webinar links for easy access.

Each webinar was overseen by a subject matter expert who gave instructions to participants, introduced presenters, and managed each segment of the webinar. In the Breast Survivorship and Surveillance webinar, the importance of post-treatment follow-up, screening, and monitoring was discussed. The Mental Health in Breast Survivorship webinar explored the mental and emotional challenges faced by survivors. Participants were offered insights and strategies to manage anxiety, depression, and other common emotional struggles. This session aimed to provide support and tools for maintaining a positive mindset during survivorship. The involved breaking down the complexities of hormone therapy, discussing its benefits, side effects, and adherence. In the final webinar, Sexual Health after Breast cancer, issues surrounding how breast cancer and its treatments can impact a survivor's sexual health and intimacy were addressed. Strategies for managing changes, communication with partners, and reintegrating intimacy into life after breast cancer were discussed. Each webinar concluded with a Question and Answer (Q&A) period, where participants could ask questions regarding the topics covered in the session.

2.2 Feedback from participants

As part of an effort to improve the effectiveness of these workshops for future webinars, participants were encouraged to provide ideas or feedback, through a voluntary post-webinar evaluation survey. This anonymous 9-question survey was administered through SurveyMonkey and was presented online to all participants immediately after the final webinar, automatically loading into the web browser upon the webinar's closure. This survey (Appendix 1), sought to capture feedback on various aspects, including webinar format, core content, and participant interest in future participation.

The survey featured Likert scales to measure the usefulness of the presented information, the relevance of the information presented, self-reported changes in understanding of the webinar topics, and willingness to attend future webinars. Participants were also asked what their preferred method of learning about breast cancer survivorship-related topics was, including webinars, printed materials (brochures, handouts, and handbooks), videos, support groups, one-on-one consultations and other. Additionally, participants were asked which topic in the webinar series they found the most informative and helpful.

Moreover, participants were given the opportunity to provide insights into areas of improvement for the webinars or share suggestions for enhancing the overall experience. Participants were invited to express topics they would like to focus on in upcoming sessions. Questions included: "Are there any specific questions or topics related to breast cancer survivorship that you would like to see addressed in future webinars?", "Would you recommend that these webinar series continue? If yes, which topics would you like us to continue exploring in future webinars?" and "Do you have any suggestions for areas of improvement for our webinars or the overall experience?". This open-ended approach allowed participants to offer constructive feedback, ensuring that future webinars are finely tuned to meet their expectations and address specific areas of interest and concern.

2.3 Evaluation

A descriptive, inductive approach was used to analyze the open-ended questions, which included topics to cover in future webinars and feedback on the overall webinar experience. Two study team members (MP, SZ) reviewed the open-ended responses multiple times and independently assigned inductive codes using constant comparative methods previously described by Percy and Kostere [13]. Results were compared between coders, and discrepancies were resolved through a consensus approach between the two study team members (MP, SZ). If new codes were suggested, a discussion occurred and new codes were added and assigned

themes as necessary, followed by a re-evaluation of the previously coded text. The team further grouped the codes into categories, sub-themes, and higher-level themes, and quotes were extracted to serve as thematic examples.

3.Results

Participants included breast cancer survivors, their loved ones, healthcare professionals, and individuals seeking knowledge and support in navigating life after breast cancer treatment. An average of 95 participants took part in the four webinars delivered through Wellspring (99 participants for the Breast Survivorship and Surveillance webinar, 97 participants for the Mental Health in Breast Survivorship webinar, 108 participants for the Adjuvant Antihormonal Therapy for Breast Cancer webinar, and 74 participants for the Sexual Health after Breast Cancer webinar). Through delving into areas like breast cancer survivorship surveillance, mental health, adjuvant

antihormonal therapy, and sexual health, this webinar series provided a platform for knowledge dissemination and empowerment. After the completion of the last webinar, participants were provided with a postwebinar survey. 25 participants completed the post-webinar survey, with some participants choosing to skip certain questions. Survey respondents included breast cancer survivors, family members and caregivers.

