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Research Article

Investigating Peer Advisors' Strategies to Promote Cancer Prevention and Early Detection in Swedish Communities with Challenging Socioeconomic Conditions

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Worse socioeconomic conditions (e.g., having a migration background, lower income, and lower educational level) may lead to barriers for cancer prevention and early detection. Community-based initiatives providing tailored and accessible information are found to increase cancer screening participation and improve health outcomes for people with challenging socioeconomic conditions. To inform such initiatives, more research is needed from the perspective of those working with them. This article focuses on the Swedish "peer advisor project" in which the Regional Cancer Centre Stockholm Gotland (RCC) collaborates with community-based peer advisors to reduce cancer inequities in areas with challenging socioeconomic conditions. We aim to investigate the perspectives of people working with the peer advisor project in relation to challenges they face, strategies they use, and forms of impact they perceive their work to have. We used a participatory action research approach, involving 12 peer advisor representatives and three RCC representatives. Underlying data (interviews and participant observations) were qualitatively analyzed. Findings are presented in relation to three themes: (1) Peer advisors bridge a gap between the cancer care system and communities through dialogues with communities and RCC representatives. (2) Peer advisors navigate culturally based sensitivities through efforts to create safe spaces for discussing cancer prevention and early detection. (3) Peer advisor and RCC representatives described forms of impact in relation to personal contexts, community contexts, RCC's organizational context, and societal context. Sustainability and structural challenges may limit the peer advisor project to create impact. We discuss that peer advisors may act as cultural brokers through dialogues with communities and the cancer care system, thereby increasing an understanding of communities' contexts and needs. Findings from this study can inform development and implementation of similar community-based peer-to-peer initiatives in other contexts. More research is needed to investigate the long-term impact of the project including community-based perspectives.

1. Background

The global cancer incidence is expected to rise by 47% between 2020 and 2040 [1]. Still, 44% of all cancer mortality is associated with modifiable risk factors, i.e., lifestyle, behavioral and environmental factors that can be affected to reduce the risk of developing cancer [2]. While the European population accounts for 9% of the world population, 25% of the global annual cancer incidence occurs in Europe [3]. To address this, the European Commission initiated the development of the European Code Against Cancer to inform Europeans about actions they can take for cancer prevention and early detection [4]. Recommended actions are based on modifiable risk factors, e.g., not using tobacco, avoiding exposure to smoke, maintaining a healthy body weight, being physically active, having a healthy diet, reducing

alcohol consumption, and participating in vaccination and cancer screening programs [4, 5]. The code is disseminated through various channels across Europe, e.g., through social media, educational campaigns, and healthcare systems [6].

Initiatives to promote actions for cancer prevention and early detection should consider variations in people's socioeconomic conditions, as these conditions may lead to barriers for such actions [7–10]. Factors affecting socioeconomic conditions include education, income, place of residence, and migration background (in the Swedish context defined as people born outside of Sweden or with both parents born outside Sweden [11]) [8, 12]. Barriers related to lower levels of education include difficulties in understanding medical terminologies and decreased likelihood of screening participation [8, 13, 14]. Barriers facing people with limited financial resources include costs associated with cancer prevention and early detection, such as costs related to healthier food options, practicing sports, and participating in cancer screening (e.g., service costs, travel expenses, and taking off from work) [15–18]. People with migration backgrounds may face barriers in navigating unfamiliar healthcare systems, as well as cultural and language differences which may lead to lack of understanding and trust [17, 19–21]. It should be considered that these various socioeconomic contexts often intersect and may thus compound barriers for cancer prevention and early detection [22]. Furthermore, healthcare systems and services often contribute to and maintain these barriers on organizational and system levels, as they can be hard to access and have limited capacity to adapt to the needs of people with challenging socioeconomic conditions [23, 24]. For instance, considerable travel distances to clinics without local alternatives and rigidity in appointment scheduling with physicians could contribute to such barriers [23, 24]. Both researchers and policymakers call for action to address cancer inequities based on socioeconomic differences through tailored approaches to care and promotion of cancer prevention and early detection with adapted and accessible information [19, 25, 26].

Internationally, initiatives aimed at lowering the risk of developing cancer among people with challenging socioeconomic conditions have received increased research attention in recent years [19, 25–28]. Two reviews investigating initiatives in various North American contexts found that initiatives in community settings primarily focused on behavioral and sociocultural environments and have addressed lack of knowledge and cancer screening-related beliefs among immigrants, refugees, and ethnic minority groups [27, 28]. Initiatives in community settings generally involve efforts to provide culturally appropriate educational materials and often utilize community-based initiatives led by well-known community members to increase sociocultural acceptance [27–29]. There appears to be no consensus about the term used for such community members (e.g., community navigators, peer navigators, community health workers, peer counselors, lay health educators, health advocates, and outreach workers) as this depends on their local context [28]. Generally, their role is described as being a link between communities and healthcare systems and offering culturally tailored information [28].

Impacts of these initiatives include increased cancer screening participation rates and improved health outcomes for target populations [27, 28]. For instance, a breast cancer screening intervention among Korean American immigrant women led to higher participation in mammography for the intervention group (56%) than for the control group (42%) 15 months postprogram [27]. Furthermore, culturally tailored diabetes education by Spanish-speaking community navigators has been shown to result in improved health outcomes such as notable better blood sugar levels among Hispanic adults with type 2 diabetes across multiple studies [28]. Similar results have been shown in community-based European contexts [17, 30, 31]. However, there appear to be knowledge gaps in relation to challenges faced and strategies used by people working in such community-based initiatives. Furthermore, while research indicates that such programs may lead to increased screening participation rates and improved health outcomes [27, 28, 30, 31], further research is needed to explore other potential forms of impact as perceived by those working with these initiatives. This knowledge can inform development of such initiatives in various contexts.

