



Published in final edited form as:

Transl Behav Med. 2025 January 16; 15(1): . doi:10.1093/tbm/ibaf085.

Peer Support Programming among Women At-Risk for or Surviving Breast Cancer: Facilitators and Barriers to Community-Based Patient Navigation

Muriel R. Statman, BA¹, Marcelo M. Sleiman Jr., BA¹, Duye Liu, BS¹, Anthony J. Zisa, BS¹, Adina Fleischmann, LSW², Kenneth P. Tercyak, PhD¹

¹Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington DC, USA

²Sharsheret, Teaneck, NJ, USA

Abstract

Background: Peer support (PS) programs offer care to women at-risk for and surviving breast cancer to improve their quality of life (QoL).

Purpose: This study evaluated a cancer-focused community-based organization's (CBO) one-on-one and no-cost PS program to identify its uptake and outcomes.

Methods: A secondary analysis was conducted among N=1,054 breast cancer previvors and survivors who contacted the CBO for information and support: outcomes were assessed 30 days later. Associations among demographic/clinical factors and the offer, uptake, and outcomes of PS were analyzed.

Results: In this sample, N = 930 women (88.2%) were breast cancer survivors. PS was offered to N = 807 women (76.6%). Logistic regression demonstrated increased odds of being offered PS among those who were younger (Odds Ratio [OR]=1.24), with lower household incomes (OR = 1.37), and who found the CBO more beneficial for themselves and their families (e.g., OR = 1.19). Of those offered PS, N = 304 (37.7%) utilized it. PS utilization was more likely among mothers (OR = 1.57), breast cancer previvors (OR = 1.59), and those with lower QoL (OR = 1.18). Women who utilized PS generally reported positive experiences (Mean = 44.4/50): younger age and positive experience were associated with better PS outcome (p 's ≤ 0.03). Among women who did not utilize PS, commonly reported challenges included time (17.5%) and discomfort sharing personal information (9.8%). Other barriers (63.9%) analyzed qualitatively referenced lack of need or interest, time constraints, and existing support networks.

Corresponding author: Kenneth P. Tercyak, PhD, tercyakk@georgetown.edu.

Conflicts of Interest: The authors declare that they have no conflicts of interest.

Human Rights: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards: IRB STUDY00008890.

Informed Consent: This is a secondary data analysis.

Welfare of Animals: This article does not contain any studies with animals.

Conclusions: PS programming was well-received among the one-third of women who participated, especially younger women and with those lower QoL. Barriers to utilizing PS could be addressed to enhance its reach and impact.

Lay Summary

This study looked at how women affected by breast cancer use a free, one-on-one peer support program offered by a cancer-focused community organization. The goal was to understand who uses the program and how it helps. Researchers reviewed data from over 1,000 women who contacted the organization for information or support. Most were breast cancer survivors. About 77% were offered peer support, and 38% accepted it. Women who were younger, had lower incomes, or had a better experience with the organization were more likely to be offered support. Those who used it were often mothers, women who had not yet had breast cancer but were at high risk, and those with lower quality of life. Most women who used the program thought highly of it (e.g., it was beneficial to them and their families). Some who didn't use it said they were too busy or felt uncomfortable sharing personal details, while others said they didn't need it or already had support. Overall, peer support appears to be beneficial, especially for women facing more challenges. Efforts to reduce barriers could make it more accessible to those who need it most.

Teaser Text

One-on-one peer support programs from community organizations are well-received by women affected by breast cancer, especially those facing greater challenges. This study explores who uses these programs, and why some women don't.

Keywords

Breast Cancer; Peer Support; Quality of Life; Patient Navigation; Community-Based Organization

Background

Each year, approximately 1 in 8 women in the U.S. will be diagnosed with invasive breast cancer. In recent years, this disease's incidence rates have increased, particularly among younger women under the age of 50 [1]. Given a decline in breast cancer mortality, there is a greater focus on improving the quality of life (QoL) among those with breast cancer and long-term survivors [2]. Breast cancer diagnoses affect all aspects of women's lives, including their psychosocial functioning [3–4]. Depression and anxiety are common, and many women report feeling overwhelmed by loneliness and uncertainty [2]. Additionally, for breast cancer previvors (i.e., those unaffected by cancer but with alterations in pathogenic predisposition genes such as *BRCA1* and *BRCA2*, conferring a lifetime risk of over 60%), many women experience high psychosocial burden as they navigate understanding their risk and heritability, family planning, and personal relationships [5–6]. Contributors to psychosocial distress and reduced QoL among women at-risk for and surviving with breast cancer include limited personal resources, ineffective coping mechanisms, insufficient social support, and being of a younger or middle age [3–4]. Thus, there is a high need for social support programs among breast cancer previvors and survivors alike [7].

