Palliative and Supportive Care

cambridge.org/pax

Original Article

Cite this article: Shinan-Altman S, Levkovich I, Hamama-Raz Y (2022). Cervical cancer survivors: The experiences of the journey. Palliative and Supportive Care, 1–8. https:// doi.org/10.1017/S1478951522000785

Received: 11 December 2021 Revised: 30 May 2022 Accepted: 12 June 2022

Key words:

Behavioral coping; Cervical cancer; Emotional coping; Survivors

Author for correspondence:

Shiri Shinan-Altman, The Louis and Gabi Weisfeld School of Social Work, Bar Ilan University, Ramat Gan 52900, Israel. E-mail: shiri.altman@biu.ac.il

© The Author(s), 2022. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.



Cervical cancer survivors: The experiences of the journey

Shiri Shinan-Altman, PH.D.¹ , Inbar Levkovich, PH.D.² and Yaira Hamama-Raz, PH.D.³

¹The Louis and Gabi Weisfeld School of Social Work, Bar Ilan University, Ramat Gan, Israel; ²Faculty of Graduate Studies, Oranim Academic College of Education, Kiryat Tivon, Israel and ³School of Social Work, Ariel University, Ariel, Israel

Abstract

Objective. Cervical cancer affects survivors' overall coping. Yet, specifically emotional and behavioral expression patterns among cervical cancer survivors have barely been examined. In addition, no study has focused on survivors' experiences of sequences related to coping. Understanding these perceptions can help provide a tailored response and improve psychosocial interventions. The aim of this study was to gain a better understanding of the emotional and behavioral motives involved in coping with cervical cancer recovery.

Methods. Qualitative interviews were conducted with 15 survivors of cervical cancer (stages I and II), using a semi-structured in-depth questionnaire. The interviews were recorded, transcribed, and analyzed by three researchers using thematic analysis.

Results. Six main themes emerged: (i) Reasons and benefits for keeping the disease a secret or sharing it with others; (ii) "When you get used to despair, there's also room for hope": Despair alongside hope; (iii) Self-guilt following the disease, but also knowing how to forgive yourself; (iv) Deep loneliness alongside a significant need for support; (v) Finding the way from passivity to activity; and (vi) When meaning in life is missing, and the importance of meaning when it is present. There was a balance between negative emotions and behaviors (despair, confidentiality, guilt, loneliness, passivity, lack of meaning) and positive emotions and behaviors (hope, openness, forgiveness, significant support, activity, meaning).

Significance of the results. The study revealed that in some cases cervical cancer coping during the recovery period moves across sequences. The women's narratives portray past difficulties as the reason for present psychological health, and their experience of a healthy present is intensified by their past difficulties. Implications for practice are discussed.

Introduction

Cancer survivorship can be challenging due to cancer treatments that often have short- and long-term effects on quality of life (Wu and Harden, 2015). In regard to gynecologic cancer, it was noted previously that the treatment regimens might cause side effects like pain, fatigue, urinary complications, vaginal dryness, sexual dysfunction, and premature menopause among younger women (Afiyanti et al., 2020). In addition, psycho-social impact was stressed as well, suggesting clinical levels of depression, anxiety, fear of cancer recurrence, and difficulties with body image (Hall et al., 2017; Campbell et al., 2019). Nevertheless, struggling with these challenges may also lead to positive changes identified as post-traumatic growth (Zhou et al., 2021). Indeed, Posluszny et al. (2011) examined gynecological cancer survivors and found that, regardless of their illness stage, the most growth reported concerned an appreciation for life, followed by items reflecting relating to others, personal strength, and spiritual change. New possibilities were also endorsed, but to a lesser degree — particularly for the early disease group. Thus, the present study aimed to broaden the current understanding of coping with the survivorship phase among cervical cancer survivors through applying a qualitative design.

Cervical cancer is the fourth most common cancer in women worldwide (World Health Organization; WHO, n.d.). Overall, preventive behaviors regarding cervical cancer are essential for women's health (Logan and McIlfatrick, 2011; Khazaee-Pool et al., 2018). However, once the disease has been diagnosed, it begins to have severe consequences on the woman's life — during the post-diagnosis phase (Kebede and Kebede, 2017) as well as the treatment phase (Abayomi et al., 2005; Maree et al., 2015). Cervical cancer usually affects younger women at a mean age of approximately 50 years (WHO, n.d.), suggesting a long-life expectancy period after diagnosis and treatment.

Thus, health-related quality of life in cervical cancer survivors becomes a more significant issue, which needs to be addressed (Ye et al., 2014). Notably, Li et al. (2015) revealed poor quality of life among cervical cancer survivors compared to other cancer patients. Furthermore, in a recent systematic review concerning quality of life of cervical cancer



survivors (Mujahadatuljannah, 2019), the authors identified several factors that significantly contribute to their quality of life, including being treated only with surgery, early stage of cervical cancer, long-term treatment, less comorbidity, higher self-esteem, younger age, higher level of education, having health insurance, higher household income, good social support, and good family support. In line with this notion, it was noted previously that maintaining or enhancing the quality of life of individuals living with chronic diseases has not been given the attention it deserves (Institute of Medicine, 2012). In addition, information on coping strategies for a chronic illness such as cervical cancer is limited globally (Binka et al., 2018), especially concerning the emotional and behavioral motives related to coping during the survivorship phase. Indeed, most studies to date have focused on the diagnosis and treatment phases, ignoring the complex coping process during recovery.