The study described in this article focuses on the Swedish peer advisor project, conducted by the Regional Cancer Centre Stockholm Gotland (RCC), one of the six regional centres in Sweden for coordination and leadership of efforts to improve cancer care, prevention, and early detection, including addressing inequities. The peer advisor project, based in the Stockholm region (2.4 million residents), strives to reduce cancer inequities among people who live in areas with challenging socioeconomic conditions by collaborating with peer advisors. As defined by the RCC, peer advisors are individuals who live in these areas themselves and are able to advise their own communities regarding cancer prevention and early detection. The aim of this study is to investigate the perspectives of people working with the peer advisor project (i.e., peer advisors and RCC representatives) in relation to challenges they face, strategies they use, and forms of impact they perceive their work to have. Findings from this study are intended to inform further evaluation and improvement of the peer advisor project.

2. Methods

2.1. Study Setting. In Sweden, areas with challenging socioeconomic conditions generally have below national average participation in cancer screening [32]. These areas are often urban communities on the outskirts of larger cities with a high prevalence of people with migration backgrounds, lower income, and lower educational level (henceforth referred to as communities) [33, 34]. The peer advisor project began in 2016 with the underlying assumption that peer advisors, who have diverse backgrounds, may be better at connecting with and informing people in their own communities compared to conventional ways of communication employed by the healthcare system. While the RCC project is based on anecdotal and experiential

knowledge from similar projects, this assumption is supported by the research described in the background above [27, 28, 30, 31].

To this end, peer advisors are recruited (through advertisement and word of mouth) and educated by the RCC to use the European Code Against Cancer to disseminate information about cancer prevention and early detection. Peer advisor education entails interactive presentations and workshops regarding various topics described in the European Code Against Cancer, information about reliable information sources, and practice in communication techniques. After this, peer advisors continue to learn through regular meetings regarding specific themes (e.g., mammography) and exchange of experiences. Peer advisors disseminate information through activities such as informing in public areas (shopping centres, neighborhood squares, and public transportation hubs), language courses, community events, and arrangements of so-called health cafés at libraries and other public spaces. Since 2016, more than 300 peer advisors with backgrounds from approximately 40 different countries have been educated by the RCC. They work on an hourly basis, based on activities and personal interest, and generally choose to work for a limited period. Currently, about 40 peer advisors are active. They range from 16 to 75+ in age and have a wide range of connections in their local communities. The peer advisor project has not previously been subject to formal research. Findings from this study can thus support further development of the project and inform efforts in other contexts towards diminishing cancer inequities based on socioeconomic factors.

2.2. A Participatory Action Research Process. RCC representatives initiated this study, with the intention to apply the findings to improve the peer advisor project and identify further knowledge gaps, as noted above. To this end, a participatory action research (PAR) approach was applied. PAR is a research approach in which various stakeholders in partnership iteratively investigate issues of importance to stakeholders with the intention to create a meaningful change [35–38]. This study is the beginning of that iterative process. The PAR approach taken in this research is rooted in research traditions, intending to democratize knowledge development for the benefit of structurally marginalized communities by doing research *with* rather than *on* people [36, 39]. This approach was chosen as RCC representatives recognized that peer advisors, who are often part of structurally marginalized communities based on their socioeconomic conditions, needed to be part of developing knowledge and change regarding their own practices and contexts. Throughout this article, we describe ways in which power dynamics among stakeholders were dealt with to maintain a critical perspective on the peer advisor project and centre peer advisors' voices, according to PAR principles [35, 40, 41].

This PAR project involved RCC representatives and peer advisor representatives as participants. Author MK, with a background in design and healthcare science and no prior experience with the peer advisor project, was recruited by the RCC to lead this research. Author SE, who worked as a peer advisor from 2015 to 2022 and became a medical student in 2018, was initially engaged as a peer advisor representative (through the process described below) and was then formally engaged as an academic researcher as well, based on his own expressed interest in this. Author LEE, a professor in nursing with no prior experience with the peer advisor project, was involved to deal with positive bias by maintaining a critical perspective on the peer advisor project.

Three RCC representatives were involved as participants, i.e., two RCC managers and the peer advisor project lead. RCC representatives agreed not to take on author roles to facilitate a critical perspective on the peer advisor project. Rather than engaging all active peer advisors as participants, a subgroup was recruited to facilitate feasibility of the research project. Twelve peer advisors were selected based on diversity among them in terms of age, gender, ethnic background, active years, and the various contexts in which they work. This selection was made by the project lead mentioned above and the peer advisor coordinator who managed the project on a daily basis while occasionally also working as a peer advisor. The coordinator was included in the subgroup of peer advisor representatives. The selected peer advisor representatives were informed that participation is voluntary, that choosing not to participate would not affect their work with the RCC, that data would be presented confidentially, and that their time would be compensated in accordance with their existing RCC contract. All 12 peer advisors expressed interest, after which they met with MK to discuss the research plan and their role in the research. The peer advisor representatives had a median age of 44 (range 20–75+), had been active as peer advisors between 3 and 7 years, and were of Swedish, North African, East and South European, South American, and West, Central, and South East Asian descent. Besides Swedish, peer advisor representatives generally spoke two or more other languages, and all were completing or had completed secondary education, with some having university degrees. Those with professional experience had worked as teachers, economists, managers, social workers, and nurses.

