

Peer Support for Women's Health in the Kita-Iwate Region of Japan: A Qualitative Descriptive Study of Peer Supporters' Experiences Using the Women's Health Action Co-Creation Approach

Wakako Yachi 

Faculty of Nursing, Iwate Prefectural University, Takizawa, Japan

Email: wakako_y@iwate-pu.ac.jp

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Abstract

Background: Breast and cervical cancer screening rates in Japan remain below international standards. Workplace peer support interventions may help promote women's health behaviors, but few studies have explored the experiences of peer supporters in rural settings. **Objective:** To explore the roles, experiences, and challenges of female peer supporters who provided workplace peer support and were engaged in the Women's Health Action Co-Creation Approach in the Kita-Iwate region of Japan. **Methods:** A qualitative descriptive study was conducted. Semi-structured interviews were conducted with seven female peer supporters who promoted breast and cervical cancer screening among their colleagues, and data were analyzed using qualitative content analysis. **Results:** Four core categories, representing the participants' experiences of peer support, emerged from content analysis: workplace and regional contexts that enabled female employees to provide peer support to their female colleagues, ripple effects on individuals and their surroundings, sharing cancer screening information with colleagues and choosing communication methods, and psychological and social barriers and coping strategies. Peer supporters engaged in health promotion activities, using leaflets, to meet the needs of different age groups and workplace settings. They encouraged colleagues to undergo cancer screening while reinforcing their own health awareness. Psychological and social barriers, including embarrassment and time constraints, were addressed through culturally sensitive and flexible strategies. Collaboration with midwives, who provided professional guidance, supported peer supporters in implementing these activities, reflecting a unique feature of Japa-

nese midwifery practice. **Conclusions:** Peer support contributes to fostering a local health culture, reducing psychological barriers, and promoting cancer screening. Internationally, these findings suggest that integrating peer networks with professional guidance and tailoring interventions to cultural, psychosocial, and generational contexts can enhance community- and workplace-based women's health promotion. Future initiatives should expand peer support, utilize digital technologies, and maintain peer supporter motivation to embed sustainable health promotion practices.

Keywords

Peer Support, Women's Health, Cancer Screening, Qualitative Research, Midwives, Rural Japan

1. Introduction

In Japan, interest in women's health issues is increasing, but the rate of cancer screening remains low. In particular, early detection and treatment of breast and cervical cancers significantly impact prognosis, yet Japan's screening rates are lower than those of Organisation for Economic Co-operation and Development member countries [1]. According to a 2023 survey, the screening rate for breast cancer was approximately 47.4% and that for cervical cancer was approximately 43.6%, which is below international standards [2]. These rates necessitate new initiatives for improvement. Commonly cited barriers to screening include psychological and social factors, such as embarrassment, being busy, and worrying about pain [3]. Rural areas also experience disparities in access and information, further affecting screening rates.

A previous quantitative study conducted by Yachi and Fukushima [4] in the same region revealed that breast cancer screening rates were higher among premenopausal women, while cervical cancer screening rates were higher among women with childbirth experience. The study also showed that intrinsic motivation and self-efficacy, rather than knowledge alone, were significantly correlated with screening behaviors. These findings underscore the importance of life stage, personal motivation, and psychosocial factors in shaping health behaviors among working women.

One system gaining attention is peer support, in which individuals with similar backgrounds support each other and promote positive health behaviors [5]. In rural and resource-limited areas, peer support can facilitate information sharing and encourage preventive care [6]. Peer health education has been shown to positively impact cancer screening behavior globally [7]. In Japan, social support from family and friends also influences cervical cancer screening intentions [8].

Community-based and workplace-based approaches are effective from the perspective of behavior change theory and the ecological model [9]. Such approaches contribute not only to individual behavioral change but also to the formation of a local health culture [10]. Peer supporters working in everyday settings, such as

workplaces and homes, reduce psychological barriers to checkups through trust-based relationships [11] and enhance their own health awareness and empowerment [12].

In Japan, midwives play a key role in women's health promotion in both clinical and community settings. The collaboration of midwives with peer supporters in the Women's Health Action Co-Creation Approach integrates professional expertise with workplace networks, creating culturally sensitive and practical interventions. Women's Health Action is a peer support-based workplace health promotion initiative designed to encourage breast and cervical cancer screening. Peer supporters distribute educational leaflets prepared by midwives and provide encouragement within a co-creation framework, in which midwives provide guidance and peer supporters adapt the approach to their workplace context, respecting individual autonomy and privacy.

