

ORIGINAL ARTICLE

Perspectives of cancer patients during the COVID-19 outbreak in Israel: The long-term implications on support and well-being in an exploratory qualitative study

Osnat Bashkin¹  | Roni Nahmias¹ | Sarah Attar¹ | Reut Moshe¹ | Noam Asna²

¹Department of Public Health, Ashkelon Academic College, Ashkelon, Israel

²Oncology Department, Shaare Zedek Medical Center, Jerusalem, Israel

Correspondence

Osnat Bashkin, Department of Public Health, Ashkelon Academic College, Ben Zvi 12, Ashkelon, Israel.
Email: obashkin@gmail.com

Funding information

The authors have no funding to disclose.

Abstract

Objectives: The COVID-19 pandemic's ongoing effects and long-term implications for the mental and social state of cancer patients are not yet fully known. The current study examined cancer patients' feelings about the pandemic's long-term impact on daily life 1 year after its outbreak in Israel and after the patient's vaccination against the virus.

Methods: Ten in-depth semi-structured interviews were conducted with cancer patients between February and April 2021.

Results and Conclusions: Findings indicated four main themes: (1) managing medical care and support from the medical staff, (2) the effect of the pandemic on social interactions; (3) the impact of the pandemic on family and social support and (4) the patients' psychological well-being. Despite the patients being vaccinated, the full impact of the pandemic on cancer patients' mental and social states is still fully apparent. The findings reflect the need to assess and monitor the patients' mental state and social and medical needs during this complex time and the importance of developing external support networks.

KEYWORDS

cancer, COVID-19, mental health, perspective, support, vaccination

1 | INTRODUCTION

The rapid, far-ranging spread of the COVID-19 virus since its outbreak in December of 2019 has presented an unprecedented challenge to healthcare systems worldwide, with the virus having serious clinical and psychological implications for public health at the global level.

Streams of published studies on the impact of the pandemic on the public, healthcare staff and specific populations (e.g., students) reveal the immediate adverse effects of the spread of the pandemic and its implications for mental health (Huang & Zhao, 2020; Rajkumar, 2020).

Findings regarding the risks involved when cancer patients become infected with the virus are not encouraging. Several studies conducted recently show that cancer patients have a higher risk of contracting the disease than does the general population (Liang

et al., 2020; Zhang et al., 2020). It has also been found that cancer patients are more likely to suffer from a more serious course of the disease than others (Whisenant et al., 2020). In addition, cancer treatments may increase the risk of severe infection (de Joode et al., 2020; Rolston, 2017).

The clinical and psychological implications of cancer treatment and its morbidity are deeply intertwined. Cancer patients are more sensitive to various infections and suffer higher rates of accompanying mental illnesses, such as depression and anxiety (Mehnert et al., 2014; Rolston, 2017). In addition, cancer patients' psychological pressure has been linked to decreased immune function over a period of several years (Anderson et al., 1998).

The COVID-19 pandemic has implications for the mental state of cancer patients due to the uncertainty involved, the physical distancing and isolation guidelines and restrictions, and its impact on daily

life. Lung cancer patients expressed concerns about what cancer had already taken from them and how this was compounded by restrictions imposed by the COVID-19 pandemic. Patients reported feelings of fear and frustration, increased anxiety, depressive symptoms, and feeling lonely (Hyland & Jim, 2020). In a recent qualitative study among incurable cancer patients and their caregivers, it was noticed that lack of face-to-face contact with close ones had a significant impact on patients' and caregivers' emotional well-being (Radcliffe et al., 2021). A study of 658 women from Hubei Province with or recovering from breast cancer during the COVID-19 pandemic found high rates of reported anxiety, symptoms of depression, and sleeping disorders (Juanjuan et al., 2020). A survey conducted in the Netherlands among 5302 cancer patients found that most patients were worried about delays in treatment and the monitoring of their disease due to the virus and expressed a need for psycho-oncological support (de Joode et al., 2020).

Another recent study examined the psychological impact of the COVID-19 pandemic on 326 cancer patients in Wuhan. The survey revealed that 86.5% of the patients reported fears of their disease progressing, 67.5% reported anxiety, and 74.5% reported depression. It was further found that patients who had experienced a delay in cancer treatment due to the pandemic expressed higher rates of worry and concern (Chen et al., 2020). A paper published recently by oncologists presents the psychological challenges cancer patients have faced during the pandemic, including loneliness, fear, conflicts regarding treatment, feeling helpless, frustration, anger, sadness and depression (Garutti et al., 2020). Loneliness has been associated with a decrease in quality of life and depressive symptoms in lung cancer patients (Hyland et al., 2019).

Despite the growing number of studies examining clinical and psychological aspects of the coronavirus, we still lack an in-depth understanding of the pandemic's effects and implications for the mental and social state of vulnerable population groups, such as cancer patients. Indeed, the COVID-19 pandemic resulted in uncertainty and lost opportunities that have broader implications for cancer patients and require further investigation (Radcliffe et al., 2021).