The research plan was developed by MK in partnership with RCC representatives and the peer advisor coordinator. Data generation was led by MK, and data analysis was led by SE and MK. RCC representatives, peer advisor representatives, and LEE provided feedback, advice, and input on the research process as described below. Preliminary findings were discussed with all the involved peer advisor and RCC representatives. Preliminary findings were used to improve the peer advisor project and identify further knowledge gaps to inform the continued PAR process, in line with the iterative nature of PAR [38].

2.3. Data Generation. Ethnographic methods including interviews and participant observations were used to generate data [42]. This combination was chosen to generate richer data regarding challenges, strategies, and forms of

impact of the peer advisor project. Furthermore, participant observations helped the researcher who was not familiar with the peer advisor project to better understand their work and context. Data generation focused initially on perspectives of the peer advisor representatives. However, the authors decided to also interview the RCC representatives, based on preliminary findings regarding peer advisor representatives pointing to a need to improve communication with RCC representatives. Data generation with peer advisor representatives took place during January-February 2022, a period of transition towards increased activity in the project as COVID-19-related restrictions were phased out. Data generation with RCC representatives took place in May-June 2022.

MK conducted interviews with the included peer advisor and RCC representatives ($n = 12$ and 3, respectively). Participants chose the time and place for interviews, e.g., libraries, cafés, or the RCC's office. At their request, two peer advisors were interviewed together. The interviews were generally about one hour and held in conversational form with the support of an interview guide with topics, including role in the project, motivation, challenges, strategies, personal perspectives on the impact of the project, and ways in which the peer advisor project can be improved. MK encouraged participants to express their honest opinions and criticisms. All interviews were audio-recorded and transcribed verbatim by a professional transcriber prior to analysis.

MK conducted five-participant observations, during which he joined the participating peer advisors as they worked. Efforts were made to observe peer advisors in a variety of contexts: shopping centres (2), a state-funded language course (1), a language cafe in a church (1), and an open-for-all Zumba class (dance-based training) in a shopping centre (1). In preparation, the peer advisor coordinator gave MK an introduction to peer advisor education. This supported MK to actively participate in peer advisors' work when needed and appropriate. Prior to each participant observation, MK discussed his role with peer advisors. MK used an observation framework based on dimensions described by Reeves et al., such as space, actor, activity, event, time, goal, and feeling. In documenting the sequence of events and interactions occurring, MK distinguished between descriptions and his own reflections [42]. MK documented observations through field notes which he transcribed afterwards.

2.4. Data Analysis. Data analysis was guided by the interpretive description methodology which aims to develop practical knowledge pertinent to the context of applied health disciplines, in line with PAR [43]. Data generation and analysis were conducted in parallel processes so that analysis of initial data informed following interviews and observations. This also helped us understand whether additional data generation contributed to new findings [44]. An analysis through interpretive description is an inductive and iterative approach [43]. To this end, SE and MK began by reading transcripts and listening to audio recordings. Both SE and MK inductively coded transcripts and field notes using NVivo software. They met regularly to compare coding schemes, discuss patterns and relationships among codes, and iteratively revise coding schemes. Throughout this process, they regularly critically discussed the analysis process and preliminary findings with LEE. Through this iterative process, preliminary themes and subthemes were defined.

The analysis process included two virtual analysis meetings held by SE and MK, one with peer advisor representatives (10 of 12 participated) and one with the three RCC representatives. The peer advisors talked about recognizing themselves in the findings but indicated that the presentation of findings needed improvement through a clearer representation of the variety of strategies used based on the diverse backgrounds of the peer advisors and the variety of community-based needs. RCC representatives reflected on learning about the perspectives of the peer advisors. They noted points of improvement for the peer advisor project, which led to a decision to organize a "dialogue meeting" with peer advisors and RCC representatives to conclude analysis. After the two virtual analysis meetings and prior to the dialogue meeting, further analysis entailed adjusting theme descriptions and presentation of findings based on the participants' feedback. Through this process, themes in the data were formulated.

The dialogue meeting included the peer advisor and RCC representatives, as well as others who previously had not been involved in the research, i.e., eight additional peer advisors, one representative from the collaboration of the regional cancer centres in Sweden, and a representative of the Stockholm healthcare region. This dialogue meeting was in the form of a discussion facilitated by SE and MK, regarding the research process, preliminary findings, ways the peer advisor project can be improved, and ways research findings can be shared with stakeholders of importance to peer advisors and RCC representatives. The peer advisors who had not previously been involved in the research project talked about recognizing themselves in the research findings, indicating relevance beyond the direct research participants.

3. Findings

Findings are presented below in three themes: (1) Peer advisors acting as a bridge through dialogues, (2) Peer advisors creating safe spaces for broaching cancer issues, and (3) Peer advisors' impact on personal, community, organizational, and societal contexts. Each theme is presented through subthemes. Findings are illustrated with quotes from data. To maintain confidentiality, personal details are modified or omitted.

3.1. Peer Advisors Acting as a Bridge through Dialogues. Peer advisors generally described their work as bridging a gap between the cancer care system and communities. Although the term "peer advisor" indicates a one-directional mode of communication (from peer advisors to communities), it is evident from both interviews and participant

observation that peer advisors establish and maintain *dialogues* with the community and with the RCC to bridge this gap, as illustrated in Figure 1.