Participants were asked to self-rate the usefulness of the information presented in the webinars. Of the 25 respondents, 60% (15/25) of participants responded that the information presented in the webinars was extremely useful, 36% (9/25) responded that the information was very useful, and 4% (1/25) responded that the information was somewhat useful. None of the participants responded that the information was not so useful or not at all useful (**Figure 1**).

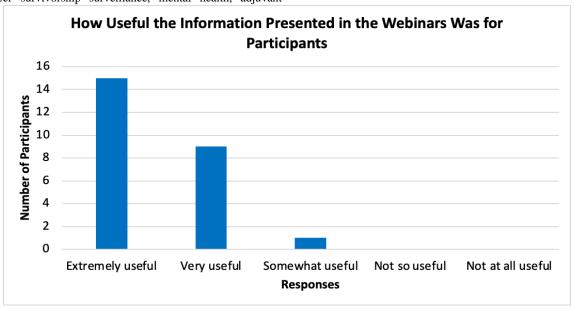


Figure 1: Self-rated usefulness of the information presented in the webinars (n=25).

Participants were also asked to rate how much the webinar series improved their knowledge about breast cancer survivorship and related topics and how relevant the webinars were to their specific needs and interests. Of the 25 respondents of the post-webinar survey, 32% (8/25) reported that the webinar

series improved their knowledge about breast cancer survivorship and related topics by a great deal, whereas 48% (12/25) noted that their knowledge improved by a lot. 44% (11/25) and 48% (12/25) of participants expressed that the webinars were relevant to their needs and interests to a great deal and a lot, respectively (Table 1).

Question	How much has the webinar series improved your knowledge about breast cancer survivorship and related topics?	To what extent were these webinars relevant to your specific needs and interests?
A great deal n (%)	8 (32)	11 (44)
A lot n (%)	12 (48)	12 (48)
A moderate amount n (%)	4 (16)	2 (8)
A little n (%)	1 (4)	0 (0)
None <i>n</i> (%)	0 (0)	0 (0)

Table 1: Participants' answers regarding the impact and relevance of the webinars (n=25).

Participants were also asked how likely they were to participate in future webinars on related topics. There was strong support for the continuation of

the webinar series; of the 25 respondents, 80% (20/25) of participants expressed a very likely inclination to participate in future webinars and 16%

(4/25) of participants expressed a likely inclination to participate in future webinars (**Figure 2**).

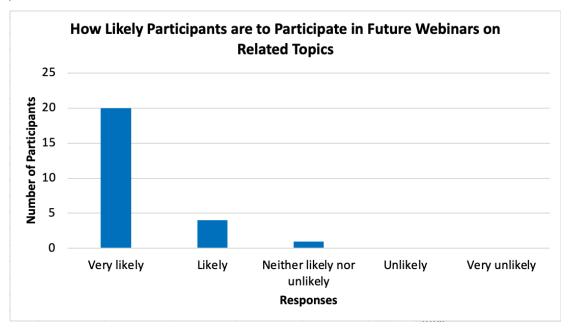


Figure 2: Participants' self-rated likelihood of participating in future webinars (n=25).

Participants were also provided a list of methods for learning about breast cancer survivorship-related topics and were requested to select the method(s) they best preferred. Of the 24 survey respondents, 95.83% (23/24) favored webinars as their preferred learning method of choice, 25% (6/24) of

participants favored printed materials, 20.83% (5/24) preferred videos, 20.83% (5/24) preferred support groups and 12.50% (3/24) chose one-on-one consultations as their preferred method of choice (**Figure 3**).