Israel imposed four lockdowns as part of its strategy to fight the coronavirus, along with guidelines for social isolation and distancing. In December 2020, 1 year after the pandemic outbreak, Israel began a methodical operation to vaccinate the population. Subsequently, in February 2021, some of the restrictions were lifted, including the isolation and distancing guidelines. By April, most of the restrictions in the country had been removed, and the mandate to wear masks in public was lifted. To date, approximately 70% of the population of the country is completely vaccinated against the virus.

Using in-depth interviews, the current study aims to examine the feelings of cancer patients about the effects of the COVID-19 pandemic and its long-term implications for daily life about 1 year after its outbreak in Israel and after the patient's vaccination against the virus. The findings pave the way for developing customised and patient-focused intervention plans for supporting and managing cancer patients' treatment during this ongoing challenging public health crisis.

2 | METHODS

In the current study, we used a rapid qualitative method (RQM). According to Beebe (1995), RQM is a team-based intensive research method that emphasises internal perspectives, uses multiple sources and usually uses iterative cycles of data collection and analyses to rapidly create a preliminary picture of a situation. RQM usually lasts 4 to 14 weeks (Handwerker, 2001; Scrimshaw & Hurtado, 1987) although some argue it can last between a few days to 6 months (Vindrola-Padros & Vindrola-Padros, 2018). RQMs for data collection and analysis including fast interview transcription or qualitative data coding were developed lately to reduce the time required for specific research processes (Vindrola-Padros et al., 2020). Rapid qualitative research, applied over a short timeframe, can be carried out in complicated circumstances of health emergencies and provide timely and actionable findings (Abramowitz et al., 2015; Faye et al., 2015). Nevertheless, using RQM demands a rapid set-up of expert teams and funding sources, parallel collection and analyses of the data and paying attention to avoid potential burdensome for participants (Vindrola-Padros et al., 2020). A recent review mentioned that RQM can be carried out effectively to identify causes of epidemiologic outbreaks and assess infrastructure and strategies to control the spread of diseases, health needs and health systems performance (Johnson & Vindrola-Padros, 2017).

2.1 | Recruitment

We developed a convenience sampling combined with snowball sampling, common to qualitative research. The interviewees were selected to obtain optimal variety and serve as potential sources of rich information to serve the study objectives. Interviewees were recruited through ads posted at a general cancer institute at a university medical hospital. Patients who were interested to participate contacted a research assistant and were given a detailed explanation of the research purpose. The date and time convenient to the patient to make the interview were scheduled. In addition, participants were asked if they are familiar with other cancer patients who may wish to share their perceptions and feelings. No relationship between the researchers and the interviewees was established prior to beginning the study. The informative richness and data saturation was achieved with 10 in-depth semi-structured interviews analysed in parallel to data collection. Recruitment of participants was ended by the end of the second wave of the pandemic in Israel and fully return to routine.

2.2 | Procedure

The study was approved by the Institutional Ethics Committee (#0151-20-BRZ). Data collection was started in February 2021, during the second wave of the pandemic in Israel and receiving the new vaccines and ended by April 2021 with the end of the pandemic restrictions and returning to routine. The interviews were conducted over

the phone by a research assistant (an undergraduate public health student), who was trained in qualitative research methods during her academic studies and was guided by the researchers. It was emphasised to all interviewees that their details would remain confidential, their names would not appear in any published findings and that they did not have to answer all the questions and could stop the interview at any point. The questions were based on recent research findings to develop a semi-structured interview guide and were pretested through an interview conducted with one cancer patient. The questions were then evaluated and revised by the researchers and the interview guide was formulated.

Every patient signed a consent form agreeing to the recording and transcription of the interviews, which lasted between 30 and 40 min. The questions addressed the interviewees' daily experiences, worries and concerns, support from their surroundings and feelings regarding coping with cancer during the pandemic and after returning to routine. The wording and order of the questions changed according to the interview dynamics to maintain continuity and flow and encourage openness among the interviewees. The interview guide is provided in Appendix A.

2.3 | Data analysis

The transcript files of the interviews were entered into the ATLAS.ti v.8 software to organise and analyse the qualitative material. The content of the interviews was analysed in several stages according to Shkedi (2003): Initially, all interviews were read by all the researchers and the research assistant at least once. The focus was on an in-depth and comprehensive knowledge of the data through a reading of all the interviews. Next, we identified ideas, categories, and themes related to the research questions. Subsequently, we redefined the main themes based on the content of the interviews. The coding guideline was created in the third stage including encoding rules and examples. Every passage that seemed relevant to the research question was marked as a findspot and allocated to one of the content themes. In the final stage, the codes and themes were rediscussed by the researchers while re-reading the transcripts until the final themes were formulated.

3 | RESULTS

A total of 10 patients were interviewed (seven women and three men). The interviewees' demographic data are described in Table 1. Of the interviewees six were married and seven were unemployed. The average number of months since their diagnosis was 32.6.