3.1.1. Peer Advisor-Community Dialogue. Peer advisors discussed that communities in which they work appear to experience a lack of health and care-related information and a need for dialogue with Swedish authorities and healthcare institutions. Furthermore, they pointed out that this insufficient dialogue can hinder integration of people with migration backgrounds and contribute to health disparities. They explained that, to address these issues, they act as a bridge between healthcare organizations and communities, as illustrated in Figure 1. One peer advisor illustrated this, saying:

> "[The community] *wants to have a dialogue, not just a paper. . . we try to create a dialogue.* [A lot of what we do is to] *talk with people and try to understand, try to get more information from them and help them in a way. . . it helps* [me] *to connect.*"

Thus, rather than merely providing information, peer advisors create community dialogues. They commonly embed these dialogues in already existing meeting places, organizations, events, and activities. They often do so on their own initiative, as demonstrated by one peer advisor saying:

> "*I usually let* [the coordinator] *know when there's an event* [in my neighborhood], *a festival or. . . meetings in the municipality. . . that there are gatherings of different ethnic groups.* [. . .] *then I tell the organizer that RCC wants to join, and then they'll give us a table. That's how it goes.*"

This quote also illustrates the importance for peer advisors to have community-based connections on personal, organizational, and municipal levels to establish dialogues.

Some peer advisors also create their own spaces for community dialogues. In doing so, they are encouraged by the coordinator to use their own interests, skills, and networks. For example, one peer advisor around retirement age described how she holds book circles using a book about healthy lifestyles to stimulate dialogues among people in her own age-group in her neighborhood. During the COVID-19 pandemic, another peer advisor used her digital and social media skills to facilitate virtual language cafés using the RCC's information material as a basis for dialogues about cancer prevention among people with a migration background while also helping them practice Swedish.

During both interviews and participant observations, the peer advisors explained that, through dialogues with communities, they better understand what questions, issues, or challenges are important to communities. Recurring issues included questions regarding human papilloma virus (HPV) vaccination and screening, the process of mammography screening, and difficulty understanding letters of invitation to screening programs. Such dialogues inform the RCC about adjusting the information material and further education of the peer advisors to be able to address issues raised by communities.

3.1.2. Peer Advisor-RCC Dialogue. The peer advisor-RCC dialogue includes education peer advisors receive from the peer advisor coordinator and RCC representatives about cancer prevention and early detection as well as how to engage communities around these issues using their own experiences, skills, and networks. This dialogue also includes feedback from peer advisors to the RCC regarding issues of importance to communities that the RCC may otherwise be unaware of, although the peer advisor project was not initially designed to facilitate this feedback. One example of this feedback took place during the early months of the COVID-19 pandemic as it became clear that people living in areas where peer advisors were active were overrepresented in illness and mortality rates. RCC representatives recommended to Stockholm regional healthcare authorities that peer advisors could be asked to inform about COVID-19 instead of cancer for the time being. Several peer advisors agreed to this and were educated to inform about COVID-19-related issues. One RCC representative described how peer advisors bridged an information gap, saying:

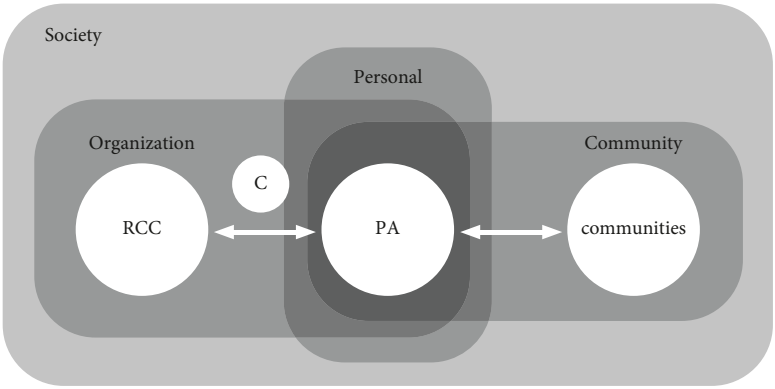
> "[The coordinator] *had a lot of information for us, which we would never have been able to capture otherwise. So that was awesome, I thought. She has so much knowledge about what works and what does not work, and she hears what is being talked about on the street right now.*"

As illustrated in figure one, the coordinator plays a key role in mediating the peer advisor-RCC dialogue, being involved in both providing education to peer advisors and giving feedback to the RCC. When discussing the peer advisor-RCC dialogue with RCC representatives in interviews, they seemed critical and discussed opportunities for improvement, as illustrated by one RCC representative saying:

> "*Sometimes I think we work too little systematically* [. . .] *It's about the connection between us at RCC and the* [peer advisors]. *This direct contact. . . we would need to tighten that, because then I think we could improve the* [project] *even more* [. . .] *Their work should be more integrated in RCC's other work. I think we would benefit from that.*"

Strengthening the RCC-peer advisor dialogue was one motivation for the dialogue meeting organized as part of the analysis process described above.

3.2. Peer Advisors Creating Safe Spaces for Broaching Cancer Issues. An overarching strategy for establishing and maintaining community dialogues regarding cancer prevention and early detection seemed to be for peer advisors to continuously adapt to various forms of diversity with the intention of creating safe spaces for broaching cancer issues.