The academic novelty of this approach lies in the integration of peer support and professional guidance in a co-creative, bottom-up approach, deviating from conventional top-down awareness campaigns. By leveraging workplace networks and midwifery expertise, this approach provides a model for promoting health behaviors among working women while considering regional, cultural, and generational contexts.

In this study, Women's Health Action refers to a peer-support-based health promotion activity within the workplace, aimed at promoting screening participation for women-specific diseases, such as breast cancer and cervical cancer. This approach is implemented collaboratively between healthcare professionals and peer supporters. It involves peer supporters distributing leaflets to other female employees within their workplace. The leaflets are created by midwives, based on their expert knowledge, and cover basic information about breast and cervical cancer and the necessity of screening. Concurrently, peer supporters engage in practical efforts such as encouraging screening participation through verbal reminders and providing information. Based on the principle of "caring for both oneself and others", personal information, such as screening experiences, is protected, and screening participation is voluntary, meaning no coercion is applied. A key feature is that peer supporters leverage their shared workplace relationship to facilitate information transfer and support behavioral change.

The aim of this study was to explore the reality, significance, and challenges of peer support activities as narrated by female peer supporters engaged in the Women's Health Action Co-Creation Approach in the Kita-Iwate region of Japan. By extracting practical knowledge from frontline peer support, this study provides insights that can contribute to future community health activities, policy formation, and potential international applications.

2. Methods

2.1. Design

This study employed a qualitative descriptive design, focusing on the experiences

and perceptions of female peer supporters involved in a community-based women's health initiative.

2.2. Peer Support Activities

In this study, peer support was operationalized as workplace-based health promotion activities conducted by female employees for their female colleagues, as defined in the Introduction.

In this study, peer support was implemented as a workplace-based health promotion activity, performed by female employees for their female colleagues. Specifically, midwives created three leaflets containing basic information about breast and cervical cancers and details about cancer screenings. These leaflets were developed with reference to findings from prior research. The female peer supporter read the leaflet first. After that, female peer supporters distributed these leaflets to their female colleagues during regular work hours or breaks, or posted them in locations accessible to female colleagues. The peer support activities were intentionally designed to respect individual autonomy regarding decisions about cancer screening and to avoid coercion. Before the study began, the midwife provided the peer supporters with written guidance clearly stating the intended scope and principles of the activities. The midwife did not directly interact with the colleagues receiving peer support.

2.3. Participants and Setting

Participants were seven working women residing in the northern area of Iwate Prefecture who participated in peer support activities aimed at promoting breast and cervical cancer screening. They were recruited through purposive sampling in collaboration with a single local company. All participants were familiar with the local cultural and social environment. The participants were female general employees of a private company, working in clerical or sales-related roles. None of the participants were medical professionals or held managerial positions.

Participants were recruited through the manager of the organization responsible for employee health management within the company.

To avoid any sense of coercion, the author directly explained the purpose and procedures of the study to each potential participant, emphasizing that participation was entirely voluntary. It was also clearly stated that refusal to participate would result in no disadvantage. Written informed consent was obtained from all participants prior to participation. The role of the manager was limited to introducing eligible candidates, and the final decision regarding participation was made solely by the individuals.

2.4. Data Collection

Semi-structured interviews were conducted individually between April and June 2024. Interviews lasted approximately 17 - 52 min each and were conducted by the author, a certified midwife with prior experience in qualitative interviewing.

Interviews were conducted in a private setting at participants' workplaces or online, based on participants' preferences. All interviews were audio-recorded with consent and transcribed verbatim. The interview guide included questions about participants' motivations, activities, perceived challenges, and the impact of peer support on themselves and others.

2.5. Data Analysis

Data were analyzed using qualitative content analysis. Transcripts were read repeatedly to achieve familiarity with the data. Codes were generated inductively from meaningful units and subsequently grouped into subcategories and categories that reflected shared meanings. The process was iterative, involving constant comparison across transcripts to refine categories and capture diverse perspectives.

Although participant schedules limited the number of participants and interview time, the researcher ensured reliability and validity through repeated reading of verbatim transcripts, careful coding involving constant comparison, and peer debriefing with regular supervision and feedback from a qualitative research expert. Data saturation was determined when no new meaning or categories emerged from subsequent interviews.

2.6. Ethical Considerations

This study was approved by the ethics committee of Iwate Prefectural University (Approval No. 447). All participants were informed about the study's purpose, procedures, and confidentiality measures and provided written consent prior to participation.

3. Results

3.1. Background of Participants

The participants' demographic characteristics are summarized in **Table 1**. Seven women participated in this study: two aged in their 20 s and five in their 50 s. Their years of employment at their current workplace ranged from 2 to 28 years, with an average of 17 years.