An analysis of the interviews revealed four distinct themes that emerged: (1) managing medical care and support from the medical staff, (2) the effect of the pandemic on social interactions, (3) the effect of the pandemic on family and social support and (4) The effects of the pandemic on the patients' psychological well-being. Figure 1 illustrates the four circles of the impact of the pandemic on cancer patients' life: three external support circles and the internal psychological well-being affected by them.

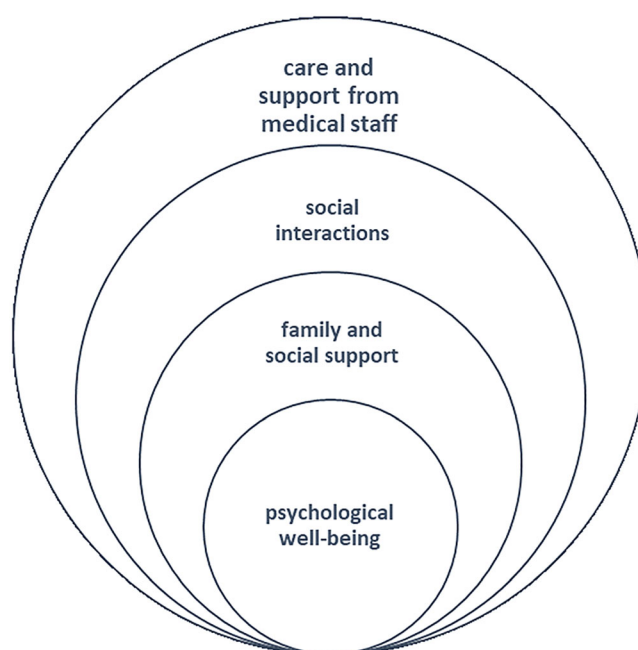


FIGURE 1 Circles of the impact of the pandemic on cancer patients' life

TABLE 1 Demographic data of interviewees

| Patient ID | Gender | Marital status | Employment status | Time from diagnosis |
|------------|--------|------------------------------|-------------------|---------------------|
| 1 | Female | Married, lives with a spouse | Working | 5 years |
| 2 | Female | Lives alone | Working from home | 2 years |
| 3 | Female | Married, lives with a spouse | Unemployed | 1 year |
| 4 | Male | Married, lives with a spouse | Unemployed | 4 years |
| 5 | Female | Divorced, with a spouse | Working | 2 years |
| 6 | Male | Single, lives alone | Unemployed | 2 years |
| 7 | Male | Married, lives with a spouse | Working | 6 years |
| 8 | Female | Single, lives alone | Unemployed | 5 months |
| 9 | Female | Married, lives with a spouse | Unemployed | 9 months |
| 10 | Female | Married, lives with a spouse | Unemployed | 5 years |

3.1 | Managing medical care and support from the medical staff

COVID-19 caused some changes that took place in routine medical care, such as delayed appointments, treatment procedures, hygiene restrictions and more. While changes to medical care led to some concern about the longer term impact of the pandemic on health, most patients reported feeling supported by the medical staff. Interviews further revealed the nature of the unique support the interviewees received from the oncology medical staff during the pandemic and the importance of continuity in care for their health. Some of the patients were offered support by the departments' psychosocial team and have received it with appreciation:

I was offered help at the very start of the pandemic. There's a social worker and a psychologist. They really helped me, also with the disability issues, the psychological treatment, even though I wasn't open to it at first. (P3, lives with her husband, 1 year since diagnosis)

At the same time, some patients reported that the doctors were focused solely on their medical care and did not offer broader support in dealing with their illness in the time of lockdowns, nor had the patients asked for such support from the medical staff. Some of them felt uncomfortable and avoided asking for help even though they needed it. The need for a broader mental, social, and financial support network along with clinical support was profound.

I did not seek or ask for help but I wasn't expecting any. Some social workers are always available to deal with any problem, but I personally have never turned to them for help. I was never offered support. Anyone who needs it goes directly to the social workers. (P1, lives with her husband, 5 years since diagnosis)

I did not voice my need for support in front of the staff too much, and I saw that they were not offering me support either, so I did not talk about it. (P10, lives with her husband, 5 years since diagnosis)

Most of the interviewees reported that there had been no adverse change in the management of the medical care they received during the pandemic; they even commended the medical staff for their efforts to maintain the treatment routine with no hindrances or delays:

They took really good care of me. The treatment was consistent the whole time, with no hiccups along the way. On the contrary, appointments for tests during my treatment were timely and quick and I did not have to wait a long time. The treatment was excellent and outstanding. (P7, lives with his wife, 6 years since diagnosis)

There was no change for the worse in terms of the treatment. Not in terms of the oncological treatment and not in terms of general healthcare. The appointments were even quicker because people were not coming into the clinics. (P9, lives with her husband, 9 months since diagnosis)

3.2 | The effect of the pandemic on social interactions

Significant changes to social life were imposed on the patients following the outbreak. Social interactions were impossible as they could risk the patients by exposing them to infections. Although many cancer patients were already affected by their disease which caused them to minimise close contact with people during their unstable health status, the guidelines for social distancing had severely worsened cancer patients' social life. All the interviewees reported having taken strict precautions to avoid contracting the virus, despite having been vaccinated. It seems that social distancing had affected the lives of cancer patients in a long-term manner, causing them the difficulty to return to the normal routine even once the crisis ended and restrictions were eased. The vaccines that were a game changer in COVID-19 management did not reduce the patients' fear of social closeness which was developed throughout the first year of the pandemic and profoundly affected various relationships. Most of the interviewees reported that they almost never left the house during this year due to a fear of contracting the virus, and they noted that this fear had also deeply affected their interactions with others close to them. As a result, feeling of loneliness, continuous fearing the possibility of infection, symptoms of social anxiety and perceptions of life as such which will never be normal again were expressed by all interviewees.