RCC: Regional Cancer Centre Stockholm-Gotland
C: The peer advisors' coordinator
PA: Peer Advisors
Communities: The peer advisor target group, i.e., people living in areas with challenging socioeconomic conditions

Figure 1: The dialogues peer advisors facilitate and the various contexts they navigate.

3.2.1. Adapting to Diversity. It is evident from both interview data and participant observations that peer advisors commonly adapt their approaches to diversities among communities they work with (i.e., diversity in ethnic, cultural, and socioeconomic backgrounds, and people of various ages, genders, experiences, and perceived needs) and diversity in contexts they work (e.g., different neighborhoods, various events, interacting with people on the street or in group-activity settings, and different seasons and times), as illustrated by a peer advisor saying:

> "*Often you're in areas where people have worse socioeconomic backgrounds and there can be a different kind of cultural atmosphere in those neighborhoods, a different kind of interacting… So, you should adapt a little depending on where you are.*"

To determine appropriate strategies for broaching dialogues about cancer, the peer advisors seemed to combine their first impressions of people they encounter with their knowledge about diversity in the contexts in which they work and their own unique perspectives, experiences, and knowledge, as exemplified in the following quote by a peer advisor saying:

> "*I add things up… I connect various things,* [for example] *this person* [I can see] *that she's shy and then I approach her and* [begin] *to talk. "Hi, how are you?" in her language. Eventually she'll tell me things. Then I tell her what I know, what I want to help* [with]. *It's important that you don't disturb people… they come from a different country that doesn't have democracy, or has war the whole time, women don't have rights like here in Sweden, they are shy, they are afraid too. So that's why they need extra, extra explanation.*"

Thus, it becomes clear that the peer advisors' own background plays an important role in determining appropriate strategies for broaching dialogues about cancer. Both peer advisors and RCC representatives therefore emphasized a need for diversity among the group of active peer advisors.

3.2.2. Broaching Cancer Issues. A common challenge peer advisors described was about navigating culturally based sensitivities related to cancer, e.g., fear of the disease or sense of shame in living with cancer and/or participating in mammography or HPV screening. Peer advisors commonly reflected on using their knowledge of their own and other cultures to find ways to discuss cancer preventive information and screening. Generally, peer advisors agreed that sharing characteristics (e.g., age group, gender, language, ethnicity, and culture) facilitates cancer dialogues, as similarities can give them an "insider" status. However, one peer advisor explained that people with culturally based shame around cancer-related topics may be more comfortable talking with an "outsider" to that culture.

When anticipating difficulties in broaching cancer-related information, the peer advisors often began discussing the benefits of a healthy lifestyle in general, avoiding using the word cancer initially. Later, when the person showed interest, the peer advisors would introduce cancer-specific information with care. This kind of "funneling strategy" is illustrated by a peer advisor, saying:

> "*I don't immediately say cancer, people distance themselves, then you need to slowly, slowly approach* [the topic] *and say that there are different illnesses and that you need to take care of yourself. That there're different methods like with food and exercise, all kinds of things. Among other things it's cancer.*"

However, some peer advisors emphasized the importance of approaching the topic head-on, particularly when someone expresses a specific cancer-related question.

The peer advisors sometimes iteratively test different strategies to address challenges they encounter. For example, one peer advisor would usually discuss mammography screening with women of diverse ethnic backgrounds during a language café session. During a participant observation, she talked about wanting to engage men in these dialogues too, as she found that they may actively or unwittingly act as gatekeepers for their women family members' participation in screening. With support from the coordinator, she used a short video explaining the mammography screening process in a new effort to engage both men and women at the language café.

We expected that connotations with severe illness and death could be reasons for cancer being a potentially sensitive issue. While peer advisors who work in public spaces commonly said that these issues were not raised by people they meet, peer advisors with experience of working in group settings mentioned that end-of-life issues could be raised in such contexts, perhaps due to an increased sense of familiarity and safety. Some peer advisors indicated a need for increased personal competency in talking with communities about end-of-life issues, while others preferred to focus on cancer prevention and early detection.

3.2.3. The Intention to Create Safe Spaces for Dialogues. An overarching strategy peer advisors seemed to apply to create community dialogues about cancer prevention and early detection was their intention to create safe spaces for these dialogues. With a safe space, we mean here an interpersonal space in which both the peer advisor and the community seem comfortable in engaging with potentially sensitive and personal cancer-related issues. Establishing a sense of trust seems to underlie these efforts, as illustrated by a peer advisor saying:

> "*I give myself, like I am your friend, you can trust me, no-one will know. And I have met many women and I. . . their trust is important. . .* MK: *How do you create that trust?* Peer advisor: *Often, I have met those women many times, not just once, they are active* [in the same] *association* [as I am]."