Peer support (PS) resources are an essential type of social support which connect individuals with trained peers with similar life experiences and aim to reduce the psychosocial side effects of cancer [8–9]. These programs are often offered through community-based organizations (CBO), which have been previously documented in the behavioral medicine research literature and shown to improve QoL, mitigate distress, and foster empowerment [10–12]. Unlike conventional medical support, PS relies on shared disease experiences among peer groups and can improve coping and provide insight into what to expect with diagnosis, treatment, or survivorship. Giese-Davis and colleagues (2016) found that women newly-diagnosed with breast cancer who received a peer counseling intervention improved significantly compared to controls on measures of breast cancer-specific well-being [13]. More recently, a systemic review of qualitative studies on PS among breast cancer survivors found that it fosters mutual understanding and emotional connection and enhances patient-centered education, but requires professional oversight to ensure member well-being and program quality [14]. PS has increasingly been offered using new convenient modalities, such as community-based or virtual programs, and at a substantially lower out-of-pocket cost to women than organized health care programs [15]. Importantly, many community-based and virtual programs are offered at no cost.

However, engagement in PS depends on a number of factors. For example, there is significant heterogeneity in the structure and content of PS interventions, and the benefits of PS are attenuated using some modalities, like online coaching with limited coach training [16]. PS programs have been shown most effective when participants are matched with peers who share similar demographic and clinical characteristics [17–18]. Thus, it is important that informational and support resources are well-aligned with specific communities' needs and interests [19]. This is especially important among high-risk populations genetically vulnerable to developing certain cancers, including Ashkenazi Jewish women [20]. Despite the potential benefits of culturally-competent CBO-led PS programs, few studies have investigated PS offer, uptake, and effectiveness of CBO for breast cancer previvors and survivors. Doing so is an important step in improving the delivery, quality, and outcomes of these programs.

Given the information and support needs of breast cancer previvors and survivors, it is essential to understand the firsthand accounts of its use in CBO contexts that deliver such programs at scale (e.g., regional, state-wide, national). Toward that end, this study evaluated a national CBO one-on-one and no-cost PS program designed for women at-risk for and surviving with breast cancer [21]. The primary aim of this analysis was to quantify PS offer, uptake, outcomes, and barriers among this population to improve program implementation reach and impact.

Methods

Overview

This is a secondary analysis of self-reported survey data collected over 10 years by a national CBO that offers no-cost patient navigation (PN) services to women at-risk for and/or surviving with breast cancer. As part of the PN outcome evaluation, data were collected 30 days following participation in one or more of the organization's programs,

with the goal of ascertaining individual-level feedback to improve care quality. For the purpose of this evaluation, program participation was defined as one or more completed encounters between women and the CBO and/or its representatives (e.g., peer supporters). Evaluation surveys were distributed by email to all women who engaged with the CBO, and data were collected using an online survey platform. Survey non-responders received three reminders weekly after survey initiation, and a final reminder was sent on the fourth week. After that time, and if no response was received, no further survey attempts were made. This study was reviewed and approved by the host university's (external evaluation partner's) Institutional Review Board.

Program Description

When individuals in need contact the CBO, they speak with a member of the professional staff and participate in an intake evaluation to assess each individual's needs for breast cancer information and support. The CBO staff consists of paid professionals who lead intakes, coordinate PN services, and oversee program operations. Many have backgrounds in oncology social work, and community health education and PN. Then as part of PN, one or more programs may be offered. The CBO provides a broad range of programming, including educational workshops, supportive services, and disease management resources focused on breast cancer control and prevention. These programs cover topics such as breast cancer treatment decision-making, managing side effects, financial and practical assistance, psychosocial well-being, and healthy living. Records in the PN evaluation dataset may have engaged in more than one program: PS represents only one component of the CBO broader model of service delivery.

In the case of the PS program, breast cancer previvors and survivors are connected to one-on-one PS with a lay peer health advisor. These peer supporters are members of the community who volunteer their time to engage with women along their breast cancer journey. Peer supporters are women who have either survived breast cancer or are previvors at elevated hereditary risk (e.g., *BRCA* carriers). Matching is performed by the CBO staff following the intake evaluation and based on women's age, breast previvor/survivorship status, and the peer supporter's training and experience addressing the range and type of women's needs. Peer supporters provide tips and resources for coping, emotional support, and navigating the shared breast cancer experience together [21].

All peer supporters enrolled with the CBO receive formal training and undergo a multi-day instructional offering that provides them with basic medical information about breast cancer risk, diagnosis, and treatment as well as supportive guidance. Training equips volunteers with the skills to provide meaningful, compassionate support to women and families facing breast cancer. Training emphasizes active listening, empathy, and cultural sensitivity, while also teaching boundaries, confidentiality, and self-care to ensure supporters can sustain their role effectively. Through role-play, breakout discussions, and guidance from experts, volunteers practice offering emotional support, sharing personal experiences thoughtfully, and connecting peers to reliable resources. The program also highlights opportunities for outreach and advocacy, empowering supporters to not only journey alongside women's breast cancer experiences but also strengthen community awareness and connection [8].

Measures

All of the evaluation measures used as part of this effort have been developed and validated by the investigator team through prior work with the CBO [8, 21–22].

Demographic/Clinical Information and Quality of Life: Women provided demographic information, such as age, race, ethnicity, marital status, and motherhood status. Women also provided self-reported medical histories, including information on breast cancer previvorship (e.g., familial and/or genetic risks) and survivorship. Following guidance by the Centers for Disease Control and Prevention for assessing health-related QoL through a scoring algorithm, women also reported on their overall health (1 = Poor, 5 = Excellent) [23].

