

## RESEARCH ARTICLE OPEN ACCESS

# The Lives of Older People With Advanced Cancer Who Live Alone During Outpatient Cancer Chemotherapy: A Descriptive Qualitative Study

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## ABSTRACT

Nursing care for older people with advanced cancer who live alone during outpatient chemotherapy should address their difficulties while respecting their lives. However, their lived experiences remain underexplored. Therefore, we conducted a descriptive qualitative study to explore and describe their lives. The participants were purposively sampled, older patients ( $\geq 65$  years) with advanced cancer who lived alone and were receiving outpatient cancer chemotherapy. Semi-structured interviews were conducted using an interview guide, and thematic analysis was applied. There were 12 participants. Nine categories and 49 subcategories were extracted. The core category was “Getting by through endurance, ingenuity, and effort in one’s increasingly fragile ‘own vessel,’ in order to survive a little longer and fulfill one’s life.” Effective support should not only address their challenges, but also respect their convictions, leverage their strengths, and enhance their self-efficacy. Further, early implementation of advance care planning (ACP) is crucial to proactively identify the needs of these patients, who rarely express their concerns. This approach facilitates their transition from full independence to autonomy, enabling them to choose and integrate necessary support into their daily lives.

## 1 | Introduction

The prevalence of cancer increases with age. The median age of cancer diagnosis is 66 years (National Cancer Institute 2021), and the number of older cancer patients is increasing globally (Pilleron et al. 2021). Cancer treatment is generally a combination of surgical therapy, radiotherapy, and chemotherapy, and cancer chemotherapy aimed at prolonging life and palliating symptoms is often indicated in cases of advanced cancer.

It has been reported that the number of older people living alone is increasing worldwide (David and Miguel 2018). Japan ranks first in the world for a declining birth rate and aging population; there are currently more than 7,427,000 households with

a person aged 65 years or older living alone, and this number is expected to increase in the future (Health, Labour and Welfare Statistics Association 2023). It has also become common in recent years for cancer chemotherapy to be administered on an outpatient basis, and, consequently, we have entered an age in which it is completely normal for older people with advanced cancer who live alone to receive cancer chemotherapy as outpatients. Enhancing nursing care to support these patients is now a common challenge around the world.

Outpatients receiving cancer chemotherapy suffer greatly from side effects such as malaise and nausea (Loerzel 2015). Older people, in particular, have difficulty coping with these health problems because the physical and cognitive changes and

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## Summary

- This study's aim was to explore and describe the lives of older patients living alone with advanced cancer and undergoing outpatient cancer chemotherapy.
- They take pride in “not being a burden on others” and maintaining their independence, enduring severe symptoms and functional limitations as the cost of life-prolonging treatment. Despite sometimes facing despair, they manage their daily lives within the confines of their personal “vessel”—the extent of their physical and social activities.
- Understanding these patients, who rarely voice their concerns, is essential to providing compassionate, patient-centered care. Furthermore, to help them maintain and improve their quality of life (QOL) and quality of death (QOD) without excessive self-limitation in their increasingly fragile “vessel” the early implementation of advance care planning (ACP) remains a critical challenge.

psychosocial factors associated with aging overlap with the challenges of cancer (Pérez-Zepeda et al. 2016; Dumitrache et al. 2018). It has also been reported that people in the final stage who live alone have a greater probability of experiencing health problems such as falls or social isolation (Iliffe et al. 2007) and suffer deterioration in their quality of life (QOL) (Johnson et al. 2004). Thus, older people living alone who have advanced cancer have the huge burden of continuing to go about their daily lives while visiting the hospital for treatment and coping with the symptoms on their own at home. Outpatient cancer chemotherapy is, therefore, likely to have a huge impact on the lives of these patients.

Chemotherapy for patients with advanced cancer continues with no end in sight, as long as the therapy is effective and the patient receives benefit from it. Unlike treatment for a period that aims for a cure, treatment during advanced cancer is not a question of just temporarily enduring the problems brought on by the treatment. The QOL of patients during therapy is connected to their quality of death (QOD), and it is important to maintain or improve the quality of their everyday lifestyles.