I do not allow guests into my home, and they know not to bring guests to my home, and when they do come over it's in my garden without a mask. Only a few come in; friends do not come and go anymore, and my distant family does not come over. It's only over the phone because of COVID. (P1, lives with her husband, 5 years since diagnosis)

I only go out to get groceries and I come back home immediately. So even though I got sick, I almost never leave the house and I do not spend time with people. No one comes over. I do not see people and it's not easy. (P2, single, lives alone, 2 years since diagnosis)

I stopped meeting up with people and kissing people and kids and my grandkids. I was very afraid of the virus. During the first lockdown, my wife and I did not go anywhere. It was very difficult. Now, I still take great care and do everything I can to keep myself safe. My constant fear is of catching the virus and dying.

The vaccine currently is not 100% effective, so we keep ourselves safe. I already received both doses, but I still take every precaution—no kissing or hugging, I still wear a mask and I'm scared, because I know it's still possible to get infected. (P7, lives with his wife, 6 years since diagnosis)

I avoided interactions in general. When I used to come to work, I asked people to stand at the entrance and wear a mask. Some would come over to hug me and I would say to them 'I'm really sorry but I'd rather not hug'. (P6, single, lives alone, 2 years since diagnosis)

3.3 | The effect of the pandemic on family and social support

One of the important issues negatively affected by the pandemic was the nature of family and social support the patients received following the coronavirus outbreak as well as the changes that took place once the second wave of the outbreak ended. Most of the patients received support from their close family members, spouses and children throughout the pandemic period.

Some patients reported an increase in support and described the importance of social ties growing stronger during the pandemic and its positive influence on feeling empowered and wanting to provide help for others who need help.

I think the crisis increased the support because suddenly I needed to be protected from two things, cancer, and the pandemic. It enforced what was already happening. It did not necessarily require more visits, even sending a message, simple things that express support for me in tough times. That's what we could do, and we made the most of it. (P3, lives with her husband, 1 year since diagnosis)

I felt family and social relationships were stronger. My true friends at the time made more of an effort. I also made more of an effort if someone needed help and I felt that I could help in any way. (P4, lives with his wife, 4 years since diagnosis)

However, some patients reported a significant decrease in the support they received from their extended surroundings about a year after the outbreak, coinciding with a respective rise in their feelings of loneliness. The psychological impact of the pandemic and the lockdowns on the general public's well-being is well described; however, the impact is even wider and deeply affects the surrounding circles, particularly among at-risk populations such as cancer patients that need continuous support during their battle with the disease. The decline in support from the close environment has long-term

implications on mental health. This impact seems more pronounced among cancer patients who live alone.

The truth is that everyone had had enough. For example, my brothers used to call me every day, and they do not call me so much anymore. Everyone's tired of it and they do not take as much of an interest in me as they did in the beginning. I lost touch with my girlfriends, I do not see them, and I do not feel like talking that much, so we lost touch. This loneliness and aloneness, that's mainly been the hardest thing during this whole period. (P2, single, lives alone, 2 years since diagnosis)

I do not go to visit my family anymore. Even when they come to visit me, it's not the same as it used to be. It's difficult now because people do not do enough to make sure they do not catch the virus and infect others, and I'm scared of catching it. (P6, single, lives alone, 2 years since diagnosis)

3.4 | The effect on psychological well-being

The effect of the pandemic and its ongoing implications for the patients' psychological state, as well as other personal aspects of their daily lives, are significant. All circles of support have a crucial role in coping with cancer, especially in times of uncertainty and life threat situations. All the patients reported developing symptoms of anxiety, depression, sleeping disorders and mental stress resulting from uncertainty about their health and finances. The unstable situation created challenges also for employed patients who were restricted to work from home or even lost their jobs during lockdowns.