Given the above, the present qualitative study sought to address this gap in the literature and gain a better understanding of the emotional and behavioral motives related to coping with cervical cancer recovery. Such an understanding may promote cervical cancer survivors' quality of life, and enable the implementation of psycho-social interventions that may incorporate a broader view of their coping needs.

Methods

The current study was based on a qualitative methodology. This choice was made based on the assumption that in-depth semi-structured interviews with cervical cancer survivors would facilitate a better understanding of their experiences regarding recovery, and shed light on issues which, until now, have received scant research attention (Patton, 2002). The interview guide was based on previous similar studies (e.g., Abayomi et al., 2005; Carter et al., 2013) and research purposes, and was finalized after revisions were made by a qualitative research expert. Even though the interview was based on an interview guide, it was

flexible and dynamic, and the questions served as a type of foundation (see Appendix 1). At the end of each interview, selected demographic questions were included.

Sample

The research population included 15 cervical cancer survivors. We used a purposive sampling method and care was taken to select participants with differing personal features (e.g., age, years of education). Inclusion criteria included: (i) diagnosis of cervical cancer stages I and II; (ii) currently free of disease; (iii) aged 18+; (iv) Hebrew speaker; and (v) under follow-up of an oncology unit. We determined the number of required respondents by interviewing women who met the inclusion criteria until the data were saturated and no new topics were generated.

Table 1 provides details pertaining to the background of the sample. All names of participants in the table are fictitious. Participants were between 34 and 47 years of age. Most of them were married (n = 13) and had children (n = 12). Years of education ranged from 12 to 37, and most women reported an average economic status (n = 9). Time since diagnosis ranged from 6 months to 7 years. Their illness stage was I and II, treated with surgery and followed by chemoradiation (n = 14) or radiation therapy (n = 1).

Procedure

The study and consent procedure were approved by the Pl's university's Ethics Committee (Approval no. 112003). Participants were recruited through social media outlets (Facebook pages focusing on cervical cancer). Notes on these outlets included an explanation about the study and the researchers' contact details for those who wanted to hear more about the study and/or to participate.

As a result of Israeli government lockdown requirements due to COVID-19, all interviews were conducted in a private video

Table 1. Demographic and medical characteristics of participants (n = 15)

Name	Age	Marital status	Children	Education (in years)	Economic status	Years since diagnosis	Treatment types
Ruth	38	М	0	16	High	1.5	Surgery + chemoradiation
Suzi	37	М	2	37	Average	3.5	Surgery + chemoradiation
Gil	38	М	2	24	Average	3	Surgery + chemoradiation
Shelly	38	М	0	15	Average	5	Surgery + chemoradiation
Leah	34	М	2	15	Average	3	Surgery + chemoradiation
Giti	40	М	0	18	Average	4.5	Surgery + chemoradiation
Yuli	42	М	3	15	High	5	Surgery + radiation
Tomi	41	М	3	14	Average	5	Surgery + chemoradiation
Rivi	46	D	2	14	High	2.5	Surgery + chemoradiation
Ariella	45	М	2	17	Average	7	Surgery + chemoradiation
Tovi	47	М	1	12	Average	1	Surgery + chemoradiation
Batia	44	М	2	12	Low	0.5	Surgery + chemoradiation
Romi	43	М	2	18	High	0.5	Surgery + chemoradiation
Mila	44	М	2	12	Average	2.5	Surgery + chemoradiation
Betty	43	D	3	18	High	2	Surgery + chemoradiation

Note: All names are fictitious; M = Married, D = Divorced.

room using the video-conference platform Zoom. Each participant received a private and personalized invitation via email.

All interviews were conducted by the three authors between November 2020 and February 2021. The interviewers (SS-A, YH-R, and IL) were female. Two of them are social workers (PhD) and one is a psychotherapist (PhD) and all the three of them are experienced in conducting qualitative research. Prior to conducting the interviews, the interviewers underwent a process (Finlay and Gough, 2008) that included reflecting on the identities, social locations, assumptions, and life experiences they brought to the research endeavor, along with thinking about their interactions with the interviewees. Interviewees were provided a comprehensive explanation about the general research aims; then, they gave their verbal permission to participate in the study. The interviews were conducted in Hebrew, recorded, and then translated into English. Each translation was verified by two native speakers, one of whom is a professional translator. Confidentiality was assured by removing identifying information from the transcripts and numbering each interview. All audio recordings and transcripts were saved on a password-protected computer, which could only be accessed by the researchers. The interviews lasted between 60 and 90 min.

