**The role of nurses in the quality of cancer care management: Perceptions of cancer survivors and oncology teams**

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**Introduction**

Over the last decades the nature of cancer as a disease and the treatments available have changed and quality in cancer care has become central (Shapiro, 2018). Advanced technologies have led to reduced mortality and increased survivorship rates, and cancer is now a chronic disease (Bashkin et al., 2021), with survivorship beginning at the diagnosis point and continuing throughout the survivor’s life. In light of this, survivor care should be an integral part of the cancer care continuum (Shapiro, 2018). Understanding how cancer survivors perceive the care and support they receive is crucial to achieving quality cancer care across the cancer trajectory (Rowland et al., 2006; Dopelt et al., 2022).

The quality of the cancer care continuum is influenced by the decisions and actions of both the patients and health care professionals throughout the multiple processes of care (Zapka et al., 2012). Integrative and well-coordinated cancer care is an important factor affecting decision-making and the development of a structured patient-centered process of care (McCormack et al., 2011; Sidhom & Poulsen, 2006). Recent studies have shown the benefits of using integrative cancer care models, which include patient adherence to the recommended medical treatment, improved quality-of-care measures, continuity of care, and longer survivorship (Chirgwin et al., 2010; Freeman et al., 2011; Kowalski et al., 2017). A study conducted among breast cancer patients found that an integrative and holistic process of care should consider instrumental aspects (e.g., coordinating between test and treatment sessions), cognitive aspects (e.g., patient involvement and joint decision-making), and emotional aspects (e.g., empathy and psychosocial support). These along with additional elements form a holistic experience of care (Admi et al., 2014).

Continuity of care as a positive outcome of integrative cancer care management is increasingly becoming a focus of attention as cancer care services are being transferred to community settings. Continuity of care has an extensive effect on cancer patients and was found to be associated with high satisfaction levels and an increase in quality-of-life and mental health indicators (Aubin et al., 2012; Hudson et al., 2009). On the other hand, lack of continuity of care was found to be associated with increased consumption of medical resources and unnecessary use of medical services (Skolarus et al., 2012). In a recent study conducted among breast cancer patients (Chen et al., 2019), continuity of care in the transition between hospital settings and community settings increased the likelihood of patients complying with recommendations and arriving for follow-up tests in the community. In addition, lack of continuity of care has been correlated with hospital readmission and an increase in emergency department visits. Chen et al. (2019) also noted that continuity of care promotes caregiver-patient communication regarding information relevant to the disease. To improve the quality of cancer care, attention must be given to the transitions between care types as well as the actual service delivery (Grunfeld & Earle, 2010; Zapka et al., 2003).

In the current study, we conducted in-depth interviews with cancer survivors and healthcare and oncology professionals to gain deeper insights into various components of quality in cancer care and the role of oncology nurses in prompting and maintaining quality across the cancer care continuum. The research is unique in that it is based on interviews with survivors and not active patients. Our purpose was to ascertain the survivors’ perspective on their experience, from the moment of receiving the diagnosis through their recovery and to their life today as cancer survivors. The study is also unique in that it compares the perceptions of two populations: cancer survivors and healthcare professionals.

**Methods**

We conducted a qualitative study using semi-structured interviews based on interview guides. Two topics guided the progression of the questions: (1) cancer patients and survivors’ needs; and (2) the nurses’ role in maintaining the quality of cancer care.

The study was approved by the Ashkelon Academic College Ethics Committee (Approval #20-2020).

**Population and procedure**

Semi-structured in-depth interviews were conducted with 16 cancer survivors and 22 healthcare professionals between August and October 2021, after informed consent was obtained. To recruit cancer survivors, posts were published in cancer patient forums on Facebook. To recruit healthcare professionals, notices were posted in cancer centers in Israel. Those who were interested contacted the research assistant and were given a detailed explanation regarding the purpose of the research. Of the healthcare professionals, four were male and 18 were female. These included four physicians and 18 nurses. Of the cancer survivors (aged 40­–85 years old), six were male and ten were female. The cancer survivors had recovered from different types of cancer (breast, lymphoma, colon, soft tissue tumor, anal tumor, lung, ovarian, and prostate) at various stages of the disease.