In this quote, the peer advisor talks about several strategies to establish trust, i.e., creating a dialogue based on confidentiality, connecting with people who share characteristics, indicating her experience with this work, having a pre-existing relationship with individuals, and being part of established community-based associations. Some peer advisors seemed to create trust through consistency, e.g., by working at the same place and time over an extended period and becoming well-known in the community. Furthermore, a sense of trust appeared to be facilitated through social interactions about other things than cancer information, as illustrated in MK's field notes from the participant observation of a peer advisor working in a shopping centre:

> "[This peer advisor] *is also very social, it's almost as if the social aspect is more important than providing information initially. It seems like* [this peer advisor] *creates trust with people who visit the shopping centre through the social aspect,* [this peer advisor] *shows respect through both body language and verbally, greeting people, and talking with them about other things* [e.g., bills, politics, daily life] *as well.*"

Thus, creating trust seems to be facilitated by peer advisors showing respect to communities. This is also apparent in ways they deal with people who question or contest the information they provide, as illustrated by one peer advisor who spoke about an experience when informing about the COVID-19 vaccination program:

> "*There was a woman* [who] *said "no, the vaccine doesn't do anything, you should go to church, you should pray, Jesus will help you, not the vaccine." And I said "OK, I understand you," and I left. . . I don't try to persuade anyone, no, that doesn't work.*"

Thus, peer advisors applied a de-escalating approach through showing respect towards different points of views. Generally, peer advisors seem to make efforts to empower communities by discussing research-based information with a sense of trust in the community to make their own decisions, rather than discussing the information in a normative and patronizing manner. Furthermore, all peer advisors talked about being aware of the limits of their own knowledge and seemed able to refer to credible sources when needed. Approaches related to de-escalation, empowerment, and referring to credible sources were explicit parts of the peer advisors' education.

A challenge in creating trust, which several peer advisors reflected on, was that the community could perceive them as salespeople. Peer advisors seemed to deal with this by differentiating themselves from salespeople through using RCC role-up banners, name tags, and clothes with the RCC logo, to signal that they work with the RCC.

A relatively new way peer advisors have tried to create space for dialogues has been through Zumba classes (music and dance-based group training) free of charge in public spaces. A peer advisor reflected on one of these Zumba events, saying:

> "*Everyone appreciated it and stayed [after the class] and started to talk with each other* [. . .]. *We had a group with just women, and we informed about HPV, self-testing and mammography, and they had questions, and the men who were on the other side, they had questions about how you can quit smoking, those kinds of things. So it was a very successful activity.*"

Based on both interviews and a participant observation, Zumba activities were found to engage communities in a health-promoting activity while also appearing to create a safe space for dialogues about cancer prevention and early detection.

3.3. Peer Advisors' Impact on Personal, Community, Organizational, and Societal Contexts. Peer advisor and RCC representatives described various forms of impact of the peer advisor project in relation to four contexts, i.e., peer advisors' personal context, community context, RCC's organizational context, and a broader societal context, as illustrated in Figure 1. Due to their community-based perspective, peer advisors generally spoke more about forms of impact on personal and community contexts, whereas RCC representatives spoke more about forms of impact on organizational and societal contexts.

3.3.1. Impact on Personal and Community Contexts. In relation to a personal context, some peer advisors described working towards cancer prevention and early detection contributes to a sense of meaning, as they had experiences of cancer themselves or in their close social network. In relation to a community context, the peer advisors often described their work giving them a feeling of being able to help influence people to live healthier lives. However, they also described not having insight into whether their dialogues have led to behavioral change as they are generally unable to follow up.

Another form of impact some peer advisors described is that their work helped them and their family members live healthier lifestyles. Furthermore, many peer advisors said that working in the project helped them integrate into Swedish society, e.g., by learning the language, understanding systems, and creating social networks, as one peer advisor illustrated:

> "[When I started, I worked with] *a woman from Morocco. . . she was almost Swedish because she came to Sweden as a child, so she spoke Swedish very well.* [. . .] *I learned so much from her. Not only the language but also practical things. I asked how do you do* [things] *in Sweden? Because as a foreign woman I didn't know much. She was very kind.* [. . .] *We became friends.*"

For some peer advisors, this was their first job in Sweden, while others were able to strengthen their resume with their peer advisor experience and get new jobs based on this. All peer advisors talked about gaining a sense of community among peer advisors, with some saying they had previously missed a sense of community. The RCC representatives discussed how the project helped them gain an understanding of the needs of people in different communities and ways in which they can contribute to addressing these needs.

3.3.2. Impact on Organizational and Societal Contexts. RCC representatives discussed that, at an organizational level, the project has led to increased awareness of health and cancer care equity issues. This is reflected in the regional cancer plan (a document written by the RCC as a basis for political decision-making on priorities for cancer care development for coming years), in which the peer advisor project and goals towards equity in cancer care have become increasingly prominent since the peer advisor project began.

RCC representatives also talked about indications that screening participation has increased in communities where peer advisors are active, but more research is needed to investigate this. Furthermore, they described forms of societal impact on health issues beyond cancer, as illustrated in the following quote from an RCC representative:

> "*They informed about* [COVID-19 during the first pandemic waves]. *They've been an important resource for us.* [Another example] *has been with the war in Ukraine. I immediately called* [the coordinator] *"do you have peer advisors who speak Ukrainian and Russian?" "Yes, absolutely" she said, and found a few who could help in welcoming* [refugees]."

Based on these experiences, both peer advisors and RCC representatives suggest that the peer advisor-bridging function between the healthcare system and communities can and should be implemented more broadly than only in relation to cancer prevention and early detection.