I developed anxiety because of COVID; I almost went to see a psychiatrist. I would cry a lot. I just feel alone and I'm not the loner type. I was alone for a long time and I'm very sad and I do not go anywhere as everyone else does. I'm on the verge of depression. I really hope it'll be over already ... I also have this financial stress. It's different working from home than working from the office. So now there's this situation where I do not have the energy to work from home. The financial issue is stressing me out emotionally. (P2, single, lives alone, 2 years since diagnosis)

I had anxiety and insomnia. I still have anxiety about everything. If my son would go out, I would ask him to take off his clothes and get in the shower immediately after coming back. It affected me particularly, and the whole family in general. I had almost no help with taking care of the children and I also wasn't able to help

them. All of this together is just too much. (P10, lives with her husband, 5 years since diagnosis)

I was afraid to leave the house because I did not want to catch the virus from people. Negative thoughts come up once in a while, and I feel sorry for myself. Sometimes I cry for no reason. It happens to me during treatment as well. (P8, single, lives alone, 5 months since diagnosis)

It seems that the uncertainty involved with the COVID-19 crisis and the fact that there have been already two waves of the outbreak in Israel caused deep anxiety and worries regarding the unknown future of the situation and feelings of losing control over their lives with no end date of the crisis. In addition, the patients expressed a lack of trust in the public's adherence to the guidelines, leading to constant fears of contracting the virus and increased mental burden. The psychological impact of not being able to be in close contact with family and friends during this year was profound.

4 | DISCUSSION

The current study reveals the impact of the COVID-19 pandemic on the support and psychological well-being of cancer patients 1 year after its outbreak. Most of the cancer patients participating in this study had received two vaccine doses by the time they were interviewed. Despite the patients being vaccinated, and Israel has emerged from the crisis, the full impact of the pandemic on cancer patients' mental and social states is still fully apparent.

One of the central themes emerging from the current study is the pandemic's implications for the patients' mental health, primarily feelings of anxiety, stress and symptoms of depression, which the patients reported experiencing even once the crisis was over in Israel. The finding coincides with recent studies examining psychological stress in cancer patients which found a high prevalence of fear of disease progression, anxiety, PTSD and depression (Chen et al., 2020; Wang et al., 2020). In addition, interviewees in the current study expressed fears of being infected and perceived others as not adhering to health guidelines, which resonate with a recent study that found that participants lacked confidence in others practicing good hygiene, and as a result, their sense of worry and perceived threat were amplified (Chia et al., 2021). Similarly, Savard et al. (2021) examined how breast cancer patients dealt with the implications of the COVID-19 pandemic and also found that the fear of going back to everyday life was a major stressor. Just the thought of returning to work in the context of a pandemic made some participants very anxious and having to adapt to new health measures at work or to telecommuting were perceived as major stressors.

Another theme involved the pandemic's impact on the patients' social interactions. Most of the interviewees reported having major concerns about leaving the house, despite the easing of the Ministry of Health's guidelines and much of the general population having been

vaccinated, noting the ongoing impact on their interactions with their close environment and family members. The patients interviewed reported feelings of loneliness due to fears about returning to routine and becoming infected by those around them. In addition, the in-depth interviews revealed that some of the patients reported a decrease in support from their broader environment about a year after the outbreak of the pandemic, and this seemed more pronounced among cancer patients who live alone. This finding raises concern, as the importance of social and family support when dealing with cancer has been well recognised.

Social support is regarded as a complex construct that has long been suggested to have direct and ameliorating effects on patients' well-being and emotional adjustment to cancer (Kroenke et al., 2020). Williams et al. (2019) found that 67% of 1460 adult cancer patients reported the need for social support, half reported a need for emotional support and 47% expressed the need for physical support. Nearly half of the subjects reported that their need for such support went unmet. Environmental factors, especially social support, have been found to affect cancer patients' psychological adaptation (Eicher et al., 2015) and overall resilience (Somasundaram & Devamani, 2016). A recent study explored the challenges in accessing care and support for cancer survivors in Australia during COVID-19 and indicated that COVID-19 had a significant impact on the lives of cancer survivors with the biggest challenges being reduced social support and the inability to see healthcare providers, older participants reported greater impact and distress due to COVID-19 (Davis et al., 2021). In line with our findings, Chen et al. (2021) have found that living alone was one of the risk factors for psychological distress including depression, anxiety and insomnia among breast cancer patients.

It appears that in Israel, no significant changes occurred in the management of cancer patients' treatment during the pandemic. While interviewees positively noted the actions taken by the medical staff to maintain their treatment routine and provide them with optimal medical care, a recent qualitative study that examined the experience of cancer patients during the pandemic found that many patients reported disruptions to their treatment routine, inaccessibility of healthcare services for the purpose of doing tests and evaluating symptoms and delays in routine treatments (Colomer-Lahiguera et al., 2021). At the same time, interviewees in the current study reported that the medical staff was focused on clinical care and did not offer broader support to help them deal with their disease in the context of the pandemic. Chia et al. (2021) recently examined the emotional and behavioural responses of cancer patients and their caregivers to the COVID-19 pandemic and found that healthcare providers were perceived as highly competent. This competence was described as broadly encompassing several aspects of care, from managing cancer treatment to treating COVID-19 and maintaining good hygienic standards.