Peer Support Offering, Utilization, Barriers, and Experience: Women indicated whether they were offered and utilized the PS program by responding to Yes/No items. Among women who did not endorse that they utilized PS, they were asked to identify their challenges out of seven options: (1) Lost contact, (2) Unable to reach, (3) Too busy, (4), Uncomfortable, (5) Difficult, (6) Needs changed, or (7) Other. Women who selected “Other” were given the option to provide an open-ended response, which were then content-analyzed.

Those who utilized PS were queried about their experience with the program. PS experience was determined through a summary score from a 10 item scale consisting of five-point Likert ratings (1 = Strongly disagree, 5 = Strongly agree). These scales assessed whether the women felt that the peer supporter: (1, 2) offered unique and practical support, and was (3) available, (4) a good fit, (5) appropriate, and (6) relatable, and if the peer supporter made them feel (7) understood, (8) supported, (9) reassured, and (10) hopeful. These items were summed together to form a continuous PS outcome experience summary score: higher scores indicated more favorable outcomes. The internal consistency reliability of the PS experience measure was high (Cronbach’s coefficient $\alpha = 0.94$).

Patient Navigation and Community-Based Organization Care Quality: The CBO PN process helps connect women to resources and services available from within the CBO itself or allied external organizations. PN quality was measured using a domain-specific seven-item scale consisting of five-point Likert ratings (1 = Strongly disagree, 5 = Strongly agree) to assess if the PN services women received were: (1) helpful, (2) informative, (3) timely, (4) effective, (5) supportive, (6) reliable, and (7) recommendable to others. These items were summed together to form a continuous PN quality summary score, with higher scores indicating a higher quality PN experience. The internal consistency of the PN quality measure was high (Cronbach’s coefficient $\alpha = 0.94$).

Similarly, CBO care quality was determined through a summary score that was derived from a four-item scale consisting of five-point Likert ratings (1 = Strongly disagree; 5 = Strongly agree). These scales assessed whether women felt that the programs and services offered by the CBO were: (1) valuable to them, (2) valuable to their families, (3) helpful, and (4) relevant.

Together, these items assessed the CBO's ability to understand the needs of and provide valuable support and services to women facing cancer, and higher scores indicated higher CBO care quality. The measure demonstrated solid internal consistency reliability (Cronbach's coefficient $\alpha = 0.95$) in assessing the extent to which women's needs were met and they felt supported by the CBO.

Data Analysis Plan

All analyses were conducted in SPSS version 29.0. Descriptive statistics were generated to summarize and inspect all data elements. Bivariate analyses, including Pearson's χ^2 tests and Student's t-tests, were then used to assess demographic and clinical factor differences between women who were and were not offered PS services. Next, among those offered PS services, bivariate analyses examined differences between women who did and did not utilize PS. Among those who utilized PS, additional bivariate tests were performed to examine relationships between demographic/clinical factors and their PS experience. Using a conventional threshold of $p < 0.10$, factors were examined using multivariable logistic regression to model the likelihood of being offered and of utilizing PS: a separate multivariable regression model was used to analyze PS experience. Among those who did not utilize PS, the open-ended responses to the "Other" option were content-coded using an AI-assisted text analysis methodology to identify common themes.[24] The initial AI-assisted coding was reviewed and validated by a member of the study team to ensure accuracy and consistency. Frequencies and percentages were then calculated for each identified theme to summarize the distribution of responses.

Results

Offer and Uptake of Peer Support

The demographic and clinical characteristics of the analytic sample are shown in Table 1. Among the $N = 1,054$ women (17.4% non-white) who contacted the CBO for information and support, $N = 518$ (49.1%) fell between the ages of 46–64 years old. The majority of women in this sample were partnered ($N=678$, 66.2%) and mothers ($N=821$, 78.9%). Additionally, $N=547$ (51.9%) of women carried a *BRCA* pathogenic alteration and $N=930$ (88.2%) had a breast cancer diagnosis.

A total of 807 women (76.6%) were offered PS. Women who were offered PS tended to be younger ($t = -2.86$, $df = 1,050$, $p = 0.004$) and have lower household incomes ($t = 2.22$, $df = 1,021$, $p = 0.03$). Further, they reported an enhanced experience with PN ($t = -3.64$, $df = 345$, $p < 0.001$) and the quality of PN care they received from the CBO overall ($t = -4.57$, $df = 317$, $p < 0.001$). Using logistic regression modeling, the odds of being offered PS were greater for younger women (Odds Ratio [OR] = 1.24, 95% Confidence Interval [CI] = 1.04–1.48), those with lower household incomes (OR = 1.37, 95% CI = 1.02–1.85), and those who reported a more beneficial experience with the CBO (OR = 1.19, 95% CI = 1.08–1.32) (Table 2).