Data analysis and trustworthiness

The data collected in the interviews were analyzed thematically (Braun and Clarke, 2006). In the first stage, the researchers read all the interviews and analyzed them line by line. The next step involved grouping statements into units of meaning (themes and sub-themes), including quotes, to describe the women's emotional and behavioral experiences while coping with recovery from cervical cancer. Subsequently, the researchers performed inter-rater reliability by comparing the individual analyses, discussing disparities, and seeking agreement concerning theme content and interpretation of meaning. When disagreement about the coding arose, the researchers re-read the entire transcript and tried to reach a consensus about their differences. To ensure coding reliability, the researchers discussed their personal perspectives and impressions of the issues under study, attempting to disregard their personal values and biases (Brinkman and Kvale, 2015; Creswell and Poth, 2018). By arranging the data based on themes emerging from the women's narratives, and separating their interpretive notes from the descriptive narratives, it was assumed that the main identified themes reflected women's experiences, rather than the researchers' opinions. Utilizing interrater reliability and systematic data analysis with rich descriptions of the women's narratives (Morse, 2000) enhanced the research credibility (Lincoln and Guba, 1985).

Results

The qualitative analysis of the interviews yielded six main themes.

Theme 1: reasons and benefits for keeping the disease a secret or sharing it with others

Twelve of the participants said they kept the disease as a secret. The need to keep this secret stemmed mainly from the wish to maintain privacy, and from feelings of embarrassment. For some, keeping the disease as a secret reflected the belief that illness is a personal matter related to failure, guilt, or even stigma.

In our family, no one knows ... just my mom ... on the one hand, it's a disease associated with guilt — maybe I brought it on myself ... and besides, people talk. There is still a stigma attached to cervical cancer — that this disease is a result of having sex with a lot of men. (Shelly)

In contrast, three women reported openness in different ways: Batia shared the fact that she has cervical cancer from the day of diagnosis; Ruth changed her mind from not sharing to sharing the secret about the disease; and Betty shared her secret about having cervical cancer selectively.

I knew from the beginning [the day of the diagnosis] that there was no way I was going to get through this alone. That I needed the support of anyone who was willing to give it ... so I shared that fact that I have cervical cancer from the first day. I also talked with the teachers at the school to help my children cope with my illness. (Batia)

I wasn't in a hurry to share the fact that I have cancer ... I think it's because the nurse told me that it [cervical cancer] was the result of having a lot of sexual partners ... but it took a lot of energy to keep the secret ... in the end, I couldn't keep it to myself ... sharing the big secret was kind of relief, especially when I went for treatments. (Ruth)

I decided to talk about the disease selectively ... I shared it only with people I trust. It confused me a bit because, at one point, I didn't remember who I'd told and who I hadn't, but I preferred to be in control and choose who I told. (Betty)

Theme 2: "When you get used to despair, there's also room for hope": Despair alongside hope

Fourteen of the participants shared their belief that the symptoms resulting from the treatments would disappear at the end of the treatment period, but were surprised by the side effects they experienced in the post-treatment period (e.g., headaches, weakness, decline in libido, and in femininity). The difficult and complex physical struggle forced them to adapt to a new reality in which the disease is part of their self-definition. Coping with the consequences of the treatments created a sense of despair, and a fear that the characteristics of the disease would never disappear from their lives.

The physicians gave me a feeling that I would do the treatments and that it would be over ... However, I still have symptoms related to the treatments ... exhaustion, general weakness ... I'm desperate ... mostly because this disease never goes away ... I actually feel that this disease has become a part of who I am. (Mila)

The whole issue of sex with my husband discourages me. I am almost incapable of having sex and both of us are desperate when we try (to have sex). (Ariella)

Over time, nine of the survivors adapted to the physical difficulties and some experienced a marked reduction in symptoms. In other words, subjectively, the time factor allowed the women to get used to the physical difficulties, while objectively, the longer time after treatments allowed time for an improvement in symptoms. While experiencing adaptation and/or reduced symptoms, the women reported that they felt some hope — mostly for the future.

Hope that the symptoms would disappear and hope that they would know how to cope with both the challenges of the disease and the return to their routine. Relying on hope helped the women overcome their sense of despair. The women articulated a type of "tango" between despair and hope: When they don't experience symptoms, hope increases; when the symptoms return and the balance is violated, despair increases.

I haven't given up hope ... On good days, when I function well, I'm optimistic ... the sky is bule ... On these days, hope replaces the despair... Days of physical peace give me hope, give me peace of mind and the strength to keep going ... (Leah)

Theme 3: Self-guilt following the disease, but also knowing how to forgive yourself

The disease was experienced by 11 women as a personal failure. They described feelings of guilt over not caring for themselves properly and failing to maintain their health. Furthermore, one participant described how she thought the bleeding she'd experienced before the disease was diagnosed was a result of her difficult pregnancy. She never imagined that the great difficulty she had experienced during pregnancy would intensify and take the form of a life-threatening disease.

I had a difficult pregnancy (crying). I was so exhausted, I didn't go to a gynecologist, even though I had insane bleeding. Finally, I went (to the gynecologist) and during the test, she said: "You have a huge tumor". I understood what had happened — I had denied all the bleeding after the difficult pregnancy. I took all the blame on myself... (Ariella)

Three participants described self-guilt over the fact that because of their physical function they had lost the intimate relationship with their partner. They described the relationship in terms of being roommates, without any intimacy.