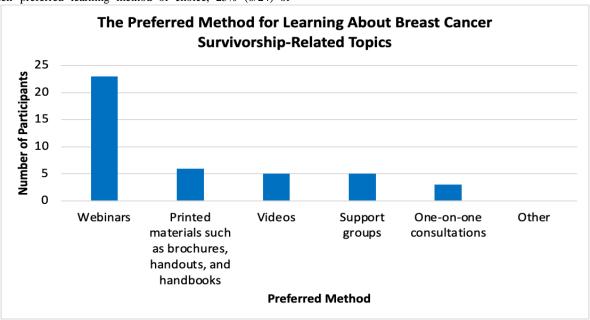


Figure 3: Participants' preferred method for learning about breast cancer survivorship-related topics (n=24).

Furthermore, participants were asked what topic(s) presented in the webinars they found the most informative and helpful. Of the 25 respondents, 40% (10/25) selected the Breast Survivorship and Surveillance webinar, 20%

(5/25) chose the Mental Health in Breast Survivorship webinar, 36% (9/25) chose the Adjuvant Antihormonal Therapy for Breast Cancer webinar, and 80% (20/25) of survey respondents selected the Sexual Health After Breast Cancer webinar (**Figure 4**).

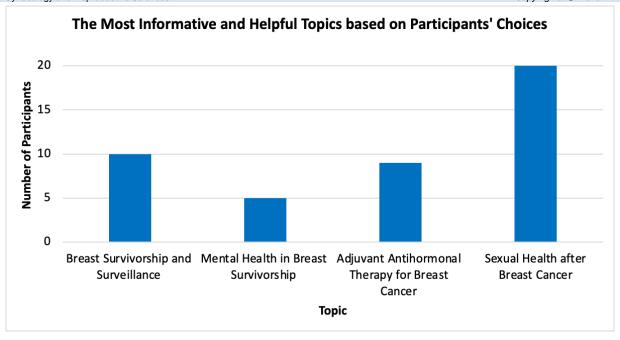


Figure 4: Topics covered in the webinars reported as the most informative and helpful, based on participants' choices (n=25).

Additionally, participants were asked three open-ended questions, which allowed them to provide additional feedback on the webinar series. Participants' feedback was categorized into two categories: topics for future webinars and feedback on the structure of future webinars.

Participants highlighted various topics to focus on in future webinars, including sexual health and partner relationships, returning to work, transitioning through different phases of recovery, accessing services, developing care timelines, mental health support, managing post-treatment symptoms, and lymphedema/lymph node management. Participants also

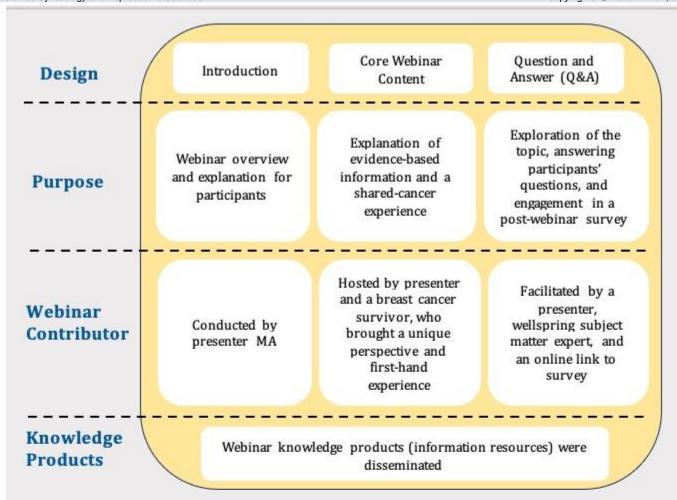
asked for webinars focused on current research and resources, including finding reputable resources, patient advocacy programs and new treatment research (**Table 2**).

Participants also provided feedback on areas of improvement and the overall webinar experience. This included having longer webinars, more time for questions, submitting questions prior to the webinar, posting question and answer responses on the handouts distributed post-webinar, incorporating more group discussions, having a variety of speakers, and providing a balanced perspective in the webinars (**Table 2**).