Among those offered PS, $N = 304$ (37.7%) utilized it. Those who utilized PS tended to be breast cancer previvors ($\chi^2 = 4.24$, $p = 0.04$), raising children (i.e., mothers; $\chi^2 = 5.15$, p

= 0.03), and experiencing lower QoL ($t = 2.23$, $df = 800$, $p = 0.03$). A logistic regression analysis revealed that the odds of utilizing PS were greater for mothers (OR = 1.57, 95% CI = 1.10–2.24), those without a breast cancer diagnosis (OR = 1.59, 95% CI=1.02–2.47), and those with poorer QoL (OR = 1.18, 95% CI = 1.02–1.37) (Table 3).

Women who utilized PS generally reported positive experiences with the program overall ($M = 44.4/50$), particularly on measures of feeling supported, understood, and reassured. Those who were younger ($r = -0.11$, $p = 0.05$) and had more beneficial experiences with PN ($r = 0.50$, $p < 0.001$) and the CBO overall ($r = 0.55$, $p < 0.001$) tended to have positive experiences with PS as well. In a multivariable regression accounting for 37% of the model's variance ($N = 285$), younger age ($\beta = -0.84$, $p = 0.03$), higher-quality CBO care ($\beta = 1.71$, $p < 0.001$), and PN quality ($\beta = 0.58$, $p < 0.001$) all contributed significantly to an enhanced PS outcome (Table 4).

Barriers to Peer Support

Among women who did not utilize PS ($N = 503$; 62.3%), participants were asked to endorse any barriers they may have faced, with the option to endorse multiple reasons. In total, there were $N = 441$ selections. The most commonly endorsed barriers included being too busy ($n = 77$ endorsements, 17.5% of all selections) and feeling uncomfortable sharing personal information with a peer supporter ($n = 43$ endorsements, 9.8%). Notably, “Other” was selected $n = 282$ times (63.9%), with respondents prompted to provide a written explanation. Common written themes included declining PS because it was not needed or due to a lack of interest ($n = 55$; e.g., “It was not necessary”), lacking time or readiness to engage ($n = 41$; e.g., “I got busy and it’s hard for me to get on the phone”), and expressing intentions to connect later, not yet being assigned, or awaiting follow-up ($n = 38$; e.g., “I haven’t yet but will soon”). Many also indicated they already had support from family, friends, or other networks ($n = 32$; e.g., “I have a lot of existing peer support”). Few responses mentioned challenges with matching based on circumstances, preferences, or availability ($n = 18$), and even fewer noted concerns or challenges with the PS process itself ($n = 9$). Smaller groups reported declining due to specific situational barriers ($n = 8$), already serving as a peer supporter ($n = 7$), or provided positive feedback about the CBO’s support ($n = 6$) (Figure 1).

Discussion

This study offers insight into patterns of PS engagement within a cancer-focused CBO and aligns with prior research on community-based peer support. Women who were younger, had fewer financial resources, and were more engaged with the CBO were most likely to be offered PS, suggesting that professional staff help navigate support toward those with greater or ongoing needs. PS uptake was moderate, with higher utilization among mothers, women without a cancer diagnosis, and those reporting lower QoL—groups who may be seeking shared understanding or guidance [22]. Although many declined due to limited need, readiness, or the presence of existing support, women who participated consistently reported feeling understood and supported by the program. Overall, these patterns suggest that PS may be especially valuable for women with persistent informational or supportive

needs, while others may find sufficient resources through alternative CBO services or within their personal networks.

Associations related to the offer and uptake of PS suggest that CBO staff appropriately target outreach to women perceived to be more vulnerable or in greater need of support. Regarding utilization, the association with motherhood suggests that child caregiving responsibilities or family-related stressors may drive a desire for greater connection and understanding along their breast cancer journey [22]. Furthermore, mothers who are previvors may be especially concerned about hereditary cancer and seek guidance in navigating not only their own risk, but also the potential risks faced by their children and other family members [25–26]. The increased uptake among women without a breast cancer diagnosis may reflect heightened needs among those earlier in the disease risk management process.

The finding that PS was more likely to be offered to women who reported greater overall benefit from the CBO can be understood in several ways. One possibility is that women who were more engaged with the CBO or who perceived higher quality initial interactions were more likely to be offered PS as part of a broader continuum of PN service delivery. Another possibility is that being offered PS contributed to a more positive overall experience with the CBO. Because the observational design does not allow determination of directionality, this association should be considered correlational. Even so, the pattern suggests that strengthening early engagement efforts may help ensure that supportive services (such PS) are offered in ways that are well-received.

Additionally, women who ultimately utilized PS reported poorer QoL at the time of the evaluation; however, because QoL was assessed approximately 30 days after PS engagement, this association should be interpreted cautiously and cannot be considered causal. It is unclear whether women with lower QoL were more inclined to seek help from the CBO and accept additional resources (including PS), or whether PS utilization reflected underlying physical and psychosocial needs that persisted over time. Thus, the observed association likely reflects pre-existing or ongoing challenges rather than any detrimental effect of PS programming. It is also important to consider that PS is one of several programs offered by the CBO reported herein, including services focused on treatment decision-making, managing chemotherapy side effects, addressing financial toxicity, promoting healthy living, and supporting cancer parenting. Additional educational resources are available on topics such as fertility, physical activity, coping with anxiety and depression, and sexual health. Many of these programs and services offer more targeted and tailored interventions that may have been used more extensively by previvors and survivors than PS. When women do receive services, including PS, they consistently evaluate the quality of their engagement with the CBO highly. This suggests that those who seek PS perceive high value in this program—even if their QoL remains compromised due to ongoing needs.