Because of me we have no intimacy ... I can't have sex with him ... I feel awful with the stoma and everything that's going on in terms of my physical functioning. We live together, do the household chores and that's it. (Tomi)

We [my husband and I] decided that once a week we would have sex. Unfortunately, when this day comes around, I just can't. He's obviously disappointed and I feel very guilty. (Gil)

Four other women reported that in the current recovery phase, they are more forgiving toward themselves, with the understanding that they have a limited ability to maintain a stable state of health. Self-forgiveness allowed better coping in the recovery phase; helped the women process the long journey they went through over the course of the treatments and provided strength to move forward in life.

Today, I am more forgiving. It took me a while to forgive myself. I now understand that not everything is in my hands. This understanding gives me strength and mostly it allows me to let go of the self-blame. When there is forgiveness, there is a sense of relief, which is very significant when you are coping with an illness. (Suzi)

Theme 4: Deep loneliness alongside a significant need for support

Some of the support the women received did not suit their needs. Twelve women wanted emotional support, but received instrumental support (e.g., house cleaning help) instead. The gap between the desired and existing support deepened their feelings of frustration and loneliness. Loneliness was manifested as the feeling that no one can really understand what it means to have cervical cancer — only someone who has experienced cervical cancer can understand and help alleviate the loneliness.

No one can understand it. I wanted so badly to talk to someone who had already undergone these treatments. I actually talked to someone, but she

didn't want to talk about it. When someone understands your experience, it's very significant, and it eases the feelings of loneliness. (Betty)

On the other hand, fourteen women described the deep importance of formal support (e.g., psychologists, social workers) and informal support (family and friends) during the journey of coping with cervical cancer. The support was a significant resource — not only during treatment periods, but also in the recovery phase when they were trying to get used to a new life routine while coping with the side effects of the treatments.

Support during the recovery period is critical ... during the treatment periods, everyone was around me ... Today, some of my friends have disappeared. However, my family and a few friends of mine are still supportive, and are a significant resource for me — especially now, when I need to make an effort to return to my routine. (Yuli)

My mother didn't leave my side for a moment. We had an argument: I told her to wait for me at home. I didn't want her to wait for me in the hospitals because of COVID-19, but she didn't agree. Every day, she was ready to be with me, she prepared food for me. My boys also waited for me at home and took care of me. I felt completely taken care of. I get excited when I talk about it. (Leah)

Theme 5: Finding the way from passivity to activity

Thirteen women recounted an emotional conflict associated with their sense of passivity. On the one hand, they experienced the emotional difficulty of being in a passive place of inaction; on the other hand, they had to cope with the difficulty of finding a way out of this passive place, after a long treatment period.

I have not yet freed myself from the passive place where me and my body are being treated ... in a sense, I'm still there ... waiting for them [the physicians] to continue to repair my broken body. The transition to a place of action is not simple after such a long treatment period, during which I was passive. (Tovi)

The recovery period reflected the transition from passivity, to an active sense of meaning — of "doing" and not merely "being". Twelve women described how they slowly regained control of their family life, friends, work, and body. They once again began to make decisions regarding what is good for them and what is bad for them.

I'm left with a shortened and scarred vagina, and I'm still trying to be in control. For example, having sex with my husband ... is painful and difficult, but I want to regain at least some of the life I had before the illness, and to be in control in this complicated situation of having sex. (Rivi)

Theme 6: When meaning in life is missing, and the importance of meaning when it is present

Looking back on their journey, 13 women described the lack of meaning they have experienced since the disease was diagnosed. From being powerful women, they became dependent on others and lost some of the meaning in their life — like what it means to be a woman. The women moved from the role of being a caring and helpful woman, to being a needy woman whose life lacked meaning.

It's as if I'm not a woman anymore ... I don't function as a woman and it's a difficult experience ... I was a superwoman once, but no longer. Cervical cancer empties you of meaning, there is really no reason to get up in the morning. It's very difficult for me. (Tomi)

Despite these physical-functional and emotional difficulties, 11 women shared that they are trying to get back to a certain routine and move on with their lives. Getting back to their routine gives them meaning, a reason to get up in the morning, and it helps them cope with their physical constraints.

I know that a lot of women take a year off for themselves after treatments. I intentionally didn't want to because I wanted the routine. I feel I have meaning in my life again, when I go to work or do things at home. It's good for me to get up in the morning, organize the kids. I don't want to be in the patient role. (Batia)

Table 2 presents additional citations per theme.

Discussion

This study sought to gain a better understanding of the emotional and behavioral motives related to coping with cervical cancer recovery. This study adds to the literature on coping strategies, specifically concerning the emotional and behavioral motives related to coping during the survivorship phase of cervical cancer. The study offers an in-depth understanding of cervical cancer survivors' perspectives, which could be of value for professionals

meeting with this group, and for tailoring rehabilitation psychosocial interventions.

According to our findings, alterations in body functions of cervical cancer survivors are only one dimension of their multifaceted needs. Indeed, in this study, participants used a wide range of emotional and behavioral coping methods. Furthermore, there was a balance between the interviews in negative emotions and behaviors (despair, confidentiality, guilt, loneliness, passivity, lack of meaning) and positive emotions and behaviors (hope, openness, forgiveness, significant support, activity, meaning). Previous studies found that psychological domains were impaired among cervical cancer survivors. In particular, 15-year survivors reported more emotional distress, more mental fatigue, and more anxiety than the general population (Le Borgne et al., 2013). Other studies focused on the positive aspects of coping with cervical cancer, such as post-traumatic growth (Zhou et al., 2021). The current study reinforces these previous studies by demonstrating the possibility of experiencing a range of positive and negative emotions and behaviors during the recovery period.