All the interviews were conducted over the telephone due to COVID-19 social distancing restrictions and were audiotaped and transcribed verbatim in Hebrew. The interviewer was a clinical psychology graduate student trained in qualitative research methods and supervised by the study’s research staff (OB and KD). No relationship was established between the interviewer and the participants before the study began. Each interview was audio-recorded and lasted 40–60 minutes.

**Study tool**

The in-depth interviews were semi-structured. The wording and order of the questions changed based on the interview dynamics to maintain continuity and flow and encourage the interviewees to be open. Two guides were developed, one for the cancer survivors and the other for the healthcare professionals. This was done in collaboration with oncology staff members and drew on the literature review. Two oncology nurses and two physicians validated the content of the guide to ensure that the questions were relevant to assessing quality across the cancer care continuum. The guides were pilot tested on one cancer survivor and one oncology nurse to ensure that the interview flowed smoothly and to verify that the questions were comprehensible. The information collected during the interviews included the survivors’ and healthcare professionals’ perceptions of the nurses’ role in cancer care and how healthcare professionals responded to the needs of cancer patients, provided information and support, managed treatments, and maintained continuity of care, in addition to background demographic details of the interviewees (Appendix 1).

**Data analysis**

The interviews were transcribed and analyzed using the ATLAS.ti v.8 software according to a thematic analysis method based on grounded theory (Shkedi, 2003). We analyzed deductive themes arising from the research topics and a review of the literature on quality in cancer care and cancer survivors’ needs in combination with inductive themes that emerged from the data (Shkedi, 2003). The interviews were transcribed by a professional and the interpretive analysis was performed soon after the interviews were conducted. The transcripts were analyzed in several stages. We began by reading the interviews at least once to gain in-depth and comprehensive knowledge of the data. Based on this we identified ideas, categories, and themes related to the study objectives. We then reread the transcripts and redefined the central themes to include encoded quotes and examples. Relevant passages were marked and allocated to one of the content themes. Finally, the themes and quotes were documented in English. The findings below include transcript quotes that support the interpretation and classification of the interviewees’ unique voices.

**Results**

Table 1 and Table 2 below present the participants’ characteristics and codification.

**Table 1.** Characteristics of cancer survivor participants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cancer survivor code | Gender | Age | Time from recovery | Cancer type |
| CS1 | Male | 56 | 7 years | Colon |
| CS2 | Female | 49 | 3 years | Breast |
| CS3 | Male | 85 | 2 years | Lymphoma |
| CS4 | Female | 63 | 6 years | Lung |
| CS5 | Female | 66 | 22 years | Breast |
| CS6 | Male | 81 | 1.5 years | Prostate |
| CS7 | Female | 47 | 6 years | Soft tissue tumor |
| CS8 | Male | 67 | 5 years | Prostate |
| CS9 | Male | 40 | 6 months | Neck |
| CS10 | Female | 60 | 17 years | Breast |
| CS11 | Female | 64 | 2 years | Anal tumor |
| CS12 | Male | 72 | 6 years | Colon and Lung |
| CS13 | Female | 71 | 5 years | Breast and Lung |
| CS14 | Female | 70 | 4 years | Ovarian |
| CS15 | Female | 44 | 2 months | Breast |
| CS16 | Female | 46 | 12 years | Breast |

**Table 2.** Characteristics of healthcare professional participants

|  |  |  |
| --- | --- | --- |
| Healthcare professionals code | Gender | Role |
| P1 | Male | Hospital oncologist, head of the oncology department |
| P2 | Female | Hospital oncologist |
| P3 | Male | Hospital and community oncologist, head of the oncology department |
| P4 | Male | Hospital and community oncologist |
| N1 | Female | Senior nurse working in the Ministry of Health’s Department of Professional Development in Nursing Administration  |
| N2 | Female | Hospital oncology nurse  |
| N3 | Female | Community oncology nurse |
| N4 | Female | Community palliative care nurse |
| N5 | Female | Community palliative care nurse |
| N6 | Female | Community palliative care and oncology nurse |
| N7 | Female | Hospital oncology nurse |
| N8 | Female | Hospital oncology nurse, board member of the Israeli Oncology Nursing Society |
| N9 | Female | Hospital palliative care nurse also working in Nursing Management at the Ministry of Health |
| N10 | Female | Hospital clinical nurse specialist |
| N11 | Male | Hospital palliative care nurse |
| N12 | Female | Hospital palliative care and radiotherapy nurse |
| N13 | Female | Senior nurse, head of the ambulatory division in a hospital, including oncology and hematology clinics |
| N14 | Female | Hospital palliative care nurse |
| N15 | Female | Senior nurse, head of the Ministry of Health’s Department of Professional Development in Nursing Administration |
| N16 | Female | Hospital palliative care nurse, breast cancer specialist |
| N17 | Female | Hospital palliative care nurse |
| N18 | Female | Hospital oncology nurse |