Category	Themes	Codes	Supporting Quotes
Topics for Future Webinars	Sexual Health and Partner Relationships	Sexual Health Advocacy	"How to advocate for your sexual health when under duress e.g. from new diagnosis, chemo, surgery, radiation etc."
		Partner Relationships	"Partner relationships after breast cancer, including separation and divorce after cancer treatment, identity and self-awareness crises after breast cancer"
	Achieving Normalcy	Returning to Work	"Return to work or 'normalcy"
		Transitioning Through Different Phases of Recovery	"Yes, more about transitioning through different phases of recovery and how long it takes to feel normal"
	Treatment-Specific and	Accessing Services	"How to advocate with hospitals that offer no survivorship programme. How to access services that are suitable post-treatment. Making a post treatment wellness plan"
		Developing Care Timelines	"Outlining timelines for breast cancer diagnosis, treatment, the roles of GP [General Practitioner], surgeon, medical oncologist, radiation oncologist, etc. I feel like there is not 1 person in charge of my care and I have to figure it out when I'm not sure what I know/don't know. A flowchart/log diagram and key questions to ask."

	<u> </u>	Mental Health Support	"Yes, specific tools and tips for mental healthhow to handle scan anxiety and as new health issues arise"
		Managing Post-Treatment Symptoms	"How to manage lingering physical symptoms after treatment. What to expect from recovery."
		Lymphedema/Lymph Node Management	"A seminar on lymph node removal and dissection and side effects/treatments for lymphedema."
	Research and resources	Reputable Resources	"Help in finding reputable resources - both online and in person across Canada, not just in the GTA [Greater Toronto Area]"
		Patient Advocacy Resources and Programs	"Yes, patient advocacy resources and programs for aftercare"
		New Treatment Research	"Yes, new treatment research or pelvic health"
Feedback on Structure of Future Webinars	Webinar Format	Longer Session	"The length of the webinars could be longer, as some topics felt constrained by the time limit. Maybe a 90 minute session?"
		Question Period Duration	"More time at the end for questions and answers."
		Prior Question Submission	"Have attendees submit questions prior to the webinar for the presenter to discuss during the presentation."
		Question & Answer Responses	"It would be great if you could collect the questions posted at q&a and add the answers to them with the handouts to the webinar"
		Group Discussion	"Opportunity for group support for participants"
	Diversity of Patient Experiences	Variety of Speakers	"I think it would be beneficial to have a variety of survivors speak, as one person's experience isn't another's with BC"
		Balanced Perspective	"I like the idea that a breast cancer survivor was included to share her experience. In this case, I found the speaker to be somewhat negative. I understand the need to share the perspective that this is/ can be very difficult experience to go through, however I think a more balanced perspective (including some positive outcomes) would also be beneficial."

Table 2: Qualitative analysis of feedback from participants regarding topics and structure of future webinars.



Recommendations

Balanced Perspective from Speakers

Some participants appreciated having a breast cancer survivor share their experience. However, there is a desire for a more balanced perspective from speakers, which includes discussing not only the difficulties but also positive outcomes of the breast cancer experience.

More Opportunities for Interaction and Support

Participants
suggested
providing a
platform for group
support among
participants.
Participants also
requested
discussing where to
find resources and
support for cancer
treatment in the
webinars.

Extended Duration of Q&A Session

Participants felt
that the webinars
should have more
time at the end for
questions and
answers.
Participants
proposed the idea
of allowing them to
send in questions in
advance and
posting responses
on the handouts
provided postwebinar.

Diverse Survivor Speakers and Longer Webinars

It was recommended to have a variety of breast cancer survivors speak, recognizing that each person's experience with breast cancer is unique. Some participants felt that the webinars were constrained by time limits and suggested extending the duration to 90 minutes for a more comprehensive discussion of topics.

Figure 5: Webinar format and recommendations for future webinars.