In line with previous literature, women in this evaluation reported a positive overall experience with PS in navigating their cancer journeys, which is in accordance with previous literature finding improved well-being and meaning-making among those with cancer [27–29] Women who had positive experiences with the CBO overall also reported positively

on PS; this suggests a reinforcing effect where trust in the CBO and its service quality contribute to favorable experiences with individual program components (such as PS). The findings also highlight the importance of integration across support services, where PN and PS may contribute synergistically to enhance patient well-being [30]. This is particularly important in light of the fact that despite the reported benefits of PS, most women offered it chose not to participate. The diversity of reasons given underscores the importance of tailoring PS timing and delivery to individual readiness and preferences. Logistical issues (e.g., matching challenges or delayed follow-up) were noted and align with prior research, suggesting areas for programmatic improvement [8]. Very few women expressed negative views of the PS program itself.

These findings have implications for the design and implementation of PS interventions in oncology and hereditary cancer care in the community [31]. First, targeted outreach to individuals with psychosocial vulnerabilities, such as younger women, those with lower incomes, or those with child caregiving responsibilities, may help increase the reach and impact of PS and women's empowerment. Second, aligning PS offerings with high-quality PN and broader CBO engagement may enhance both uptake and outcomes. Finally, barriers to PS utilization, including logistical, emotional, and personal preference-related factors, should be addressed through flexible delivery models, clear communication, and readiness-based matching [30].

Limitations

This study is subject to several limitations. First, the use of self-reported data introduces potential concerns related to subjectivity and memory recall, which may influence participants' responses. Additionally, selection bias may have affected results, as the data were drawn exclusively from those who were offered and chose to participate in at least one of the CBO's programs (including PS) and completed an evaluation survey. As a result, the views of individuals who were not offered and/or declined program participation, or did not complete the survey, are not reflected in the findings. Moreover, the predominance of women with breast cancer diagnoses may limit generalizability to women with other hereditary or female cancers (other than breast) or at-risk individuals without a diagnosis. Furthermore, the sample predominantly consisted of White, college-educated women, which constrains the applicability of these findings to the broader population affected by breast cancer. Community-based evaluations may also be subject to a polarization effect, where individuals with particularly strong opinions are more inclined to respond, potentially skewing the results. Additionally, data were collected over a 10-year span. Although the CBO continues to operate and provide PS, aspects of service delivery such as the incorporation of virtual formats have evolved over time. This may limit the applicability of some findings to current practices, even as the longevity of the PS program underscores its sustained relevance for women at-risk for or living with breast cancer. Finally, all outcome measures were collected approximately 30 days after participation in PN and without baseline assessments, meaning observed associations are correlative rather than causal and may reflect pre-existing differences in women's needs or well-being that cannot be ruled-out.

Conclusion

PS is a valued and well-received component of care for many women navigating breast cancer, particularly those facing greater psychosocial stressors. Continued refinement of outreach, matching, and delivery processes may enhance program accessibility and impact. Further research is needed to explore how PS can be effectively integrated into broader care pathways and tailored to the evolving needs of diverse patient populations.

Acknowledgements:

The authors would like to thank the members of the community who completed evaluations, and the staff of Sharsheret.

Funding Sources:

This study was funded by U58DP005408 and P30CA051008.

Role of the Funder:

The funder had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; or the decision to submit the manuscript for publication.

Transparency Statements:

(1) This study was not formally registered. (2) The analysis plan was not formally pre-registered. (3) De-identified data from this study are not available in a public archive. (4) Analytic code used to conduct the analyses presented in this study are not available in a public archive. (5) Materials used to conduct the study are not publicly available.

References

- [1]. "Breast Cancer Facts & Figures 2024–2025".
- [2]. Jansen BA et al. , "Breast cancer patients' needs and perspectives on a one-on-one peer support program: quantitative and qualitative analyses," *Support Care Cancer*, vol. 31, no. 12, p. 656, Oct. 2023, doi: 10.1007/s00520-023-08009-6. [PubMed: 37882849]
- [3]. Heidary Z, Ghaemi M, Hossein Rashidi B, Kohandel Gargari O, and Montazeri A, "Quality of Life in Breast Cancer Patients: A Systematic Review of the Qualitative Studies," *Cancer Control*, vol. 30, p. 10732748231168318, 2023, doi: 10.1177/10732748231168318.
- [4]. Mehnert A and Koch U, "Psychological comorbidity and health-related quality of life and its association with awareness, utilization, and need for psychosocial support in a cancer register-based sample of long-term breast cancer survivors," *J Psychosom Res*, vol. 64, no. 4, pp. 383–391, Apr. 2008, doi: 10.1016/j.jpsychores.2007.12.005. [PubMed: 18374737]
- [5]. Haddad JM et al. , "Family planning in carriers of BRCA1 and BRCA2 pathogenic variants," *J Genet Couns*, vol. 30, no. 6, pp. 1570–1581, Dec. 2021, doi: 10.1002/jgc4.1423. [PubMed: 33904624]
- [6]. Dean M, "'It's not if I get cancer, it's when I get cancer': BRCA-positive patients' (un)certain health experiences regarding hereditary breast and ovarian cancer risk," *Soc Sci Med*, vol. 163, pp. 21–27, Aug. 2016, doi: 10.1016/j.socscimed.2016.06.039. [PubMed: 27376595]
- [7]. Owen JE, Goldstein MS, Lee JH, Breen N, and Rowland JH, "Use of health-related and cancer-specific support groups among adult cancer survivors," *Cancer*, vol. 109, no. 12, pp. 2580–2589, June 2007, doi: 10.1002/cncr.22719. [PubMed: 17503435]
- [8]. Rehberg K, Fleischmann A, Silber E, O'Neill SC, Lewis FM, and Tercyak KP, "Facilitators of peer coaching/support engagement and dissemination among women at risk for and surviving