The study findings show that in some cases coping during the recovery period moves across sequences. For example, some women reported despair due to the disease while other reported hope because of their ability to look ahead and have hope for

Table 2. Additional citations per theme

Themes	Examples of citations				
Theme 1: Reasons and benefits for keeping the disease a secret or sharing	Cervical cancer is an intimate, female disease. This isn't lung cancer, for example. It's embarrassing to talk about it, and I also see that it's hard for others to talk about this specific type of cancer. So, I prefer to keep it (the disease) to myself and my close family. (Mila)				
it with others	The first thing I thought about was how many men I'd been with after the divorce. I thought that probably other people also thought the disease was related to the fact that I'd gotten divorced I was also worried about my kids' reactions, so I decided to deal with the disease on my own. (Rivi)				
Theme 2: "When you get used to despair, there's	It's a bit strange, but the real despair came precisely after the treatment journey I'd been through. Now, I [finally] understand the whole medical and mental process I went through and I am in place of despair, seeing life differently. (Ruth)				
also room for hope": Despair alongside hope	Two months after the treatments, I was in total despair. I realized that life would never be the same again. Although it may sound a little strange, I started to get used to the despair. In other words, I got used to the situation and gradually I had room for hope the hope that maybe one day my life would be better. (Suzi)				
	Without hope, I don't have a chance. That's how I feel. I must look forward — for my children, my husband and my parents. I sincerely hope that the hardest part is behind us. We've been through enough. (Tomi)				
Theme 3: Self-guilt following the disease, but also knowing how to	There's a sense of betrayal a betrayal of the body on the one hand, but also a sense of self-guilt — that I didn't take care of myself In general, I may have neglected myself. I didn't worry enough about myself I'm one of those people who always worries about others. (Yuli)				
forgive yourself	I always take everything onto my shoulders and it's "heavy". My psychologist asked me to ease up on myself and aggravate myself less, to be more forgiving — especially of myself, and especially in light of the cancer. I'm trying to do it. (Giti)				
Theme 4: Deep loneliness alongside a significant	My husband does everything that's necessary. He cleans up if I vomit, prepares food, drives the children places. But that's it. When it comes to technical matters, he functions, but for anything related to emotional support, he's simply not there. (Tovi)				
need for support	On a day-to-day basis, the kids are home and I don't have time to think about what I went through and what I'm still going through. At home, I have to be "on" all the time the emotional therapy has great significance because it gives me a moment to express my difficulties related to dealing with the disease and [through this], I receive all the support I need. (Romi)				
Theme 5: Finding the way from passivity to activity	During the treatment period, I had a routine: I received treatment and then came home and just got into bed. I was physically and mentally broken. Unfortunately, to date, I'm still not the way I used to be — before the cancer. I feel different, a change [has occurred] in my self-identity — from an active woman to a passive woman. I'm sad that this is the way it is. (Yuli)				
	I never give up on myself — even if it means being exhausted the end of the day. I want my life back, and I understand that in order for that happen, I have to act. (Batia)				
Theme 6: When meaning in life is missing, and the importance of meaning	In the end, you forget a little about what you went through physically, but the emotional problems remain. That is, the experience of the process has a meaning that affects who you are I can say, today, that the meaning of life has changed for me, and I don't even know how because, at the moment, there is no real meaning [in my life]. (Mila)				
when it is present	I have no interest in continuing to be in a meaningless, low place. I've been there long enough. The disease allowed me to see life differently, more meaningfully and this is a central value I received while dealing with the difficult treatments. (Suzi)				

the future. Previous studies emphasized the importance of exploring coping sequences, which enables better understanding of coping responses (Laux and Weber, 1987; Gottlieb, 2002). In the current study, sometimes there was a cyclical connection between one end of the sequence and the other end. For example, despair when experiencing physical symptoms; hope when the symptoms stabilized; and again, despair when the symptoms re-appeared. This is consistent with other studies which showed that cognitive and emotional change, while coping with a health threat, may be necessary in order to achieve better psychological health (Charmaz, 1991; Pennebaker, 1997). Other sequences were described in a linear manner, with a positive improvement trend. For example, a transition from a state of meaninglessness in life to a sense of meaning and value — from the negative end to the positive end.

Overall, these trends indicate volatility in the emotional and behavioral coping process during the recovery period, after difficult and intensive treatments. Consistent with other cancer survivorship literature (Ueland et al., 2020), the recovery period among cervical cancer survivors raises existential questions and leads women to experience internal conflicts. On the one hand, they must cope with past experiences related to dealing with the difficult treatments they have undergone; on the other hand, they also cope with the desire to look ahead toward the future, and even grow as a result of the difficulties experienced because of the disease. These tensions — between negative and positive, as well as between past and future — create a sense of confusion, and feelings of helplessness as well as meaning, hope, and a new appreciation of the value of life. Indeed, it has been claimed that cancer leads to the emergence of fairly complex feelings about both strength and weakness (Sontag and Broun, 1977).