4. Discussion

This 4-part webinar series was developed to teach participants the basic concepts of cancer survivorship care. After analyzing the participants' post-webinar feedback, we discovered that a large majority of participants found the webinars useful and expressed a strong inclination to participate in future webinars. Of the 25 survey respondents, 60% of participants responded that the information presented in the webinars was extremely useful and 80% of respondents expressed a very likely inclination to participate in future

webinars. This may be partly attributable to the webinars' accessible and interactive format which facilitated engagement and allowed these workshops to be tailored to participant's needs [11]. Therefore, this provides insights on the value webinars hold in increasing awareness of cancer survivorship care [11,12].

Unfortunately, many cancer survivors report lack of information and support during cancer survivorship care, making webinars a new and innovative way to provide this information [14,15]. The Breast Cancer Webinar Series aimed to tackle this issue, by providing participants with information on various areas of cancer survivorship care, including breast cancer survivorship surveillance, mental health, adjuvant antihormonal therapy, and sexual health. With the growing number of breast cancer survivors worldwide [1,16], there is a greater need to provide an overview of cancer survivorship care to the general public [9,10,17]. There is also a clear need to provide more quality online resources to support the mental health and wellbeing of those with breast cancer, along with their caregivers [18–20].

The Breast Cancer Webinar Series utilized digital technology, enabling the engagement of diverse audiences, including breast cancer survivors and their families. The convenience of this medium delivered by subject-matter experts, coupled with the overarching objective of delivering empowering information and engaging new audiences, has showcased the utility of webinars in addressing the gap in breast cancer survivorship knowledge. Webinars have been shown to be correlated with positive gains in knowledge and serve as a good supplement to traditional educational methods, particularly when there is need for greater geographical flexibility [21,22].

The audience expressed a high likelihood of intention to attend future webinars (96%), which indicates their interest and a positive response to the series. This positive response can be attributed to the effectiveness and flexibility of webinars in the delivery of patient education [11]. In one study, Alaska's rural tribal health workers were offered 10 one-hour cancer education webinars. All 11 participants reported that, because of the webinars, they planned to change their own behaviors to minimize cancer risks and planned to communicate cancer prevention strategies to their patients [23]. Additionally, the preferred method of learning among participants was webinars followed by printed material, which was voted by 95.83% and 25% of participants respectively. This supports earlier findings which list webinars as a favorable means of receiving quality survivorship information [24].

During the webinars, the discussed topics included breast cancer survivorship and surveillance, mental health, adjuvant antihormonal therapy, and sexual health. Participants were asked which webinar topic they found most informative and helpful, and 80% of survey respondents selected the Sexual Health After Breast Cancer webinar. Research shows that cancer survivors continue to lack the necessary resources needed to support sexual rehabilitation following cancer treatment [25–30]. For example, in one study, of the 25 cancer centers contacted, 87% reported having no sexual aids available for male cancer survivors, and 72% reported having no sexual aids available for female cancer survivors [25]. Furthermore, a qualitative study found that female breast cancer survivors who completed treatment reported difficulties adapting to the physical and emotional traumas of breast cancer

surgery and treatment, navigating sexual communications with partners, and negotiating intimacy and closeness without sexual intercourse with existing partners [26]. This demonstrates the persistent gap that exists in sexual rehabilitation resources for cancer survivors.

The practical strategies discussed were found applicable by 92% of attendees, emphasizing the series' practical relevance and potential impact on real-life situations. Furthermore, participants expressed a desire to have longer and more interactive sessions. They also highlighted the importance of bringing diverse survivor speakers, which underscores the need for inclusivity in future webinars. This is especially true, since various studies highlight the inequities faced by cancer survivors in the healthcare system [31–33].