- with breast cancer,” *Transl Behav Med*, vol. 11, no. 1, pp. 153–160, Feb. 2021, doi: 10.1093/tbm/ibz186. [PubMed: 31886505]
- [9]. Rini C, Graves KD, O’Neill SC, and Tercyak KP, “The science of peer support as applied to behavioral medicine and the care of individuals surviving with cancer: a commentary on ‘Peer mentors delivering a physical activity intervention for cancer survivors: effects among mentors by Pinto et al.,’” *Transl Behav Med*, vol. 8, no. 6, pp. 851–854, Nov. 2018, doi: 10.1093/tbm/iby004. [PubMed: 29474729]
- [10]. Hoey LM, Ieropoli SC, White VM, and Jefford M, “Systematic review of peer-support programs for people with cancer,” *Patient Educ Couns*, vol. 70, no. 3, pp. 315–337, Mar. 2008, doi: 10.1016/j.pec.2007.11.016. [PubMed: 18191527]
- [11]. Toija AS, Kettunen TH, Leidenius MHK, Vainiola THK, and Roine RPA, “Effectiveness of peer support on health-related quality of life in recently diagnosed breast cancer patients: a randomized controlled trial,” *Support Care Cancer*, vol. 27, no. 1, pp. 123–130, Jan. 2019, doi: 10.1007/s00520-018-4499-0. [PubMed: 30338354]
- [12]. Ruiz-Romeo M et al. , “Empowerment among breast cancer survivors using an online peer support community,” *Support Care Cancer*, vol. 33, no. 1, p. 56, Dec. 2024, doi: 10.1007/s00520-024-09119-5. [PubMed: 39730856]
- [13]. Giese-Davis J et al. , “Peer-counseling for women newly diagnosed with breast cancer: A randomized community/research collaboration trial,” *Cancer*, vol. 122, no. 15, pp. 2408–2417, Aug. 2016, doi: 10.1002/cncr.30036. [PubMed: 27198057]
- [14]. Clougher D, Ciria-Suarez L, Medina JC, Anastasiadou D, Racioppi A, and Ochoa-Arnedo C, “What works in peer support for breast cancer survivors: A qualitative systematic review and meta-ethnography,” *Appl Psychol Health Well Being*, vol. 16, no. 2, pp. 793–815, May 2024, doi: 10.1111/aphw.12473. [PubMed: 37493002]
- [15]. Meyer A, Coroiu A, and Korner A, “One-to-one peer support in cancer care: a review of scholarship published between 2007 and 2014,” *Eur J Cancer Care (Engl)*, vol. 24, no. 3, pp. 299–312, May 2015, doi: 10.1111/ecc.12273. [PubMed: 25512107]
- [16]. Hu J et al. , “Peer support interventions for breast cancer patients: a systematic review,” *Breast Cancer Res Treat*, vol. 174, no. 2, pp. 325–341, Apr. 2019, doi: 10.1007/s10549-018-5033-2. [PubMed: 30600413]
- [17]. Knaapen L et al. , “Who is your ideal peer mentor? A qualitative study to identify cancer patient preferences for a digital peer support app,” *Support Care Cancer*, vol. 33, no. 4, p. 253, Mar. 2025, doi: 10.1007/s00520-025-09262-7. [PubMed: 40048052]
- [18]. Haynes-Maslow L, Allicock M, and Johnson L-S, “Peer support preferences among African-American breast cancer survivors and caregivers,” *Support Care Cancer*, vol. 25, no. 5, pp. 1511–1517, May 2017, doi: 10.1007/s00520-016-3550-2. [PubMed: 28032217]
- [19]. Bickell NA et al. , “Do community-based patient assistance programs affect the treatment and well-being of patients with breast cancer?,” *J Oncol Pract*, vol. 10, no. 1, pp. 48–54, Jan. 2014, doi: 10.1200/JOP.2013.000920. [PubMed: 24023271]
- [20]. Daly MB et al. , “Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic, Version 2.2021, NCCN Clinical Practice Guidelines in Oncology,” *J Natl Compr Canc Netw*, vol. 19, no. 1, pp. 77–102, Jan. 2021, doi: 10.6004/jnccn.2021.0001. [PubMed: 33406487]
- [21]. Tercyak KP et al. , “Survey on Addressing the Information and Support Needs of Jewish Women at Increased Risk for or Diagnosed with Breast Cancer: The Sharsheret Experience,” *Healthcare (Basel)*, vol. 3, no. 2, pp. 324–337, May 2015, doi: 10.3390/healthcare3020324. [PubMed: 27417765]
- [22]. Zamir T, Statman MR, Sleiman MM, Fleischmann A, Silber E, and Tercyak KP, “Patient Navigation in Mothers at Risk for and Surviving with Breast/Ovarian Cancer: The Role of Children’s Ages in Program Utilization and Health Outcomes,” *Healthcare (Basel)*, vol. 12, no. 22, p. 2317, Nov. 2024, doi: 10.3390/healthcare12222317. [PubMed: 39595514]
- [23]. Moriarty DG, Zack MM, and Kobau R, “The Centers for Disease Control and Prevention’s Healthy Days Measures - population tracking of perceived physical and mental health over time,” *Health Qual Life Outcomes*, vol. 1, p. 37, Sept. 2003, doi: 10.1186/1477-7525-1-37. [PubMed: 14498988]