**Themes**

Four main themes emerged from the interviews. The first is “Patient participation in the cancer care plan: Shared information and decision-making.” The second is “Emotional and support aspects in cancer care.” The third is “Continuity in cancer care: From hospital patient to survivor in the community,” and the fourth is “Cancer care management.” Figure 1 illustrates the themes along the three main phases of cancer.



Figure 1: Themes related to quality in cancer care along the three main phases of cancer

1. ***Patient Participation in the cancer care plan: Shared information and decision making***

This theme includes two main sub-themes. The first is the sharing of information as a central factor affecting patient involvement across the cancer care continuum. The second is support in decision-making as a complex need that should be addressed as part of cancer care.

Cancer survivors described their need for information, which was especially strong at the beginning of the treatment phase. They described wanting information about their medical condition and care plan, different options of medications and their respective side effects, and how the disease would affect their daily life. In addition, they noted their need for information regarding various administrative aspects, including financing options and social security.

Some described receiving comprehensive information and a clear explanation from the doctors and/or nurses at the hospital. Others had to find the information on their own (by going online, asking relatives, or approaching external consultants). Many noted the nurses’ ability to explain and provide missing information and help them understand more about the disease, in contrast to what they felt they received from the doctors. The doctors mentioned the importance of the nurse’s role as a complementary source of information. Cancer survivors and the oncology staff raised the need for a single comprehensive and concentrated source of information for all issues on the cancer care continuum to rectify the current situation, in which hospital staff can only provide information related to their specific field but not about the whole process of care.

*I gathered the information myself. I don’t think the doctor ever gave me all the information. He gave me information about his field, but nothing beyond that, for example, about studies or the treatment plan and what my options were throughout the process. I had many questions. For example, I got the results of a PET/CT scan and I couldn’t get the doctor on the phone. I kept calling and calling and he didn’t have time or couldn’t answer and I was extremely anxious. Or when I felt unwell and was vomiting and having stomachaches and didn’t know if it was related to the chemo, and all kinds of things like that.*

*Tsipi, a survivor*

*The doctor treated me with respect and took everything I said seriously. He contacted me after work hours. Beyond the hours, beyond the fact that I was in hospital, he consulted with me about how to move forward, he asked me. I was an active participant in the process and that was very important to me. At the beginning of the process I was at a different hospital and I wasn’t that interested. There were so many things I didn’t understand, so I didn’t really care. But now I feel like someone who has a say. I know my body really well and the cooperation with the doctors throughout the entire period at the hospital was very important.*

*Dganit, a survivor*

*I’ve come across quite a few cases of patients missing critical information. For example, there was a patient who arrived with a lump in her breast who had surgery, or a patient who arrived with a tumor in his colon who had surgery and they had no idea they needed to schedule an appointment to see the oncologist. I came across quite a few of these patients completely by accident, because they turn to me as someone who can answer many different kinds of questions. Suddenly I realize that the patient hasn’t contacted oncology and hasn’t scheduled an appointment because the surgeon told him everything was alright and that he was completely clean, so he assumed there was nothing else he needed to do. These are the implications of not sharing information with patients.*

*Galit, a nurse*

The survivors referred to their participation in decision-making as a vital component of the cancer care plan. Some survivors noted that they were pleased they had been given the information to make a decision about their treatment. Others reported experiencing difficulty when having to make decisions regarding their treatment and care plan. They felt they had not fully understood the implications and that they could not trust themselves or family members to make the decision. In regard to shared decision-making, the oncology staff noted that it was important to provide patients with information on drug treatments, pain management, and the impact of the disease on daily life. In this context, they also noted the importance of providing patients and survivors with continuous access to information and assistance in the hospital and especially in community settings and suggested that nurses have an important role in providing missing information when needed. However, the doctors still see themselves as the supreme authority and nurses as intermediaries between the patient and doctor.