The six themes described in this study, filter down into two main coping strategies: emotional coping and behavioral coping. These coping strategies are in line with Lazarus and Folkman's (1984) classification of coping: problem-focused coping and emotion-focused coping, as differentiated by their function. Problem-focused coping includes steps aimed at managing future dangers or threats, reflected in the efforts the person invests to alter his/her interaction with the environment. In the current study, behavioral expressions included confidentiality, openness, receiving support, and activity. Emotion-focused coping is aimed at reducing, preventing, or tolerating the emotional and physiological reactions that are characterized as stressful (Lazarus and Folkman, 1984). Emotional expressions included despair, guilt, loneliness, hope, forgiveness, lack of meaning, and meaning. The benefit of emotional expressions is supported by clinical psychology theories that encourage the expression of both positive and negative emotionality, in the belief that they can alleviate the patient's negative experience (Murray et al., 1989). Emotional expression is related to enhanced well-being (Ryff and Singer, 1998), and it was found that survivors with high levels of hope, self-forgiveness, and meaning in life have better mental health (Toussaint et al., 2017). We assume that cervical cancer survivors derive their present feelings (e.g., despair, loneliness), in part, from their former experience of the illness. Namely, their narratives portray past difficulties as the reason for present psychological health, and their experience of a healthy present is intensified by their past difficulties (Benish-Weisman et al., 2014).

The issues of femininity and sexuality have emerged as significant elements influencing women's coping. The women in this study shared their difficulties engaging in sexual intercourse; however, they continue to try and do so — in order to regain control

over themselves and their life. It should be noted that all of the women in this study underwent chemoradiation, radiation therapy, and surgery. These medical interventions can destroy the vaginal mucosa, often resulting in fibrosis and stenosis (Carter et al., 2013). As found in previous studies (Park et al., 2007; Vermeer et al., 2015), the women in the current study reported on sexual emotional distress involving guilt or sadness, which is a common consequence of sexual dysfunction.

Beyond the objective difficulty of having an intimate relationship, coping in the case of cervical cancer is also related to the fear of stigma about having multiple sexual partners. The fear of stigma has led women to keep the disease a secret and to harbor feelings of guilt. This finding is in line with a previous study, which found that women with cervical cancer felt guilt, embarrassment, and shame as a result of their disease. In addition, it generated feelings of anxiety related to being misjudged by society, which ultimately led to the loss of their social support (Dyer, 2010).

This study has several limitations. First, due to COVID-19, the interviews were conducted via Zoom. This online platform biased the sample toward participants who had access to digital resources. Second, this qualitative research used only a small sample of Israeli participants; therefore, its results cannot be generalized to wider population groups. Third, this was a short-term study. Long-term experience of the research subjects would be a valuable avenue to explore in the future. Fourth, the interview guide was not validated prior to the study. Fifth, three interviewers conducted the interviews with 15 women. Interviewees may respond differently to the interviewer and the way the questions are asked (Matteson and Lincoln, 2009). However, using multiple interviewers can reduce biases that may develop if only one person conducts all of the data collection (Boutain and Hitti, 2006). Finally, time elapsed since diagnosis was not one of the inclusion criteria. We recommend that in future research time elapsed since diagnosis will be limited.

Regardless of its limitations, this study has practical implications. The challenges that cervical cancer survivors cope with are also opportunities for clinicians to practice sensitivity, gain insight, and provide quality care through a process of inquiry and consideration of these women's unique characteristics. It is recommended that therapeutic interventions address sequences of emotional and behavioral states, discern the direction of the sequence (e.g., circular sequence), and the implications of coping with the disease in relation to daily functioning. Our findings show the emotional and behavioral complexities the women continue to face during the survivorship phase. Therapeutic interventions should emphasize the unique characteristics of each type of coping. For example, in the case of confidentiality (keeping the disease a secret or sharing it with others), it is advisable to honor the woman's desire to maintain secrecy, but also to encourage openness as part of the psychotherapeutic process of liberation from the need to invest energy in pretending, and as part of their returning to being themselves. In the sequence of deep loneliness alongside a significant need for support, psychotherapy is a good opportunity to establish contact and communication between the woman and her immediate environment. Regarding the sequence of finding the way from passivity to activity, it is recommended in therapeutic treatment to provide the woman with a sense of control, activity, and responsibility. Regarding the sequence of meaninglessness and meaning in life, the treatment should include an appropriate stage for a constructive dialogue that relates to the emotional and environmental meaning given

to the new situation. The therapeutic process will make it possible to build a new narrative alongside the medical-functional reality that is part of the woman's new life. It is also recommended that therapeutic interventions will focus on promoting couple communication as this can be effective in improving intimacy and psycho-sexual well-being. In addition, the option of sexual health clinics may be also relevant. In these clinics, women and their spouses can receive help with technical solutions to sexual problems, and/or with changing perceptions of what intimate relations include; they can get an opportunity to think differently about intimate relations. Furthermore, it is also advisable that future studies will examine the experience of both women and spouses in the journey of coping with cervical cancer as this disease might affect both spouses emotionally and behaviorally. Finally, the findings demonstrate the process that women undergo during the survivorship phase of coping with cervical cancer. During this phase, they are post-treatments, but still have interactions with medical staff, mostly in the form of periodic check-ups. Since most psycho-social interventions in the medical system are available during the treatment phase or in the form of palliative care, it is also important to have psycho-social interventions in the public health system during the survivorship phase as well.