After the webinar series, participants were invited to provide feedback on topics to include in future webinars. Suggestions embodied areas such as sexual health and partner relationships, achieving normalcy, access to survivorship services, post-treatment wellness resources, timelines for breast cancer treatment, a seminar clarifying lymph node information, and current survivorship research and resources. Participants were also invited to provide feedback on the value and informativeness of the sessions, as well as share their suggestions. This feedback highlighted the importance of a balanced perspective from speakers, more opportunities for interaction and support and extended durations for Q&A sessions. These valuable insights will inform the development of future webinars, ensuring that they align with participants' preferences and expectations.

Limitations

Despite the various strengths of this study, there were some limitations as well. The webinar series had an average of 95 participants across the four webinars. However, only 25 participants filled out the post-webinar survey, with some participants choosing not to answer certain questions. This resulted in a small sample size, providing less feedback on the webinar format and content. Participants may have decided not to complete the survey since it was delivered after the completion of the final webinar. In the future, a dedicated period can be provided to complete the survey during the session. Additionally, the post-webinar survey was administered exclusively after the fourth session, which focused on "Sexual Health After Breast Cancer." This introduces a potential bias, as certain participants solely attended this webinar and may have disproportionately rated it as the most valuable and informative. Nonetheless, having open-ended questions provided greater insight on participants' understanding and feedback for future webinars. Additionally, since participant responses were only collected at the end of the webinar series, statistical analysis regarding the effectiveness of the webinar series could not be performed. Furthermore, specific demographic information (e.g., participants' age and racial ethnicity) were not collected, which may limit the generalizability of these results. Future studies should focus on conducting pre- and post-webinar surveys, collecting specific demographic information of participants, and conducting post-webinar surveys after each webinar, to gain a better understanding of which sessions and topics resonated most with participants.

5.Conclusion

In summary, the Breast Cancer Webinar Series seeks to bridge the gaps in breast cancer survivorship support. Through these informative sessions, participants have gained knowledge, emotional support, and practical guidance, empowering them to face their survivorship journey with confidence and optimism. Based on the responses provided by the participants in the post-webinar survey, there is a strong recommendation to continue the webinar series. Participants expressed their interest in various topics related to cancer survivorship and recovery. The interactive nature of this webinar has served to bridge the gap between healthcare professionals,

advocates, and patients, facilitating a deeper understanding of the intricate issues that affect breast cancer survivors. The recommendations provided by participants will be used to inform the development of future webinars. Future studies should evaluate whether incorporating experiential learning, group activities, and more diverse speakers improves knowledge and attitudes of participants.

Funding: This webinar did not receive any financial support.

Dr. Kwan holds the Hold'em for Life Early Career Professorship in Cancer Research, a University Named Professorship at the University of Toronto.

Ethical statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Research ethics: Ethical review and approval were not required for this study as unidentified data was used and anonymous post-webinar surveys were administered.

Informed consent: Written informed consent was not required as unidentified data was used and anonymous post-webinar surveys were administered.