*You have to let the patients be part of the process and you need to present them with options. Turn out there are so many options they don’t tell you about… It forces patients to take responsibility for what happens to them. They advise you and you make the choice. They direct you, give you the tools. I think that’s basic in planning the treatment.*

*Dganit, a survivor*

*When doctors say, “We’re considering a few options and you’ll decide,” including the patient is the right and appropriate thing to do. The problem was that they let me choose which surgery I wanted. Now I had to decide. I think patients don’t have the tools or enough knowledge to make such a decision. For me it was problematic because I felt that I had no basis for making a choice.*

*Hannah, a survivor*

*Nurses can provide information to patients. They can offer professional advice at the hospital and in community settings. They help patients, provide information, conduct follow-ups and then report to us doctors. If fact, they can serve as the link between the patients and the doctors.*

*Dr. Julia Schneider*

*Nurses can provide support for a variety of issues. For example, balancing pain. Not all doctors are pain balancing specialists and know exactly how to mix medications. It’s a vast and complex field. [You need] to know all the signs and symptoms, such as nausea, digestive problems, hair loss. There are many other issues that are relevant to oncology patients in regard to which nurses could advise, provide information, follow-up on the effects of the medication, and support the patient.*

*Irena, an oncological nurse*

1. ***Emotional and support aspects in cancer care***

Survivors emphasized the role of emotional support throughout the various stages of the disease, from diagnosis through the tests and treatments to the recovery stage, including the ongoing follow-ups and return to daily life. They particularly emphasized the importance of seeing the person behind the treatment. This included listening to their changing needs, finding personalized solutions, and mainly having a holistic approach to planning the cancer care process, one that considers the patient’s family, social needs, and personal desires.

*The nurse said to me, “Do you want to live for your son? Live for yourself.” These kinds of sentences stay with you for life. The pressure and the fear and the stress. And some of the staff are supportive and some make you more stressed. You know how to direct yourself toward people who make you feel good while your living this nightmare.*

*Neta, a survivor*

*When you get free of the disease, that’s when you need a lot more support. There was no mortal danger and the treatments were over but I never got my life back, and anyway, there’s no such thing as getting your life back. It’s a different life and that’s okay. But I feel that there’s not enough support during this stage. I have a friend who had very difficult cancer and she said to me, “That’s it. I’m not sick anymore so no one pays any attention to me.” It was so difficult. I think we need a lot more of this kind of support in the community.*

*Hannah, a survivor*

The oncology staff described the personal relationship between the nurse and patients as extremely significant, in light of the nurses’ constant presence and availability to the patients and their ability to offer more in-depth advise. Nurses also described the need to form a personal relationship with the patient’s accompanying family members and provide them with information, explanations, advice, and guidance.

*The doctor comes and goes. He doesn’t have as much time. He’s not near the patient’s bed all the time. The nurse is always there. She knows the patients “from head to toe.” Some days a specialist nurse is alone at the department and she effectively runs it. Her ability to integrate the nursing with the medical aspects is a major benefit. This gentleness she can offer to patients in conversations and treatments. That’s definitely an important point.*

*Shulamit, a nurse*

*The nurse independently adjusts the treatment to meet the patient’s needs. She provides comprehensive care, which is good because it allows the patient to receive physical, psychological, and social therapy. The nurse serves as a type of compass. She directs the entire treatment and connects between all the professionals who should be involved in the patients care.*

*Tali, a Southern District supervisor*

1. ***Continuity in cancer care: From hospital patient to survivor in the community***

This theme included two main sub-themes: the transition between hospital and community, and discontinuity of care after the recovery phase. Survivors described experiencing the transition from the hospital to the community setting as uncoordinated and that once the intensive treatment and recovery period were over most of the follow-ups were done at the hospital, usually by the physician who was involved in the cancer treatment. They spoke about feeling required to self-manage their care in the community setting, noting that there was no oncology staff member who initiated follow-ups and managed the treatment plan.