The current study has its limitations. The study period was limited as the main aim was to examine perceptions of patients during the period of receiving the vaccine and just before fully returning to routine; therefore, it is difficult to draw broader conclusions. Yet previous

experience of Vindrola-Padros et al. (2020) pointed to the importance of collecting data in real time when carrying out research in the context of infectious epidemics. In addition, interviews were conducted over the phone and not face-to-face which may affect the nature of the interview and limited the ability to share perceptions and feelings of some of the interviewees. Moreover, the participants voluntarily contacted the research assistant, a fact that may have a bias related to the participants' characters. Nevertheless, the qualitative examination through in-depth interviews was valuable for presenting a comprehensive and in-depth picture of the effects of the pandemic on cancer patients' support networks and as a result their psychological well-being. Qualitative research provides insight into aspects of behaviour and perceptions often missed in epidemiological research (Teti et al., 2020).

5 | CONCLUSIONS AND IMPLICATIONS

The recent COVID-19 crisis posed unique health-related challenges for cancer patients and oncology medical teams that add to the challenges that already exist in tackling cancer disease. Despite the efforts to respond swiftly to the new situation, healthcare services are required for specific adjustments at a variety of levels for at-risk patients such as cancer patients. The findings of the current study reflect the need to devote comprehensive attention to the longer term implications of the pandemic to aspects of treatment and care. Patients expressed concerns regarding the future even after the population has been vaccinated and emerged from the crisis. This finding emphasises the need to continuously assess and monitor the patients' well-being, as well as their psychological, social and medical needs during this complex time, especially in light of the uncertainty about the spread of the pandemic and the development of various virus mutations and continued pressure on health services. Based on the findings, it is recommended that community and hospital cancer care units will plan new strategies for providing practical and emotional support networks reflecting cancer patients' concerns related to the long-term impact of the pandemic on their changing needs.

ACKNOWLEDGEMENTS

We deeply thank the cancer patients who participated in the research.

CONFLICT OF INTEREST

The authors declare they have no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Osnat Bashkin  <https://orcid.org/0000-0001-8096-8430>

REFERENCES

- Abramowitz, S. A., McLean, K. E., McKune, S. L., Bardosh, K. L., Fallah, M., Monger, J., Tehoungue, K., & Omidian, P. A. (2015). Community-centered responses to Ebola in urban Liberia: The view from below. *PLoS Neglected Tropical Diseases*, 9(4), e0003706. <https://doi.org/10.1371/journal.pntd.0003706>
- Anderson, B. L., Farrar, W. B., Golden-kreutz, D., Kutz, L. A., McCallum, R., Country, M. E., & Glaser, R. (1998). Stress & immune responses after surgical treatment for regional cancer. *Journal of National Cancer Institute*, 90(1), 30–36. <https://doi.org/10.1093/jnci/90.1.30>
- Beebe, J. (1995). Basic concepts and techniques of rapid appraisal. *Human Organization*, 54(1), 42–51. <https://doi.org/10.17730/humo.54.1.k84tv883mr2756l3>
- Chen, G., Wu, Q., Jiang, H., Zhang, H., Peng, J., Hu, J., & Xie, C. (2020). Fear of disease progression and psychological stress in cancer patients under the outbreak of COVID-19. *Psycho-Oncology*, 29(9), 1395–1398. <https://doi.org/10.1002/pon.5451>
- Chen, X., Wang, L., Liu, L., Jiang, M., Wang, W., Zhou, X., & Shao, J. (2021). Factors associated with psychological distress among patients with breast cancer during the COVID-19 pandemic: A cross-sectional study in Wuhan, China. *Supportive Care in Cancer*, 29(8), 4773–4782. <https://doi.org/10.1007/s00520-021-05994-4>
- Chia, J. M. X., Goh, Z. Z. S., Chua, Z. Y., Ng, K. Y. Y., Ishak, D., Fung, S. M., & Griva, K. (2021). Managing cancer in context of pandemic: A qualitative study to explore the emotional and behavioural responses of patients with cancer and their caregivers to COVID-19. *BMJ Open*, 11(1), e041070. <https://doi.org/10.1136/bmjopen-2020-041070>
- Colomer-Lahiguera, S., Ribi, K., Dunnack, H. J., Cooley, M. E., Hammer, M. J., Miaskowski, C., & Eicher, M. (2021). Experiences of people affected by cancer during the outbreak of the COVID-19 pandemic: an exploratory qualitative analysis of public online forums. *Supportive Care in Cancer*, 29(9), 1–7. <https://doi.org/10.1007/s00520-021-06041-y>
- Davis, C., Cadet, T., Rune, K., Wilson, P., & Banks, J. (2021). Exploring the challenges in accessing care and support for cancer survivors in Australia during COVID-19. *Journal of Psychosocial Oncology*, 39, 1–7. <https://doi.org/10.1080/07347332.2021.1904086>
- de Joode, K., Dumoulin, D. W., Engelen, V., Bloemendal, H. J., Verheij, M., van Laarhoven, H. W. M., & van der Veldt, A. A. M. (2020). Impact of the coronavirus disease 2019 pandemic on cancer treatment: The patients perspective. *European Journal of Cancer*, 136, 132–139. <https://doi.org/10.1016/j.ejca.2020.06.019>
- Eicher, M., Matzka, M., Dubey, C., & White, K. (2015). Resilience in adult cancer care: An integrative literature review. *Oncology Nursing Forum*, 42(1), E3–E16. <https://doi.org/10.1188/15.ONF.E3-E16>
- Faye, O., Boëlle, P. Y., Heleze, E., Faye, O., Loucoubar, C., Magassouba, N. F., Soropogui, B., Keita, S., Gakou, T., Bah, E. H. I., Koivogui, L., Sall, A. A., & Cauchemez, S. (2015). Chains of transmission and control of Ebola virus disease in Conakry, Guinea, in 2014: An observational study. *The Lancet Infectious Diseases*, 15(3), 320–326. [https://doi.org/10.1016/S1473-3099\(14\)71075-8](https://doi.org/10.1016/S1473-3099(14)71075-8)
- Garutti, M., Cortiula, F., & Puglisi, F. (2020). Seven shades of black thoughts: COVID-19 and its psychological consequences on cancer patients. *Frontiers in Oncology*, 10, 1357. <https://doi.org/10.3389/fonc.2020.01357>
- Handwerker, P. W. (2001). *Quick ethnography: A guide to rapid multi-method research*. Rowman Altamira.
- Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry Research*, 288, 112954. <https://doi.org/10.1016/j.psychres.2020.112954>
- Hyland, K. A., & Jim, H. S. (2020). Behavioral and psychosocial responses of people receiving treatment for advanced lung cancer during the