- [24]. Cook DA, Ginsburg S, Sawatsky AP, Kuper A, and D'Angelo JD, "Artificial Intelligence to Support Qualitative Data Analysis: Promises, Approaches, Pitfalls," *Acad Med*, June 2025, doi: 10.1097/ACM.0000000000006134.
- [25]. O'Neill SC et al. , "Improving our model of cascade testing for hereditary cancer risk by leveraging patient peer support: a concept report," *Hered Cancer Clin Pract*, vol. 19, no. 1, p. 40, Sept. 2021, doi: 10.1186/s13053-021-00198-7. [PubMed: 34565430]
- [26]. Bertonazzi B, Turchetti D, and Godino L, "Outcomes of support groups for carriers of BRCA 1/2 pathogenic variants and their relatives: a systematic review," *Eur J Hum Genet*, vol. 30, no. 4, pp. 398–405, Apr. 2022, doi: 10.1038/s41431-022-01044-7. [PubMed: 35082397]
- [27]. Tan Y et al. , "Effectiveness of Peer Support on Quality of Life and Anxiety in Breast Cancer Patients: A Systematic Review and Meta-Analysis," *Breast Care (Basel)*, vol. 18, no. 1, pp. 49–59, Feb. 2023, doi: 10.1159/000527849. [PubMed: 36876170]
- [28]. Guo M et al. , "A Structured Peer Support Intervention for Patients With Hematologic Malignancies Undergoing Hematopoietic Stem Cell Transplantation: Peer Support Interventionists' Perspectives," *Transplant Cell Ther*, vol. 31, no. 6, p. 390.e1–390.e13, June 2025, doi: 10.1016/j.jtct.2025.03.017.
- [29]. Amonoo HL et al. , "Peer support in patients with hematologic malignancies: a systematic review," *Bone Marrow Transplant*, vol. 57, no. 8, pp. 1240–1249, Aug. 2022, doi: 10.1038/s41409-022-01709-3. [PubMed: 35597891]
- [30]. Allicock M et al. , "Peer Connect for African American breast cancer survivors and caregivers: a train-the-trainer approach for peer support," *Transl Behav Med*, vol. 7, no. 3, pp. 495–505, Sept. 2017, doi: 10.1007/s13142-017-0490-4. [PubMed: 28425087]
- [31]. Rini C, Graves KD, O'Neill SC, and Tercyak KP, "The science of peer support as applied to behavioral medicine and the care of individuals surviving with cancer: a commentary on 'Peer mentors delivering a physical activity intervention for cancer survivors: effects among mentors by Pinto et al.,'" *Transl Behav Med*, vol. 8, no. 6, pp. 851–854, Nov. 2018, doi: 10.1093/tbm/iby004. [PubMed: 29474729]