Data Availability Statement. Data available from the authors upon reasonable request.

Acknowledgments. The authors thank all the participants who took part in this study.

Author contributions. SS-A, YH-R, and IL contributed to the study conception and design and performed the recruitment and the data analysis. The first draft of the manuscript was written by SAS and YHR, and all the authors reviewed and edited the manuscript. All the authors read and approved the final manuscript.

Funding. This research received no specific grant from any funding agency, commercial, or not-for-profit sectors.

Conflict of interest. There are no conflicts of interest.

References

- Abayomi J, Kirwan J, Hackett A, et al. (2005) A study to investigate women's experiences of radiation enteritis following radiotherapy for cervical cancer. Journal of Human Nutrition and Dietetics 18(5), 353–363.
- Afiyanti Y, Setyowati, Milanti A, et al. (2020) "Finally, I get to a climax": The experiences of sexual relationships after a psychosexual intervention for Indonesian cervical cancer survivors and the husbands. *Journal of Psychosocial Oncology* 38(3), 293–309. doi:10.1080/07347332.2020.1720052
- Benish-Weisman M, Wu LM, Weinberger-Litman SL, et al. (2014) Healing stories: Narrative characteristics in cancer survivorship narratives and psychological health among hematopoietic stem cell transplant survivors. Palliative & Supportive Care 12(4), 261–267. doi:10.1017/ S1478951513000205
- Binka C, Nyarko SH, Awusabo-Asare K, et al. (2018) "I always tried to forget about the condition and pretend I was healed": Coping with cervical cancer in rural Ghana. BMC Palliative Care 17(1), 1–8. doi:10.1186/s12904-018-0277-5
- **Boutain DM and Hitti J** (2006) Orienting multiple interviewers: The use of an interview orientation and standardized interview. *Qualitative Health Research* **16**(9), 1302–1309.
- Braun V and Clarke V (2006) Using thematic analysis in psychology. Qualitative Research in Psychology 3(2), 77–101.
- Brinkman S and Kvale S (2015) Interviews: Learning the Craft of Qualitative Research Interviewing, 3rd ed. Thousand Oaks, CA: Sage.

- Campbell G, Thomas TH, Hand L, et al. (2019) Caring for survivors of gynecologic cancer: Assessment and management of long-term and late effects. Seminars in Oncology Nursing 35(2), 192–201. doi:10.1016/j.soncn.2019.02.006
- Carter J, Stabile C, Gunn A, et al. (2013) The physical consequences of gynecologic cancer surgery and their impact on sexual, emotional, and quality of life issues. The Journal of Sexual Medicine 10, 21–34. doi:10.1111/jsm.12002
- Charmaz K (1991) Good Days, Bad Days: The Self in Chronic Illness and Time. New Brunswick, NJ: Rutgers University Press.
- Creswell JW and Poth CN (2018) Qualitative Inquiry Research Methods: Choosing among Five Approaches, 4th ed. Thousand Oaks, CA: Sage.
- Dyer K (2010) 2010 PK new award from cancer to sexually transmitted infection: Explorations of social stigma among cervical cancer survivors. *Human Organization* 69(4), 321–330.
- Finlay L and Gough B (Eds.) (2008) Reflexivity: A Practical Guide for Researchers in Health and Social Sciences. Oxford: John Wiley & Sons.
- Gottlieb BH (2002) Coping research: The road ahead. Canadian Journal of Nursing Research 34(1), 13–28.
- **Hall DL, Lennes IT, Pirl WF,** *et al.* (2017) Fear of recurrence or progression as a link between somatic symptoms and perceived stress among cancer survivors. *Supportive Care in Cancer* **25**(5), 1401–1407. doi:10.1007/s00520-016-3533-3
- **Institute of Medicine** (2012) *Living Well with Chronic Illness: A Call for Public Health Action.* Washington, DC: The National Academies Press.
- Kebede W and Kebede K (2017) Psychosocial experiences and needs of women diagnosed with cervical cancer in Ethiopia. *International Social* Work 60(6), 1632–1648.
- Khazaee-Pool M, Yargholi F, Jafari F, et al. (2018) Exploring Iranian women's perceptions and experiences regarding cervical cancer-preventive behaviors. BMC Women's Health 18(1), 1–14.
- Laux L and Weber H (1987) Person-centered coping research. European Journal of Personality 1(3), 193–214.
- **Lazarus RS and Folkman S** (1984) *Stress, Appraisal and Coping.* New York, NY: Springer.
- Le Borgne G, Mercier M, Woronoff AS, et al. (2013) Quality of life in long-term cervical cancer survivors: A population-based study. *Gynecologic Oncology* 129(1), 222–228. doi:10.1016/j.ygyno.2012.12.033
- Li CC, Chen ML, Chang TC, et al. (2015) Social support buffers the effect of self-esteem on quality of life of early-stage cervical cancer survivors in Taiwan. European Journal of Oncology Nursing 19(5), 486–494. doi:10.1016/j.ejon.2015.02.008.
- Lincoln YS and Guba EG (1985) Establishing trustworthiness. Naturalistic Inquiry 289(331), 289–327.
- **Logan L and McIlfatrick S** (2011) Exploring women's knowledge, experiences and perceptions of cervical cancer screening in an area of social deprivation. *European Journal of Cancer Care* **20**(6), 720–727.
- Maree J, Langley G and Nqubezelo L (2015) "Not a nice experience, not at all": Underprivileged women's experiences of being confronted with cervical cancer. *Palliative and Supportive Care* **13**(2), 239–247. doi:10.1017/S1478951513001247.
- Matteson SM and Lincoln YS (2009) Using multiple interviewers in qualitative research studies: The influence of ethic of care behaviors in research interview settings. *Qualitative Inquiry* 15(4), 659–674.
- Morse JM (2000) Determining sample size. Quality Health Research 10(1), 3-5.
- Mujahadatuljannah I (2019) Factors associated with quality of life among cervical cancer survivors: Systematic literature review. Proceeding International Conference 1(1), 246–251.
- Murray EJ, Lamnin AD and Carver CS (1989) Emotional expression in written essays and psychotherapy. *Journal of Social and Clinical Psychology* 8(4), 414–429. doi:10.1521/jscp.1989.8.4.414
- Park SY, Bae DS, Nam JH, et al. (2007) Quality of life and sexual problems in disease-free survivors of cervical cancer compared with the general population. Cancer 110(12), 2716–2725. doi:10.1002/cncr.23094
- Patton MQ (2002) Qualitative Research and Evaluation Methods, 3rd ed. Thousand Oaks, CA: Sage.
- Pennebaker JW (1997) Writing about emotional experiences as a therapeutic process. *Psychological Science* **8**(3), 162–166.