- COVID-19 pandemic: A qualitative analysis. *Psycho-Oncology*, 29(9), 1387–1392. <https://doi.org/10.1002/pon.5445>
- Hyland, K. A., Small, B. J., Gray, J. E., Chiappori, A., Creelan, B. C., Tanvetyanon, T., Nelson, A. M., Cessna-Palas, J., Jim, H. S. L., & Jacobsen, P. B. (2019). Loneliness as a mediator of the relationship of social cognitive variables with depressive symptoms and quality of life in lung cancer patients beginning treatment. *Psycho-Oncology*, 28(6), 1234–1242. <https://doi.org/10.1002/pon.5072>
- Johnson, G. A., & Vindrola-Padros, C. (2017). Rapid qualitative research methods during complex health emergencies: A systematic review of the literature. *Social Science & Medicine*, 189, 63–75. <https://doi.org/10.1016/j.socscimed.2017.07.029>
- Juanjuan, L., Santa-Maria, C. A., Hongfang, F., Lingcheng, W., Pengcheng, Z., Yuanbing, X., Yuyan, T., Zhongchun, L., Bo, D., Meng, L., Qingfeng, Y., Feng, Y., Yi, T., Shengrong, S., Xingrui, L., & Chuang, C. (2020). Patient-reported outcomes of patients with breast cancer during the COVID-19 outbreak in the epicenter of China: A cross-sectional survey study. *Clinical Breast Cancer*, 20(5), e651–e662. <https://doi.org/10.1016/j.clbc.2020.06.003>
- Kroenke, C. H., Paskett, E. D., Cené, C. W., Caan, B. J., Luo, J., Shadyab, A. H., Robinson, J. R. M., Nassir, R., Lane, D. S., & Anderson, G. L. (2020). Prediagnosis social support, social integration, living status, and colorectal cancer mortality in postmenopausal women from the women's health initiative. *Cancer*, 126(8), 1766–1775. <https://doi.org/10.1002/cncr.32710>
- Liang, W., Guan, W., Chen, R., Wang, W., Li, J., Xu, K., Li, C., Ai, Q., Lu, W., Liang, H., Li, S., & He, J. (2020). Cancer patients in SARS-CoV-2 infection: A nationwide analysis in China. *The Lancet Oncology*, 21, 335–337. [https://doi.org/10.1016/S1470-2045\(20\)30096-6](https://doi.org/10.1016/S1470-2045(20)30096-6)
- Mehnert, A., Brähler, E., Faller, H., Härter, M., Keller, M., Schulz, H., Wegscheider, K., Weis, J., Boehncke, A., Hund, B., Reuter, K., Richard, M., Sehner, S., Sommerfeldt, S., Szalai, C., Wittchen, H. U., & Koch, U. (2014). Four-week prevalence of mental disorders in patients with cancer across major tumor entities. *Journal of Clinical Oncology*, 32(31), 3540–3546. <https://doi.org/10.1200/JCO.2014.56.0086>
- Radcliffe, E., Khan, A., Wright, D., Berman, R., Demain, S., Foster, C., Restorick-Banks, S., Richardson, A., Wagland, R., & Calman, L. (2021). 'It feels its wasting whatever time I've got left': A qualitative study of living with treatable but not curable cancer during the COVID-19 pandemic. *Palliative Medicine*, 36(1), 152–160.
- Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry*, 52, 102066. <https://doi.org/10.1016/j.ajp.2020.102066>
- Rolston, K. V. I. (2017). Infections in cancer patients with solid tumors: A review. *Infectious Disease and Therapy*, 6, 69–83. <https://doi.org/10.1007/s40121-017-0146-1>
- Savard, J., Jobin-Théberge, A., Massicotte, V., & Banville, C. (2021). How did women with breast cancer experience the first wave of the COVID-19 pandemic? A qualitative study. *Supportive Care in Cancer*, 29(10), 1–7. <https://doi.org/10.1007/s00520-021-06089-w>
- Scrimshaw, S. C., & Hurtado, E. (1987). Rapid assessment procedures for nutrition and primary health care: Anthropological approaches to improving programme effectiveness.
- Shkedi, A. (2003). *Words that try to touch: Qualitative research—Theory and application*. Ramot. In Hebrew
- Somasundaram, R. O., & Devamani, K. A. (2016). A comparative study on resilience, perceived social support and hopelessness among cancer patients treated with curative and palliative care. *Indian Journal of Palliative Care*, 22(2), 135–140. <https://doi.org/10.4103/0973-1075.179606>
- Teti, M., Schatz, E., & Liebenberg, L. (2020). Methods in the time of COVID-19: the vital role of qualitative inquiries. *International Journal of Qualitative Methods*, 19, 1609406920920962.
- Vindrola-Padros, C., Chisnall, G., Cooper, S., Dowrick, A., Djellouli, N., Symmons, S. M., Martin, S., Singleton, G., Vanderslott, S., Vera, N., & Johnson, G. A. (2020). Carrying out rapid qualitative research during a pandemic: Emerging lessons from COVID-19. *Qualitative Health Research*, 30(14), 2192–2204. <https://doi.org/10.1177/1049732320951526>
- Vindrola-Padros, C., & Vindrola-Padros, B. (2018). Quick and dirty? A systematic review of the use of rapid ethnographies in healthcare organisation and delivery. *BMJ Quality & Safety*, 27(4), 321–330. <https://doi.org/10.1136/bmjqs-2017-007226>
- Wang, Y., Duan, Z., Ma, Z., Mao, Y., Li, X., Wilson, A., & Chen, R. (2020). Epidemiology of mental health problems among patients with cancer during COVID-19 pandemic. *Translational Psychiatry*, 10(1), 1–10. <https://doi.org/10.1038/s41398-020-00950-y>
- Whisenant, J. G., Trama, A., Torri, V., De Toma, A., Viscardi, G., Cortellini, A., de Toma, A., Michielin, O., Barlesi, F., Dingemans, A. M. C., van Meerbeeck, J., Pancaldi, V., Soo, R. A., Leigh, N. B., Peters, S., Wakelee, H., Garassino, M. C., & Horn, L. (2020). TERAVOLT: Thoracic cancers international COVID-19 collaboration. *Cancer Cell*, 37(6), 742e5. <https://doi.org/10.1016/j.ccell.2020.05.008>
- Williams, G. R., Pisu, M., Rocque, G. B., Williams, C. P., Taylor, R. A., Kvale, E. A., Partridge, E. E., Bhatia, S., & Kenzik, K. M. (2019). Unmet social support needs among older adults with cancer. *Cancer*, 125(3), 473–481. <https://doi.org/10.1002/cncr.31809>
- Zhang, J. J., Dong, X., Cao, Y. Y., Yuan, Y. D., Yang, Y. B., Yan, Y. Q., & Gao, Y. D. (2020). Clinical characteristics of 140 patients infected with SARS-CoV-2 in Wuhan, China. *Allergy*, 75(7), 1730–1741. <https://doi.org/10.1111/all.14238>