There has been increased recognition in recent years that cancer chemotherapy in older people should give due consideration to the impact of therapy and its effectiveness. Geriatric oncology guidelines have been published in the United States (Mohile et al. 2018), and Clinical Practice Guidelines of Cancer Drug Therapies for the Elderly have been published in Japan (Japanese Society of Medical Oncology & Japan Society of Clinical Oncology 2019). Evaluation systems are also being developed to prevent under-treatment and over-treatment of older cancer patients (Tsubata et al. 2019). However, there are far greater individual differences among older people than among younger people, and these systems have to be used while also selecting treatments that suit each individual's physique, lifestyle, and values.

Nurses are therefore expected to support older patients' treatment choices and their everyday lives during treatment so that

they can live with cancer in their own way while maintaining their QOL. In their nursing care, addressing patients' difficulties while respecting their convictions, leveraging strengths, and enhancing self-efficacy is essential. Though previous studies have highlighted the challenges faced by patients, they have not fully explored their lived experiences during treatment, including the strengths of patients and how they cope, adjust emotionally, and adapt their lives. To address this gap, this study used a qualitative research methodology suitable for describing experiences from the patient's perspective, with the aim of exploring and describing the lives of older people living alone who are receiving outpatient cancer chemotherapy for advanced cancer, and the direction of support and support measures was considered.

## 2 | Methods

### 2.1 | Study Design

This study used a descriptive, qualitative research design, including semi-structured interviews to explore the lived experiences of participants. The naturalistic inquiry approach was chosen for this study because it allows for an in-depth understanding of their lives from the participant perspective. This methodology is particularly suited for exploring complex, subjective phenomena without imposing predefined variables or theoretical hypotheses (Sandelowski 2000). To ensure comprehensive and transparent reporting, the study followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (Tong et al. 2007).

### 2.2 | Operational Definition of Terms

Outpatient cancer chemotherapy: Cancer therapy using anti-cancer drugs or molecular-targeted drugs carried out during hospital visits. Clinical trials and adjuvant chemotherapy were excluded. Orally administered drugs were included.

Life: All experiences, including emotions and thoughts, physical and social effects, and how they are dealt with, and interactions with other people, and so on, that occur on a daily basis while a patient is undergoing treatment.

### 2.3 | Recruitment of Participants

Participants were recruited by purposive sampling. The inclusion criteria were:

1. a diagnosis of inoperable and incurable advanced cancer by a physician;
2. currently receiving outpatient cancer chemotherapy;
3. age 65 years or older;
4. living alone;
5. completion of at least one course of outpatient chemotherapy;
6. awareness of diagnosis and prognosis; and
7. physical and mental capacity for participation

Candidates received verbal and written explanations of the study's purpose, procedures, and ethical considerations through a research information sheet. Participation was confirmed upon signing a consent form.

## 2.4 | Data Collection

Data collection was conducted between March and October 2021. Interviews were conducted face-to-face and one-on-one, scheduled based on participants' treatment routines and held in private spaces, either in a hospital consultation room or at the university. Each participant was interviewed once. There was no prior relationship between the participants and the research team, including the interviewer, ensuring objectivity during the interviews.

Each interview lasted approximately 40 min, with adjustments made based on the participants' physical conditions. The interviews were conducted by the first author, a female researcher with extensive clinical experience, and were successfully completed with all participants. With participants' explicit permission, all interviews were audio-recorded and supplemented with detailed notes to ensure comprehensive data collection.

The semi-structured interviews followed a guide refined through pre-testing with two individuals. "How have you been spending your days since starting outpatient treatment? Please describe your daily life, including activities, feelings, or any difficulties."

After interviewing 11 participants, data saturation was reached, since no new subcategory was discovered. One further participant was included to confirm data saturation. Thus, data collection ceased after the 12th interview.