They noted the lack of communication between the hospital oncology staff and the community clinic doctor and that it was difficult to coordinate between the community clinics and the hospital. They added that this sometimes caused necessary medical examinations to be delayed for a long time. Survivors emphasized the benefits of the nurse and the family doctor being acquainted with the patient. These included the medical team’s ability to notice changes in the patient’s medical condition and respond appropriately to special needs as they arise. Survivors also expressed a critical need for a more holistic approach to patient and survivor care.

Furthermore, survivors described experiencing a major change in their relationship with the doctors once the intensive treatment period was over. The time between follow-up sessions got longer and less time was devoted to each session. They felt their follow-up appointments were frequently postponed because they were no longer at the top of the doctor’s priorities.

Most of the survivors described their experience of being in contact with many doctors, at times for various treatments at various hospitals. As various disciplines are involved in cancer treatment, patients have to be in touch with different people to receive information and treatments. The patients would keep their medical information and transfer it from one doctor to the next (e.g. test results, etc.), noting that the doctors did not always communicate with each other.

*I had my amazing family doctor whom I actually asked to manage my disease. I wasn’t able to communicate everyone I had to in any cohesive way. So she really did the best she could to find out and ask. But her ability was also very limited. It’s not like she called my surgeon and my surgeon willingly answered her.*

*Shira, a survivor*

*I feel that if I don’t ask I don’t get, because there’s no system here for calling me up and asking how I am, how I’m doing. Our relationship exists from one test to the next. When there’s a test they ask me how I am.*

*Karin, a survivor*

*I think cancer has long-term effects. It’s not just [that you need] repeat follow-ups to make sure everything is normal and the cancer hasn’t returned. There are long-term effects - physical, emotional, functional. I mean, I’m no longer an oncological patient, not hospitalized in the department, I don’t belong to the department, I am no longer an active patient. But there’s no guidance and support in the community for survivors’ long-term needs.*

*Tova, a survivor*

*No one talks about the day after. Even in the hospital, it should be added. Don’t just tell me “It’ll be alright” – tell me what to do, what I should plan, how to get back to normal life, what recreational activity, maybe there are support groups.*

*Batya, a survivor*

In the context of the importance of continuity of care, healthcare professionals noted the value of oncology nurses in the community who monitor the needs of patients and survivors before they arrive at the hospital. Another valuable function the nurses fulfilled was conducting follow-ups and providing continuous support to the patients after the intensive treatment phase, especially in Israel’s periphery. They mentioned the need to expand the role of community nurses to include managing continuity of care, maintaining contact with patients to balance pain and side effects, coordinating tests and follow-ups, and communicating with the hospital.

*Many patients in the community fall between the cracks. These patients are neither here nor there… but they do require follow-up. They do require treatment and support. In the periphery there’s no oncology clinic like there is in the center. That’s why it could be good to open a consultation clinic in the community with a specialist nurse to help with the volume of patients.*

*Eti, an oncology nurse*

*In some situations, the patient receives treatment at the hospital and transfers to the community setting, where he needs to continue receiving the same treatment and balance. The authority of the specialist nurse in the community needs to be expanded so she can maintain continuity of care.*

*Sanda, nurses’ study*

*Life expectancy is longer. People often live with a metastatic disease for many years and they live in the community. A patient can receive chemical or biological treatment by taking a tablet in a community setting, without coming into the hospital or the radiation institute. There are current trends around the world toward developing oncology care in community settings. That’s why it’s necessary to strengthen the oncology nursing infrastructure in the community. It’s imperative. Both in the hospitals and the community.*

*Livia, an oncology nurse*

1. ***Cancer care management***

Survivors found three main elements lacking in their treatment management. First, at the beginning of the process they needed to understand the treatment concepts and processes and required help with coordinating the various initial treatments. Survivors reported having to teach themselves how to navigate the process, seek external consultations, and be in touch with many different doctors. Second, they were not given a comprehensive view of the treatment process and other effects (e.g. nutritional, psychological, family-related, etc.). Third, after the first and intensive treatment period was over, the survivors described having to deal with multiple therapists with no one coordinating the process (with the exception of the main treating doctor whom survivors visited periodically).

Most of the oncology staff participants mentioned the need for a single staff member to manage the cancer care plan and serve as a case manager for patients and survivors. This professional could provide a holistic solution and monitor patients more closely, specialize in specific topics and serve as a source of information for patients and survivors.