References

- 1. Arnold, Melina, Morgan, Eileen, Rumgay, et al. (2022). Current and future burden of breast cancer: Global statistics for 2020 and 2040. The *Breast*. 66: 15–23.
- World Health Organization. (2024). Breast cancer. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/breast-cancer. Accessed 1 June 2024.
- 3. Heer, Emily, Harper, Andrew, Escandor, et al. (2020). Global burden and trends in premenopausal and postmenopausal breast cancer: a population-based study. Lancet *Global Health*. 8(8): e1027–1037.
- Chu, Alanna K, Mutsaers, Brittany, Lebel, et al. (2022). The Association between Survivorship Care Plans and Patient-Reported Satisfaction and Confidence with Follow-Up Cancer Care Provided by Primary Care Providers. *Current Oncology*. 29(10): 7343–7354.
- King, R, Stafford, L, Butow, P, Giunta, D, Laidsaar-Powell, R. (2023). Psychosocial experiences of breast cancer survivors: a meta-review. *Journal of Cancer Survivorship*. 18: 84–123.
- Soldato D, Arecco L, Agostinetto E, Franzoi MA, Mariamidze E, et al. (2023). The Future of Breast Cancer Research in the Survivorship Field. *Oncology and Therapy*. 11(2): 199–229.
- 7. Elmore, Lynne W, Greer, Susanna F, Daniels, et al. (2021). Blueprint for cancer research: Critical gaps and opportunities. CA: A Cancer *Journal for Clinicians*. 71(2): 107–139.
- Bateman, Jerram, Egan, Richard, Maclennan, et al. (2023).
 'Survivorship care is one big gap': a qualitative study of post-treatment supportive care in Aotearoa New Zealand. BMC Health Services Research. 23(1).
- Vandraas, Kathrine F, Reinertsen, Kristin V., Kiserud, et al. (2022). Health literacy among long-term survivors of breast cancer; exploring associated factors in a nationwide sample. Supportive Care in Cancer. 30(9): 7587–7596.
- Jinghua Lin, Katherine, Lengacher, Cecile A, Rodriguez, et al. (2022). Educational programs for post-treatment breast cancer survivors: a systematic review. European Journal of Gynaecological Oncology. 43(2): 285-341.

- 11. Chiswell, Megan, Smissen, Annika, Ugalde, et al. (2016). Using Webinars for the Education of Health Professionals and People Affected by Cancer: Processes and Evaluation. *Journal of Cancer Education*. 33(3): 583–591.
- Chan, RJ, Crichton, M, Crawford-Williams, F, Agbejule, OA, Yu, K, et al. (2021). The efficacy, challenges, and facilitators of telemedicine in post-treatment cancer survivorship care: an overview of systematic reviews. *Annals of Oncology*. 32(12): 1552–1570.
- Chan, Raymond J, Agbejule, Oluwaseyifunmi A, Yates, et al. (2022). Outcomes of cancer survivorship education and training for primary care providers: a systematic review. *Journal of Cancer Survivorship*. 16(2): 279–302.
- Khajoei, Rahimeh, Ilkhani, Mahnaz, Azadeh, et al. (2023).
 Breast cancer survivors-supportive care needs: Systematic review. Vol. 13, BMJ Supportive and Palliative Care. 13(2): 143–153.
- Nekhlyudov, Larissa, Mollica, Michelle A, Jacobsen, et al. (2019). Developing a Quality of Cancer Survivorship Care Framework: Implications for Clinical Care, Research, and Policy. *Journal of the National Cancer Institute*. 111(11): 1120– 1130.
- Percy, William H, Kostere, Kim, and Kostere, et al. (2015).
 Generic qualitative research in psychology. The Qualitative Report. 20(2): 76–85.
- Hussey, Conor, Hanbridge, Moira, Dowling, et al. (2024).
 Cancer survivorship: understanding the patients' journey and perspectives on post-treatment needs. BMC Sports Science, Medicine and Rehabilitation. 16, 82.
- 18. Hyatt, Amelia, Shelly, Amy, Cox, et al. (2022). How can we improve information for people affected by cancer? A national survey exploring gaps in current information provision, and challenges with accessing cancer information online. Patient Education and Counseling. 105(8): 2763–2770.
- Sung, Hyuna, Ferlay Jacques, Siegel, et al. (2021). Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA: A Cancer *Journal for Clinicians*. 71(3): 209–249.
- 20. Comander, Amy, Frates, Beth, and Tollefson, et al. (2021). PAVING the Path to Wellness for Breast Cancer Survivors: Lifestyle Medicine Education and Group Interventions. American Journal of Lifestyle Medicine. 15(3): 242–248.
- 21. Tuckey, Natalie, Iasiello, Matthew, Corsini, et al. (2024). 'Just Google it'—A scoping review of online mental health resources for survivors of breast cancer. Psycho-Oncology Journal of the Psychological, Social and Behavioral Dimensions of Cancer. 33(4): e6337.
- 22. Harkin, Lydia Jo, Beaver, Kinta, Dey, et al. (2017). Navigating cancer using online communities: a grounded theory of survivor and family experiences. *Journal of Cancer* Survivorship. 11(6):658–669.
- Budenz, Alexandra, Sleight, Alix G, and Klein William MP. (2022). A qualitative study of online information-seeking preferences among cancer survivors. *Journal of Cancer* Survivorship. 16(4): 892–903.
- 24. Ebner, Christian, and Gegenfurtner, Andreas. (2019). Learning and Satisfaction in Webinar, Online, and Face-to-Face Instruction: A Meta-Analysis. Frontiers in Education. 4.