All participants provided peer support in their capacity as employees at the same workplace, rather than as formal patient advocates or healthcare professionals. Peer support activities were embedded in daily workplace interactions, such as casual conversations, encouragement to attend cancer screenings, and the distribution of informational leaflets.

Not all participants were breast cancer survivors. Some participants had personal or family experiences related to breast or gynecological health, and others participated based on their interest in health promotion and their familiarity with their colleagues. Peer support was provided on an ongoing basis in everyday work settings, rather than at a specific time point such as immediately after a cancer diagnosis or treatment.

3.2. State of Peer Activities and Experiences of Peer Challenges

A qualitative descriptive analysis of the narratives from the seven peer supporters in the Kita-Iwate region revealed four core categories, 10 categories, 33 subcategories, and 161 codes (Table 2). The results for each core category are described below; core categories are shown in [], categories in < >, and subcategories in ‘ ’. Verbatim data are presented in quotation marks (“ ”).

Table 1. Participant characteristics.

Participant	Age Group	Years of Employment at Current Workplace	Participation in Cancer Screening	Employment Type	Occupational Role
1	50 s	9 years	Yes	Part-time	Sales-related staff
2	50 s	26 years	Yes	Part-time	Sales-related staff
3	50 s	23 years	Yes	Part-time	Sales-related staff
4	20 s	7 years	Yes	Full-time	Sales-related staff
5	50 s	28 years	Yes	Full-time	Clerical staff
6	20 s	24 years	Yes	Full-time	Clerical staff
7	20 s	2 years	Yes	Part-time	Sales-related staff

Table 2. Experiences of peer supporters.

Core Categories	Categories	Subcategories
Workplace and regional contexts that enabled female employees to provide peer support to their female colleagues	Ratio of women in the region and the workplace	Having many women in the workplace An environment that makes it easy to talk about menopause and personal health condition
	Experiencing institutional and professional support in the workplace	Using corporate health checkup subsidy systems Free health checkup systems run by local governments Reduced financial burdens Undergoing checkups have become a habit due to the systems available Feeling confident using the materials developed by health professionals Gaining confidence through professionally developed materials
Ripple effects on individuals and their surroundings	Changes in health awareness due to own experiences and family medical history	Experiences of family members (mother) with breast cancer Awareness of hereditary risks Heightened awareness toward early detection
	Changes in awareness due to encouragement and the distribution of leaflets Self-growth and reflection through activities	Sharing of information through the distribution of leaflets Changes in own behavior based on reactions of colleagues Encouragement became a motivator to undergo checkups Self-review through peer activities Reevaluation of own health Self-reflection and growth through activities
Sharing cancer screening information with colleagues and choosing communication methods	Ease of understanding and penetration of paper media	Information available through paper media was easy to see Paper media has a wide reach
	Necessity of using smartphones and digital media simultaneously	Possibility of displaying information in places such as lockers at workplaces Differences in the means of information contact between generations Smartphones are effective for the younger generation Paper media is effective for older adults Need to use paper and digital media simultaneously

Continued

Psychological and social barriers and coping strategies	Embarrassment, topics treated as social barriers and taboo	Embarrassment surrounding conversations on gynecological topics
	Difficulty of balancing work and family life	Difficulties in bringing up checkups as a conversation topic
	Difficulties in raising awareness and consideration of others	Talking about [gynecological] topics tends to be considered taboo
		Busy work schedules became a barrier to receiving checkups
		Time constraints due to the balancing of family and work life
		Difficulties in taking leave and finding time to undergo checkups
		Restriction of information shared, stemming from consideration of male employees in the workplace
		Attention paid to content of and location where information is presented
		A need to be creative in response to the workplace environment
		Consideration of methods through which information is communicated to the younger generation
		Difficulty in communicating with individuals with low perceived relevance

3.2.1. [1] Workplace and Regional Contexts that Enabled Female Employees to Provide Peer Support to Their Female Colleagues

This core category describes how the high proportion of women in workplaces in the Kita-Iwate region and the institutional foundations supporting health awareness have created an environment conducive to the natural development of peer activities.

One participant shared, “There are a lot of women in the workplace, so naturally we talk about menopause and the physical condition” (Participant 2), expressing that <having many women in the workplace> led to <an environment that makes it easy to talk about menopause and personal health conditions>. Another said, “At my workplace, there are only women over 40 years, so we talk about things like health checkups quite naturally” (Participant 1).

The high proportion of women in both the community and workplace was identified as a contextual feature enabling open communication about women’s health.