How to cite this article: Bashkin, O., Nahmias, R., Attar, S., Moshe, R., & Asna, N. (2022). Perspectives of cancer patients during the COVID-19 outbreak in Israel: The long-term implications on support and well-being in an exploratory qualitative study. *European Journal of Cancer Care*, e13657. <https://doi.org/10.1111/ecc.13657>

APPENDIX A: INTERVIEW GUIDE

Thank you for agreeing to do this interview. Tell me a little about yourself. When was the disease diagnosed? How did it affect you emotionally/your relationship with your family/your day-to-day life?

1. Do you live alone/with a partner/family? Do you work? Describe your daily routine coping with cancer (frequency of treatments at the oncological institute, physical activity, social/family gatherings, and hobbies).
2. In coping with the disease, do you receive support from family/friends/neighbours? Tell me a little about this support and how it is expressed.
3. How did the COVID-19 outbreak change your daily life? Did your routine change? In what way? Do you leave the house/meet with people less? Have your healthcare habits changed?
4. Do you take any specific precautions to avoid catching the virus? Tell me about them.

5. Do you feel your close environment takes more care in adhering to the guidelines to prevent infection?
6. Do you feel the pandemic has affected how your treatment is managed by the medical staff? In what way?
7. Do you feel your treatment was delayed or harmed due to the outbreak of the coronavirus? In what way?
8. Do you feel the pandemic has affected your mental state? Do you suffer from insomnia? Symptoms of anxiety? Negative thoughts?
9. Describe your personal concerns and worries regarding the pandemic.
10. Have you expressed your concerns to the medical staff? Have they offered you support or help?
11. Describe how you deal with worries and concerns that arise for you during this complex time.
12. Do you feel the pandemic has affected the support you receive from your environment/family/those who are close to you?
13. Do you feel you have needs that aren't being met during this period?