Most of the survivors reported seeing the nurse as the treatment manager, responsible for coordinating treatments and referrals, the relationship with the patient, the treatment sequence, etc. However, in regard to decision-making, almost all of the survivors emphasized the importance of the doctor. They expressed confidence in the nurses as treatment managers because of their avaibility and accessibility and the close personal relationship they had cultivated with the patients, in addition to the nurses’ professional expertise and ability to provide information, directions, and advice.

*In the healthcare system there’s no one managing the disease. You go to the gynecologist, he doesn’t know. It’s a breast issue – that’s not my field. We go to the breast surgeon – not me… No one’s actually in charge. You get all these kinds of drugs that cause all kinds of problems, but there’s no one with an overview who tells you that if you’re taking this, it’s not good. If you’re taking that, it’s not good. And that’s really missing.*

*Shira, a survivor*

*There’s no single place. Ultimately, it’s the connection between the surgical and oncological disciplines. They might communicate with each other but they don’t always involve me as the patient. So there was a lot of work to do. In the beginning, I didn’t know the playing field and how things worked. I had to learn about the bureaucracy.*

*Tova, a survivor*

*The doctor decides the course of treatment and the nurse executes the plan. Maintaining a good atmosphere is very important, and the nurses also have a lot of accumulated knowledge, because they work with the people all day. Being the link between the doctor and patients is very important and if nurses were also given the ability to make decisions, I think it would shorten waiting times and make information and support more accessible.*

*Batya, a survivor*

*A nurse can certainly make the treatment a lot more professional and focused on the person and their needs, their highly specific problems, and provide a personalized solution, whether at the hospital or in the community.*

*Hila Fogel*

**Discussion**

The aim of this study was to explore the perceptions of cancer survivors and healthcare professionals regarding the quality of cancer care. The study also explored how cancer survivors and healthcare professionals understand the nurse’s role in improving the quality of service in the oncology field.

Cancer survivors pointed to several elements that can increase the quality of cancer care. These include ongoing provision of information, explanations, and support in decision-making, and continuity of care in the hospital and especially during the follow-up phase in the community setting after the treatment phase ends. Another aspect survivors noted in this context was periodical contact initiated by the medical team, and the need for more holistic and emotional support throughout the cancer care continuum. Finally, they expressed the need for structured and continuous care management. Our findings are in line with earlier evidence that showed long-term cancer survivors prioritize the accessibility of health services, continuity, and coordination of care and express greater satisfaction when healthcare professionals understand their needs beyond cancer and offer them comprehensive care (Luctkar-Flude et al., 2015).

Similar to the findings of the current study, Ker (2021) found patients benefit from oncology nurses in five main aspects: psychological support, provision of information, symptom management, treatment coordination, and patient satisfaction. As the survivors in the current study attested, this is particularly important in light of the fact that patients need to be in touch with many different specialists and receive holistic care and there is no single entity managing the treatment, causing patients to have to cope with everything themselves. Indeed, Griffiths’ study (2013) found that clinical oncology nurses adopt a holistic approach and view cancer in the overall context of the patient’s unique life circumstances. Another study found that patients view nurses as available, accessible, and trustworthy (Borland, 2014).

Most of the oncology staff participants mentioned the need for a single staff member to manage the cancer care plan and serve as a case manager for patients and survivors, as well as the need to expand the nurses’ role to include continuity of cancer care management.

A recent systematic review that examined the effectiveness of nurse-led case management in cancer care showed that nurse case managers provided accountable and patient-centered care from the early stage of diagnosis, and that cancer patients received quality, continuous, and comprehensive care, which was associated with better physical and psychological outcomes (Joo & Liu, 2018).