- Gegenfurtner Adreas, and Ebner, Christian. (2019). Webinars in higher education and professional training: A meta-analysis and systematic review of randomized controlled trials. Educational Research Review. 28: 100293.
- Cueva, Katie, Cueva, Melany, Revels, et al. (2021). An Evaluation of Cancer Education Webinars in Alaska. *Journal of Cancer Education*. 36(3): 484–490.
- 27. Thorner Bantung, Elissa, Duffey, Katherine E, Peairs, et al. (2013). Webinars as a tool for breast cancer survivorship education. *Journal of Clinical Oncology*. 31(26).
- Bober, Sharon L, Michaud, Alexis L, and Recjlitis, et al. (2019).
 Finding sexual health aids after cancer: are cancer centers supporting survivors' needs? *Journal of Cancer Survivorship*. 13(2): 224–230.
- Tat, Susana, Doan, Therese, Yoo, et al. (2016). Qualitative Exploration of Sexual Health Among Diverse Breast Cancer Survivors. *Journal of Cancer Education*. 33(2):477–484.
- 30. Marsh, Sydney, Borges, Virginia F, Coons, et al. (2020). Sexual health after a breast cancer diagnosis in young women: clinical implications for patients and providers. *Breast Cancer Research and Treatment*. 184: 655–663.
- Albers LF, Van Ek GF, Krouwel EM, Oosterkamp-Borgelink CM, Liefers GJ, et al. (2020). Sexual Health Needs: How Do Breast Cancer Patients and Their Partners Want Information? *Journal of Sex and Marital Therapy*. 46(3): 205–226.

- Franzoi MA, Aupomerol M, Havas J, Soldato D, Lambertini M, et al. (2024). Investigating sexual health after breast cancer by longitudinal assessment of patient-reported outcomes. ESMO Open. 9(2): 102236.
- 33. Katz, Anne, Agrawal, Laila S, and Sirohi, et al. (2022). Sexuality After Cancer as an Unmet Need: Addressing Disparities, Achieving Equality. American Society of Clinical Oncology Educational Book. 42.
- Truant TLO, Lambert LK, and Thorne S. (2021). Barriers to Equity in Cancer Survivorship Care: Perspectives of Cancer Survivors and System Stakeholders. Global Qualitative Nursing Research. 8.
- 35. Ke, Yu, Tan, Yung Yin, Neo, Patricia Soek Hui, Yang, et al. (2023). Implementing an Inclusive, Multidisciplinary Supportive Care Model to Provide Integrated Care to Breast and Gynaecological Cancer Survivors: A Case Study at an Asian Ambulatory Cancer Centre. *International Journal of Integrated Care*. 23(1): 14.
- Garret, Elleyse, Ma, Cindy, Ochoa-Dominguez, Carol Y, et al. (2024). Black cancer patients navigating a health-care system of racial discrimination. *Journal of the National Cancer Institute*. 116(2): 258–263.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article, Click Here:

Submit Manuscript

DOI:10.31579/2578-8965/230

Ready to submit your research? Choose Auctores and benefit from:

- > fast, convenient online submission
- > rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- > unique DOI for all articles
- > immediate, unrestricted online access

At Auctores, research is always in progress.