## 2.5 | Data Analysis

The study data were the verbatim transcripts of the interviews. Thematic analysis, as described by Braun and Clarke (2006), was used to analyze the data. The process included: (1) data familiarization and writing familiarization notes; (2) systematic data coding; (3) generating subcategories from coded and collated data; (4) developing and reviewing categories; (5) refining, defining, and naming categories; and (6) writing the report. A continuous comparative analysis was carried out. In addition, the relationship between categories was examined, and a core category was derived. The first and second authors, both female, were involved in the analysis of the data and conducted manual coding. The first author has extensive experience in cancer nursing, whereas the second author specializes in home nursing. Both researchers are RNs and PHNs with doctoral degrees and have prior qualitative research experience. At the time of the study, they were both university faculty members and unaffiliated with the care of the participants.

## 2.6 | Rigor

To ensure rigor, the study followed Guba and Lincoln's criteria for qualitative research evaluation: dependability, credibility, transferability, and confirmability (Lincoln and Guba 1985). Any disagreements between the two analysts during the entire analytical process were resolved through discussion until a consensus was reached. Results were validated through member checking with participants and consultation with nurses specializing in outpatient cancer chemotherapy.

## 2.7 | Ethical Considerations

Ethical approval was obtained from the research ethics board of Akita University Graduate School of Health Sciences (Approval No. 513). Written informed consent was acquired from all participants after explaining that non-participation would not result in disadvantages, that responses were voluntary, and that withdrawal was permitted at any time. Privacy and confidentiality were strictly maintained.

## 3 | Results

The data of 12 participants were included in the analysis. The mean duration of the interviews was 44 min. There were seven men and five women, with a mean age of 74 years. Eight of the participants had been married, and the time living alone ranged from 3 months to 50 years. The length of time they had been receiving outpatient cancer chemotherapy ranged from 1 to 40 months (Table 1).

Nine categories and 49 subcategories were extracted (Table 2). The nine categories are described below.

### 3.1 | Category 1: Living With the Pride of Not Being a Nuisance to Other People

The person has had a long life with the experience of overcoming a succession of difficult events and painful emotions, such as the loss of a spouse, living with disease, major surgery for cancer, and so on. They have a sense of capability and confidence built up through these experiences, and they are proud to live independently, as far as possible without being a nuisance to other people, even their own families. They show a desire to continue this lifestyle for as long as possible in the future. This category comprises seven subcategories.

#### 3.1.1 | Being Independent Means It Is My Own Life

I have always lived in the belief that taking care of things by yourself is the natural thing to do, even when times get tough. (I68)

I don't think in terms of it being hard or painful, I just go about my everyday life in a straightforward way

**TABLE 1** | Summary of participants.

| Participant | Age group | Sex | Diagnosis  | History of cancer surgery | Duration of outpatient chemotherapy | Main symptoms  | Performance status | Previously married | Time living alone |
|-------------|-----------|-----|--|---------------------------|-------------------------------------|--|--------------------|--------------------|-------------------|
| A           | Early 70s | M   | Colorectal cancer<br>Liver metastasis                                | Y                         | 7 months                            | Pain, malaise  | 2                  | N                  | 5.5 years         |
| B           | Late 70s  | F   | Cecal cancer<br>Liver and lung metastasis                            | Y                         | 29 months                           | Malaise, muscle weakness, numbness in fingers                            | 1-2                | Y                  | 4.5 years         |
| C           | Early 70s | F   | Breast cancer<br>Lung and lymph node metastasis                      | Y                         | 6 months                            | Malaise, alopecia, edema   | 0-1                | Y                  | 10 years          |
| D           | Late 60s  | M   | Head and neck cancer<br>Multiple lung and liver metastases           | Y                         | 1 month                             | Pain, dysphagia  | 0-1                | Y                  | 2 years           |
| E           | Early 70s | M   | Pancreatic body cancer<br>Recurrence                                 | Y                         | 12 months                           | Malaise  | 0-1                | Y                  | 3 months          |
| F           | Early 70s | M   | Pancreatic head cancer<br>Recurrence                                 | Y                         | 7 months                            | Numbness of arms and legs, malaise                                       | 1                  | N                  | 50 years          |
| G           | Late 70s  | F   | Ascending colon cancer<br>Metastatic brain tumor                     | N                         | 3 months                            | Right-sided paralysis, difficulty walking, malaise, edema of lower limbs | 3                  | N                  | Unknown           |
| H           | Late 70s  | M   | Descending colon cancer<br>Liver metastasis                          | Y                         | 17 months                           | Hand-and-foot syndrome, alopecia   | 0-1                | Y                  | 10 years          |
| I           | Early 70s | F   | Esophageal cancer<br>Neuroendocrine tumors<br>Pancreatic body cancer | Y                         | 20 months                           | Malaise, difficulty in defecating  | 0-1                | N                  | 6 years           |