Survivors in the current study reported experiencing discontinuity of care in the transition to the community setting and difficulty coordinating between community care providers and hospital care providers, noting that this negatively affected their health. The long-term physical, psychosocial and financial implications of cancer on survivors’ lives are well known (Hewitt et al., 2005). Nevertheless, recent studies have shown limited success in implementing survivorship care plans, which may lead to poor health outcomes (Birken et al., 2019; Hahn Erin et al., 2016). Unfortunately, cancer survivors still experience a lack of continuity and integrated care delivery, feelings of being lost, and reduced well-being (Garcia-Vivar et al., 2019; Nekhlyudov et al., 2017). Continuity of care in the transition from hospital settings to community settings is vital to the successful implementation of survivorship care plans. Collaborative relationships involving community resources are important for high-quality cancer care and can increase survivors’ participation in preventative actions and compliance with the recommended treatment (Zapka et al., 2003). A recent study showed the positive effect of different elements of continuity of cancer care on quality of life among cancer patients. These included the ongoing therapeutic relationship between the patient and care provider, the provision of timely and personalized information to the patient, coordination between various entities in the healthcare system, and adjustments made as the patient’s needs change over time (Plate et al., 2018). In light of this, strategies for achieving high continuity of cancer care should be developed and implemented urgently.

Our study has several limitations. First, the study was conducted in Israel, which has a public health system. Therefore it may be difficult to extrapolate the findings to countries where the health system is based on private insurance and unfunded healthcare and the patient experience is different. Second, by nature, qualitative research includes a limited sample of participants based on the purpose of the research. Nevertheless, we interviewed survivors of various types of cancer and healthcare professionals working in various hospitals and community settings to present as broad a picture as possible.

**Conclusions and recommendations**

The current study sheds light on the unique role of nursing in improving the quality of care for cancer patients and survivors. Advanced practice nurses have been recognized as key professionals uniquely suited to providing comprehensive follow-up care in a variety of settings, providing emotional and family support, and maintaining quality care for cancer survivors (Corcoran et al., 2015). As shown in our study, nurses have a central role in cancer survivorship and a major impact on achieving the highest possible quality of cancer care for the growing number of survivors and their families. All the survivors we interviewed saw the nurse as a potential treatment manager, especially when several disciplines were involved (e.g. surgery, urology, and oncology) and they felt lost. The healthcare professionals also considered the nurses as treatment managers and noted that sometimes they took on the role informally to help anxious patients and their families. It seems there are high expectations of nurses, and everyone agrees the nurses can meet them. However, doctors are still regarded as the highest authority when making treatment decisions. We recommend expanding the role of oncology nurses to that which exists in various countries around the world (e.g. Germany, Australia, the United States, and others) and formally declaring them as treatment managers. Furthermore, we recommend making more of these nurses available in the community to accompany, support, and follow-up on the survivors.

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**Appendix 1: Guide for interviewing nurses, doctors, policy makers, and medical teams at oncology departments**

1. Tell me a little about yourself, about your current role and any previous noteworthy roles you performed.
2. Tell me about your training, what did it include?
3. How do you think nurses contribute to patients on the one hand, and the system on the other?
4. Do you think the nurse’s role should be expanded beyond its current scope?
5. In your opinion, what should the functions and authority of a hospital oncological nurse include?
6. In your opinion, what should the functions and authority of a community oncological nurse include?
7. Would you like to add anything?

**Appendix 2: Guide for interviewing cancer survivors**

1. Tell me a little about yourself. When did you receive the diagnosis? How did it affect you emotionally/financially/your family life/your daily life?
2. Did you receive any support from your family or someone close to you while you were coping with the disease?
3. Did you receive ongoing support from healthcare professionals while you were coping with the disease, when you came in for treatments, in decision making, etc.? Try to describe how you acted with the doctor and how you acted with the nurse. Was it different in any way?
4. Did you receive advice, medical information, explanations and clear and comprehensive guidance regarding the treatment and how to cope with the disease? If so, from whom?
5. Did the oncological team who treated you help you coordinate treatments and referrals and represent you when dealing with bureaucracy? If so, who helped you?
6. Did you feel that the oncological team who treated you were empathetic and sensitive enough to your needs? Were they patient and dedicated enough in your opinion?
7. During the transition to the community setting for treatment and follow-up did you feel the hospital and community professionals were coordinated? Did they maintain ongoing contact with you? Was continuity of care maintained?
8. Did you feel there were many medical professionals you had to deal with at a certain stage of your treatment, or did you feel you had one specific place you could go to for help with various issues?
9. Did you feel you had certain needs that were not being met by the medical team during the transition to the community setting?
10. How would you summarize the quality and experience of your care at various stages of the disease?