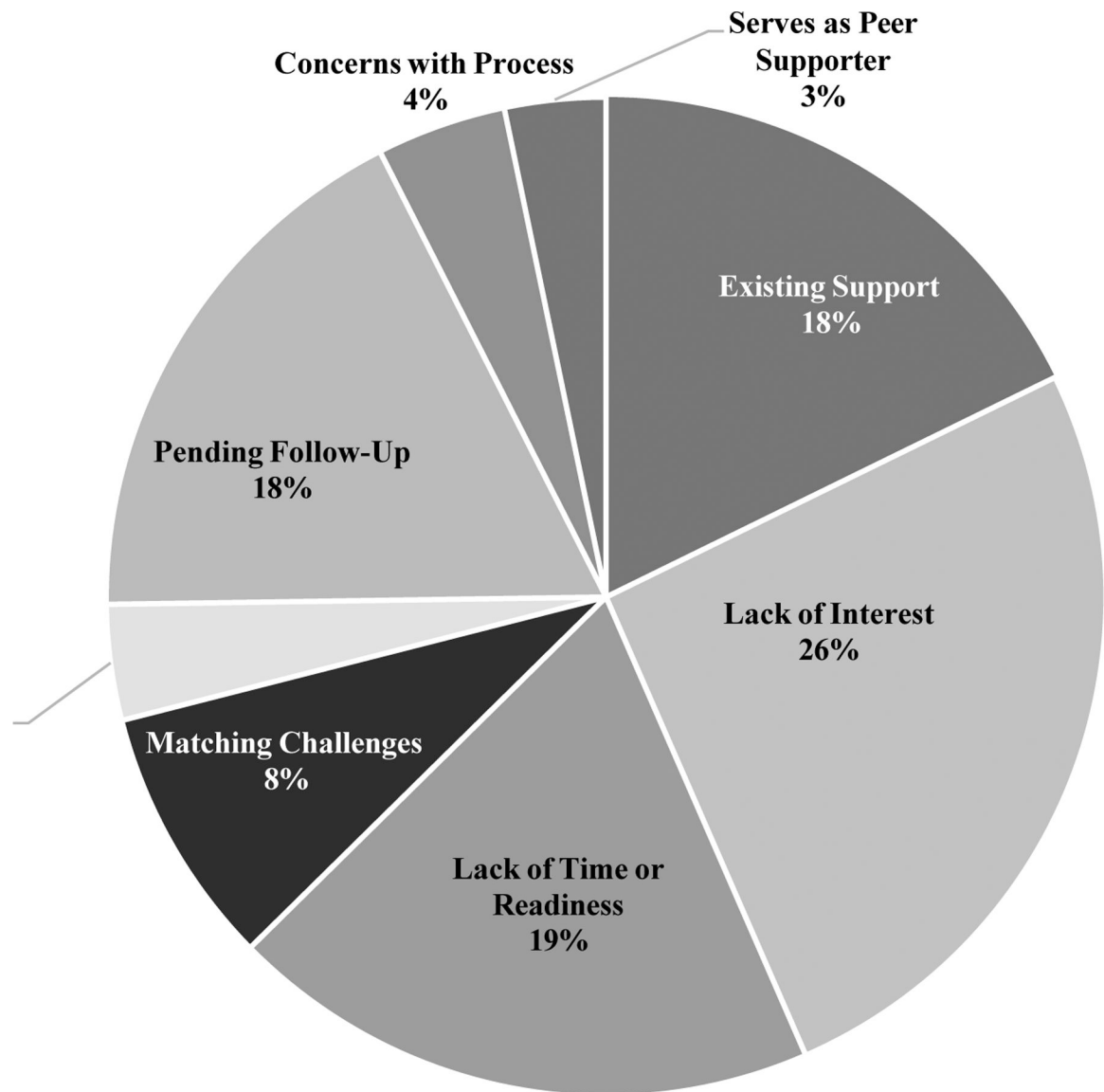


Figure 1.
Barriers to peer support utilization

Table 1.

Demographic and clinical characteristics

Factor	Total Sample (N=1,054)		Utilized PS (N=304)	
	M (SD)	N (%)	M (SD)	N (%)
Age				
18–45		388 (36.8%)		103 (33.9)
46–64		518 (49.1%)		166 (54.6)
65–74		125 (11.9%)		29 (9.5)
75+		21 (2.0%)		6 (2.0)
Race				
White		862 (81.8%)		248 (81.6)
Non-white		183 (17.4%)		54 (17.8)
Jewish descent				
Yes		507 (48.1%)		167 (54.9)
No		530 (50.3%)		129 (42.4)
Motherhood status				
Mother		821 (78.9%)		249 (81.9)
Not a mother		233 (22.1%)		55 (18.1)
Marital status				
Partnered		678 (66.2%)		200 (65.8)
Non-partnered		346 (33.8%)		97 (31.9)
Household income	87,640 (35,000)		86,788 (34,000)	
BRCA status				
Positive		547 (51.9%)		160 (52.6)
Negative		503 (47.7%)		143 (47.0)
Breast cancer history				
Yes		930 (88.2%)		259 (85.2)
No		124 (11.8%)		45 (14.8)

Table 2.

Logistic regression model of peer support offer

Factor	Odds Ratio	95% Confidence Interval	p-value
Age	1.24		
Older *			
Younger		1.04–1.48	0.016
Household income	1.37		
Higher *			
Lower		1.02–1.85	0.039
CBO care quality	1.19		
Lower *			
Higher		1.08–1.32	0.001

* = Referent

Table 3.
Logistic regression model of peer support utilization

Factor	Odds Ratio	95% Confidence Interval	p-value
Motherhood status	1.57	1.10–2.24	0.01
Not a mother *			
Mother			
Breast cancer diagnosis	1.59	1.02–2.47	0.04
Yes *			
No			
Quality of life	1.18	1.02–1.37	0.03
Higher *			
Lower			

*= Referent

Table 4.
Multivariable regression model of peer support experience

Factor	β	Standard Error (β)	p
Age	-0.84	.39	
Older			
Younger			0.031
CBO care quality	1.71	.24	
Lower			
Higher			<0.001
PN quality	0.58	.12	
Lower			
Higher			<0.001

Adjusted $R^2 = .37$, $N = 285$