In addition, participants stated, “At my company, we get a subsidy for health checkup fees, so I make sure to get one every year” (Participant 5), and “I get a gynecological checkup at the town hall every year. It is free, so I am grateful” (Participant 3). Another added, “I never forget when I receive a cancer screening notice from the city” (Participant 4).

These narratives indicate that participants utilized “corporate health check subsidy systems” and “free health check programs provided by local governments”. Such systems reduced the financial burden and promoted participation in screenings. For these women, <the existence of support systems run by companies and local governments> was a [factor promoting peer activities rooted in regional characteristics].

In addition, participants described that professionally developed materials supported their peer activities by providing reliable information and increasing their confidence in sharing screening messages. Some participants noted that reviewing the materials helped them learn new information and made it easier to speak with colleagues about cancer screening. For example, Participant 2 noted: “I had never

had this kind of opportunity before, and there were many things I did not know. By reading the materials we received, I learned a lot about breast and cervical cancer, and it became a valuable learning experience for me.” and “Because there was no family history, I had not taken breast or cervical cancer very seriously. After reviewing the materials, I realized there were many things I should pay attention to, and it increased my awareness.”

3.2.2. [2] Ripple Effects on Individuals and Their Surroundings

This core category highlights how participants’ personal and familial health experiences—such as breast cancer, gynecological diseases, or vaccination histories—directly influenced their own health behaviors and awareness. The insights gained through peer activities extended beyond individual awareness, creating ripple effects on family members and workplace colleagues.

One participant stated, “My mother had breast cancer. I thought I should be careful too, so I decided to go for a checkup” (Participant 6). Another noted, “My mother has uterine fibroids and thyroid problems, so when I see things like that, I think it is not something that is just happening to other people” (Participant 5).

Through these experiences, participants developed “awareness of genetic risk from family members” who had “experienced breast cancer”, which enhanced their “awareness of early detection”.

Participants also described how they “shared information with their colleagues at work by distributing leaflets”, and that “their colleagues” reactions led to changes in their own behavior”, such as undergoing screening themselves. Encouraging others to attend screenings became a source of motivation for the participants’ own health behaviors.

Thus, participants facilitated <changes in awareness among colleagues through peer activities, including encouragement and leaflet distribution>, and these experiences also prompted self-reflection and personal growth.

3.2.3. [3] Sharing Cancer Screening Information with Colleagues and Choosing Communication Methods

This core category demonstrates that approaches to providing information and selecting communication media were directly linked to the effectiveness of peer activities. Participants discussed the importance of both paper-based and digital media, emphasizing flexible information dissemination suited to different age groups and workplace contexts.

Participants shared, “Many people said that paper was the easiest to understand, so we put up posters in the lockers at work” (Participant 7), and “People seem to opt to keep the information if it is on paper. With smartphones, the information just goes away, but with paper it stays” (Participant 3).

They recognized the <ease of understanding and reach of paper media> and the practical benefits of tangible materials. Another participant remarked, “Young people will look at it on their smartphones, but I think paper is better for older people. We need both” (Participant 2).

Participants observed “differences in information dissemination methods between generations” and emphasized the <necessity of using smartphones and digital media simultaneously> to reach diverse audiences effectively.

3.2.4. [4] Psychological and Social Barriers and Coping Strategies

This core category illustrates the presence of psychological and social barriers—such as embarrassment related to gynecological checkups, difficulty balancing work and family responsibilities, and the need to be considerate of others—as well as the participants’ attempts to address these challenges.

One participant explained, “Many people feel embarrassed about breast and uterine cancers. There is an atmosphere that makes it difficult to talk about it” (Participant 2). Participants felt that “talking about gynecological topics tends to be viewed as taboo”, perceiving <embarrassment and social taboo> as major psychological barriers.

Furthermore, participants described that “busy work schedules became a barrier to receiving checkups”, and that “time constraints due to balancing work and family life” led to <difficulty in balancing work and family life>.

One woman stated, “I think it does come down to whether one would have to actually take time off work to attend a checkup. I think in most cases, people feel that they’re getting older themselves, and then there are work factors and timing to consider, so their busy schedule means they can’t attend a checkup. Everyone puts their own needs last. If they are raising children, then the children come first. If they are caring for parents, then the parents come first. So, it’s like, when is there time for myself?” (Participant 5).

Additionally, some noted the need to adjust communication styles depending on workplace gender composition: “Since there are men in the workplace, I am a little careful about what I post. I felt that I needed to be careful not to stand out too much” (Participant 3).