However, peer advisors talked about their limited insights into potential impacts on organizational and societal contexts. A strengthened dialogue with the RCC was mentioned by both peer advisors and RCC representatives as one way to address this as illustrated by an RCC representative saying:

> "*We need to be better at that, in education or when we meet them, and perhaps report back to them these kinds of results so that they can see that their work actually does. . . gives something positive.*"

3.3.3. Sustainability and Structural Challenges Limiting Impact. Limitations to impact development were related to sustainability challenges, i.e., challenges in efforts to maintain the project, further develop it, and ensure its longevity. One RCC representative pointed out:

> "*As long as we receive financing and there's staff on a managerial level who see the positive aspects of the work, it will continue to exist, I'm completely sure about it. But we also need capable coordinators like* [names present coordinator]"

Besides the importance of financial and managerial support, RCC representatives discussed a need to transition from a project based at the RCC to an established program managed at a regional level with a broader approach to health promotion, rather than an exclusive focus on cancer. While RCC representatives have made efforts to this end, they have not yet found a readily existing managerial structure at a regional level that could act as a long-term host for a peer advisor program.

Some peer advisors related limitations on impact development to structural challenges, i.e., factors that uphold rather than address disparities based on socioeconomic

differences. While the peer advisor project intends to contribute to cancer care equity, some peer advisor representatives pointed out that this goal cannot be fulfilled as long as societal systems are in place that uphold socioeconomic differences. One peer advisor discussed barriers people with migration backgrounds face, saying:

> "*It's hard for people who are new in Sweden to enter the labor market* [. . .] *It's a complex problem, partly because of a naivety about it. Because it can be difficult for those who are born and raised in Sweden* [. . .] *to understand how it is for those who came to Sweden and start from zero. To create good systems, that's so important. Besides information about health it's about keeping people away from criminality and giving them a good education and good conditions. And when you have a kind of naivety about this problem, it will show on many levels, all the way up to us peer advisors, when we try to reach out with vital information, for example about how important it is for women to participate in mammography.*"

Thus, while the peer advisors may be able to have an impact in a community context, the peer advisor project alone cannot address structures that uphold socioeconomic differences.

4. Discussion

In this article, we investigate the perspectives of people working in the Swedish peer advisor project (i.e., peer advisors and RCC representatives), a community-based initiative to reduce cancer inequities based on socioeconomic conditions, in relation to challenges they face, strategies they use, and forms of impact they perceive their work to have. In summary, findings indicate that peer advisors act as a bridge through dialogues with communities and RCC representatives (Figure 1). The overall strategy peer advisors use in community dialogues is to make efforts to create safe spaces for broaching cancer and other health-related issues. To do this, the peer advisors described adapting to various forms of diversity by using their own diverse perspectives, experiences, and knowledge. In doing so, they tried to build trust and approach potentially sensitive topics with care. The peer advisors generally described a positive impact on their personal contexts. One challenge is to maintain an RCC-peer advisor dialogue. Improving this dialogue through regular and direct contact could facilitate mutual learning and provide peer advisors with insight into impact in organizational and societal contexts. Sustainability and structural challenges may limit the impact of the peer advisor project.

The idea that well-connected and educated community members can act as a bridge between the cancer care system and communities through peer-to-peer dialogues has been applied in health-promotion initiatives in other contexts [28, 30, 31]. Our findings add insight into strategies peer advisors used which can be understood as a form of cultural brokerage, i.e., a process of mediating between different cultural groups or communities to facilitate communication, understanding, and exchange of information [45]. As cultural brokers, peer advisors facilitate communication and understanding between the cancer care system and communities. Kroik et al. [46] noted that one role of cultural brokers is to promote cultural safety. Curtis et al. [47] take a clinical perspective in describing cultural safety as an ongoing process whereby healthcare professionals and organizations continuously reflect to increase self-awareness and hold themselves accountable for "providing culturally safe care, as defined by the patient and their communities, and as measured through progress towards achieving health equity" (p. 14). Based on our findings, peer advisors seem to contribute to cultural safety in their dialogues with communities by trying to create safe spaces. However, our present data do not allow conclusions about ways in which the communities' members perceive the peer advisors and experience dialogues with them; further research is thus needed to incorporate community perspectives.

Pang et al. [48] pointed out that cultural brokers can act on individual, organizational, and policy levels. The peer advisor representatives seem to act primarily at an individual level, promoting cancer preventive behaviors in community contexts. However, findings also indicate that the peer advisor project does have impact on an organizational level as it contributed to a heightened understanding of communities' situation and needs as well as more integrated focus on equity within the RCC. However, the RCC-peer advisor dialogue needs to be improved to facilitate mutual learning. This may lead to increased organizational self-awareness and accountability and thus increased cultural safety on that level.

In the dialogue meeting with peer advisors and RCC representatives during analysis, peer advisors began to discuss the potential of acting as brokers in the healthcare system more broadly. For example, policy and system changes aimed at diminishing socioeconomic disparities could be facilitated through cultural brokerage at a policy level by decision-makers and politicians engaging with peer advisors. In developing similar community-based initiatives in other contexts, we recommend that the potential for cultural safety processes on organizational and policy levels are considered already from initial planning phases. To note is that cultural safety requires an ongoing process, critically examining the power structures that shape healthcare systems, and facilitating change to better meet the needs of diverse communities, thus pointing to a need for long-term efforts to this end [47]. Further research is needed to investigate how the peer advisor project can contribute to an organizational and policy change.

As noted above, peer advisors base their community dialogues in part on cancer preventive information described in the European Code Against Cancer [5]. Rather than simply providing this information in its original form, the peer advisors use this material as a basis for dialogue. Based on our findings, this may facilitate bridging a gap between the cancer care system and communities. We therefore suggest that the European Code Against Cancer could be disseminated among communities with challenging socioeconomic conditions through dialogues with cultural brokers. We also suggest reconsidering the use of the term

"advisor" as this may not fully capture the reciprocal nature of community-based dialogues the peer advisors seem to initiate.