- Posluszny DM, Baum A, Edwards RP, et al. (2011) Posttraumatic growth in women one year after diagnosis for gynecologic cancer or benign conditions. Journal of Psychosocial Oncology 29(5), 561–572. doi:10.1080/ 07347332.2011.599360
- Ryff CD and Singer B (1998) The contours of positive human health. Psychological Inquiry 9(1), 1–28. doi:10.1207/s15327965pli0901_1
- Sontag S and Broun HH (1977) *Illness as Metaphor*. New York: Farrar, Straus, p. 343.
- Toussaint L, Barry M, Angus D, et al. (2017) Self-forgiveness is associated with reduced psychological distress in cancer patients and unmatched caregivers: Hope and self-blame as mediating mechanisms. *Journal of Psychosocial Oncology* 35(5), 544–560. doi:10.1080/07347332.2017.1309615
- Ueland V, Rørtveit K, Dysvik E, et al. (2020) Life after cancer treatment Existential experiences of longing. International Journal of Qualitative Studies on Health and Well-being 15(1). doi:10.1080/17482631.2020. 1838041
- Vermeer WM, Bakker RM, Kenter GG, et al. (2015) Sexual issues among cervical cancer survivors: How can we help women seek help? Psycho-Oncology 24(4), 458–464. doi:10.1002/pon.3663
- World Health Organization (n.d.) Cervical cancer. Retrieved from: https://www.who.int/health-topics/cervical-cancer#tab=tab_1
- Wu HS and Harden JK (2015) Symptom burden and quality of life in survivorship: A review of the literature. *Cancer Nursing* **38**(1), E29–E54. doi:10.1097/NCC.0000000000000135
- Ye S, Yang J, Cao D, et al. (2014) A systematic review of quality of life and sexual function of patients with cervical cancer after treatment. International Journal of Gynecologic Cancer 24(7), 1146–1157. doi:10.1097/IGC.00000000000000207
- Zhou LH, Hong JF, Qin RM, et al. (2021) Post-traumatic growth and its influencing factors among Chinese women diagnosed with gynecological cancer: A cross-sectional study. European Journal of Oncology Nursing 51, 101903. doi:10.1016/j.ejon.2021.101903.

Appendix 1. Interview guide for cervical cancer survivors

- Please go back to the time when your cancer was first discovered. Tell me how it was discovered.
- Describe your feelings and thoughts immediately after receiving the diagnosis.
- Describe your feelings and thoughts when you discovered you needed surgery/treatments.
- Treatments require adjustments and changes in life. Tell me about yourself during the treatments. What did you do to cope with the change and adapt to it?
- When you look back at yourself during the treatments, what do you see, what do you feel?
- How did people close to you react to you during the treatment period/s?
- How did you feel about the changes taking place in your body? in your daily routine?
- If you were asked to describe your life before and after discovering and being treated for your illness, what has changed? What has remained the same?
- What have you discovered about yourself as a result of your cancer diagnosis?
- What were/are your difficulties/worries caused by your illness?
 What have you done about them? Have you asked for help?
 From whom?
- What helped you cope? How did you feel about this help?
- What advice would you give to other women diagnosed with cervical cancer?
- What advice would you give to the partners of women diagnosed with cervical cancer?