They emphasized the importance of “being considerate of male colleagues when choosing the content and location of information displays”, recognizing <difficulties in raising awareness and consideration for others> and the “need to adapt creatively to workplace environments”.

Finally, some participants expressed the challenge of promoting cancer screening to those who perceived it as irrelevant to themselves.

“I am struggling with how to reach people who think it is not their concern” (Participant 5).

These narratives demonstrate that psychological barriers, time constraints, and workplace dynamics influence women’s screening behaviors, yet peer supporters sought creative strategies to overcome them.

4. Discussion

In this study, we clarified the practices and challenges experienced by seven female peer supporters in the Kita-Iwate region through qualitative descriptive analysis. Four core categories were identified: Workplace and regional contexts that ena-

bled female employees to provide peer support to their female colleagues, ripple effects on individuals and their surroundings, sharing cancer screening information with colleagues and choosing communication methods, and Psychological and social barriers and coping strategies.

The workplace of the participants had a high proportion of women, and an environment had been created where information and topics related to physical changes and health were discussed daily among colleagues of the same generation. This structure facilitated the natural organization of peer activities and increased their acceptability. In addition to a high proportion of women, institutional support, such as workplace health subsidies and free local health checkups, encouraged participants to undergo health screenings. Face-to-face information exchange in local communities also functioned as a cultural foundation supporting peer activities, strengthening trust and enhancing motivation for preventive health behaviors.

Many peer supporters experienced increased health awareness and behavioral changes due to personal or family health experiences. Their peer activities had a dual impact: promoting change in their own behavior and influencing those around them. This aligns with previous reports that peer support benefits both recipients and providers, enhancing self-efficacy and health consciousness [5] [11] [13].

Regarding strategies for information delivery and media preferences, participants effectively utilized paper media to distribute leaflets and posters while recognizing the need for digital media for younger generations. Tailoring communication methods to the audience's age and literacy level was consistent with health promotion principles [14].

In relation to psychological and social barriers and coping strategies, participants addressed embarrassment, work–family balance, and considerations related to male colleagues. Their flexible, culturally sensitive approaches, such as discreet placement of materials and respectful encouragement, reflect empowerment and staged behavior change theories [15] [16].

In addition, this study highlights the role of midwives in the Women's Health Action Co-Creation Approach. Japanese midwives possess core competencies in women's health, including health promotion, early detection, and community-based support [17]. Collaboration with workplace peer supporters facilitated culturally sensitive, practical interventions tailored to women's health needs. This integration of professional expertise with peer networks may be a distinctive feature of Japanese women's health promotion, emphasizing empowerment and preventive care, and demonstrates how midwives can extend their competencies beyond clinical settings into community and workplace health initiatives.

4.1. Limitations

This study has several limitations. First, only seven participants were included, all working in a single northern Iwate region company, which limits generalizability.

Second, interview durations were relatively short (17 - 52 min), which may limit depth. Despite these limitations, the richness of participants' narratives and cross-verification by a qualitative research expert helped ensure trustworthiness.

4.2. Implications

The findings suggest that region-specific peer support initiatives, incorporating both workplace networks and midwife collaboration, can effectively promote cancer screening and general women's health awareness. The approach could be adapted to similar rural regions globally, demonstrating that culturally contextualized peer-led interventions have the potential to enhance preventive health behaviors internationally.

5. Conclusions

This study qualitatively analyzed the activities of female peer supporters in the northern region of Iwate Prefecture and identified four core categories: workplace and regional contexts that enabled female employees to provide peer support to their female colleagues, ripple effects on individuals and their surroundings, sharing cancer screening information with colleagues and choosing communication methods, and psychological and social barriers and coping strategies.

The findings indicate that in addition to promoting cancer screening, peer support contributes to forming a regional health culture and reducing psychological barriers to preventive care. Workplace and community characteristics, along with personal experiences and motivation, facilitated the development and sustainability of peer activities. The collaboration with midwives in the Women's Health Action Co-Creation Approach allowed culturally sensitive, practical interventions, highlighting the distinctive role of Japanese midwives in community and workplace health promotion.

Internationally, these results suggest that integrating peer support networks with professional guidance can be applied in various cultural contexts. Tailoring interventions to the target population's psychosocial, cultural, and generational needs can enhance engagement and effectiveness in community- or workplace-based women's health programs worldwide. Future initiatives should aim to expand peer support to diverse groups, incorporate digital technologies, and maintain continuous learning and motivation for peer supporters, thereby embedding these practices within broader health promotion frameworks.

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Conflicts of Interest

There are no items related to conflicts of interest that should be specified in the article.

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