Our underlying data do not allow investigation as to whether the peer advisor project contributed to enhanced cancer equity. However, we did find that peer advisors and RCC representatives described forms of impact on individual, community, organizational, and societal contexts. This can be related to Kleijberg et al.'s [49] model of impact development in community-based PAR, which describes that"strategy-oriented impact", in this case increasing cancer equity, starts with "individual/group development" (p. 5). In the current context, this could be seen as peer advisors' integration into society and adapting healthier lifestyles themselves, as well as RCC representatives learning about the communities' situations and needs. This form of initial impact can then lead to an "action-oriented impact" [49], e.g., peer advisors adapting strategies to broach dialogues about cancer prevention and early detection and RCC representatives integrating issues of equity in cancer care throughout the organization. An action-oriented impact can then lead to a strategy-oriented impact, provided that contextual factors are supportive [49]. In this study, we found that some contextual factors threaten the sustainability of the project, e.g., the need for consistent financial and managerial support and a transition from a project to an established program on a regional level. In addition, limitations on impact development are related to structural barriers that perpetuate socioeconomic disparities, as those outlined in the background. The peer advisor project cannot independently address these. We therefore recommend that impact is considered from various perspectives when developing, implementing, and evaluating similar community-based initiatives.

To interpret our findings and consider transferability to other contexts, this study's strengths, limitations, and setting need to be considered [50]. The present study took place in an urban Swedish context, with a focus on neighborhoods with challenging socioeconomic conditions. We found research on similar initiatives in North America and Europe with groups with similar characteristics, e.g., with migration backgrounds [27–31]. It may be useful to investigate whether similar community-based peer-to-peer approaches are transferable to different contexts and other structurally marginalized groups, e.g., gender and sexual minorities, people dealing with poverty and/or homelessness, and/or people with substance use challenges [22, 51–53].

One methodological challenge was dealing with the potential of bias resulting from this study being initiated and funded by the RCC. In addition, as working in the peer advisor project is a source of income for peer advisor representatives, they may have been prone to focus on positive aspects and cautious in expressing criticism. Thus, efforts were made to maintain a critical perspective and centre peer advisors' voices. This was carried out through regular reflective discussions among authors as well as peer advisors and RCC representatives regarding roles and power dynamics. Based on these discussions, RCC representatives agreed not to be authors to facilitate a critical perspective on the project. As noted in the method section, SE was involved as both the peer advisor representative and researcher. His insider perspective [54, 55] contributed to representing peer advisors' voices in an authentic manner. In addition, the peer advisor representatives were informed that their work with the RCC would not be affected, independent of their choice to participate, and that data would be presented confidentially. During analysis, meetings with peer advisors and RCC representatives were held separately to create a safer space for peer advisors to express their reflections without self-censorship.

Another limitation may be a potential selection bias resulting from inviting a subgroup of peer advisors rather than all currently active peer advisors as this may have excluded other valuable and deviating perspectives, despite the diverse characteristics of the invited representatives. However, peer advisors who were not part of the research process said that they recognized themselves in the findings during the dialogue meeting at the end of analysis. Another strength is that underlying data included both interviews and participant observations, which helped the authors gain a deeper and more nuanced understanding. Furthermore, the authors' different perspectives on and familiarity with the peer advisor project facilitated a critical approach to the analysis. RCC representatives have applied preliminary findings to improve the peer advisor project by intensifying the RCC-peer advisor dialogue, disseminating findings to politicians on various levels, and further incorporating cancer care equity issues in the regional cancer plan. More research is needed to investigate measurable and long-term forms of impact of the peer advisor project.

5. Conclusions

This research contributes with perspectives of people working with the peer advisor project to promote cancer preventive behaviors and early detection among communities with challenging socioeconomic conditions. Insights into challenges and strategies may inform development and implementation of similar community-based peer-to-peer initiatives in other contexts. We found that peer advisors act as cultural brokers by initiating community dialogues. Furthermore, peer advisors may act as cultural brokers in relation to the cancer care system by facilitating dialogues to increase understanding of communities' contexts and needs. These dialogues may contribute to a sense of community-based cultural safety, but more research is needed to investigate this. We have also noted a potential for increasing cultural safety on organizational and policy levels. However, this requires an ongoing reflective process to critically examine power structures shaping healthcare systems. Therefore, in developing and implementing similar initiatives, not only the impact of peer advisors in community contexts should be considered, but also the potential for creating a systematic change on organizational and policy levels to address cancer inequities based on socioeconomic differences.

Data Availability

Underlying data are not publicly available due to restrictions applied to the availability of this data based on ethical considerations and the participants' consent.

Ethical Approval

Ethical approval for this research was obtained from the Swedish Ethical Review Authority (record no. 2021–05028).

Consent

Prior to participation, participants signed informed consent forms.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Authors' Contributions

Max Kleijberg developed the research plan in partnership with representatives from the Regional Cancer Centre Stockholm Gotland and the peer advisor coordinator. Data generation was led by Max Kleijberg, and data analysis was led by Simon Efremius and Max Kleijberg. Throughout data generation and analysis, Lars E. Eriksson provided feedback, advice, and input through reflective discussions. Simon Efremius led the process of writing the article with supervision from Max Kleijberg and feedback from Lars E. Eriksson. All the authors have approved the version to be published.

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