(Continues)

TABLE 1 | (Continued)

| Participant | Age group | Sex | Diagnosis   | History of cancer surgery | Duration of outpatient chemotherapy | Main symptoms        | Performance status | Previously married | Time living alone |
|-------------|-----------|-----|---|---------------------------|-------------------------------------|----------------------|--------------------|--------------------|-------------------|
| J           | Late 60s  | F   | Pancreatic body adenocarcinoma<br>Multiple liver metastases | N                         | 2 months                            | Pain, malaise        | 1                  | Y                  | 4 months          |
| K           | Late 80s  | M   | Pancreatic body cancer                                      | N                         | 2 months                            | Pain, malaise        | 0–1                | Y                  | 1.5 years         |
| L           | Late 60s  | M   | Lung cancer<br>Recurrence                                   | Y                         | 40 months                           | Edema of lower limbs | 0–1                | Y                  | 15 years          |

without help from other people. That's all it is. That's my lifestyle. When I can't manage on my own, I'll go into hospital. When I go into hospital, it's the end for me. That's what I think. (K49)

3.1.2 | Wanting to Live as Far as Possible Without Being a Nuisance to Other People

Even when I've had a tough time physically, I've really done my best to manage on my own. My daughter has her own problems, and I don't want to be a nuisance to her. (C14)

3.2 | Category 2: Old Age and Living Alone Give Both the Space to Live at One's Own Pace and Insecurities

Being old and living alone gives the freedom and the space to live at one's own pace, free of time constraints and without being a nuisance to others. However, there is the worry that there is no one there to turn to when help is needed or if there is a problem, and there is the loneliness of being isolated and having little communication with other people. The person shows worry about what to do in an emergency, particularly because of being old and having advanced cancer. This category comprises four subcategories.

3.2.1 | Living Slowly and at One's Own Pace, Without any Constraints

I have nothing in particular to do, I'm not a nuisance to others, I don't really have any problems. I don't have to worry about time, I don't need to fit in with anything else, I'm not under pressure to do anything for other people. It's just me. (D139)

3.2.2 | Seldom Interacting With Others and Feeling Lonely, but Unable to Seek New Interactions

Nobody comes to visit me. Every day it's just me on my own. I have many days when I just watch TV with no one to talk to. But I just feel I couldn't be bothered to get involved with new people. Much less going and talking to women. You have to refrain a bit if you are a man living alone. (H74)

3.3 | Category 3: Mentally Tending Toward Despair

The persons have unbearable anxiety and pain due to the threat of disease and death because the cancer will not go away and they will have to live with it for the rest of their lives, or because they will not be able to do the things they want to as a result of the further progression of the disease, symptoms, and debilitation. They tend mentally toward despair, showing a state

**TABLE 2** | Lives of older people with advanced cancer who live alone during outpatient cancer chemotherapy.

| Category (9)  | Subcategory (49)  |
|---|---|
| Living with the pride of not being a nuisance to other people                           | Being independent means it is my own life   |
|   | Wanting to live as far as possible without being a nuisance to other people   |
|   | Having experienced separation from people who were close and a range of emotions  |
|   | Having experienced living with disease on a daily basis after a family member's struggle with disease or death                        |
| Old age and living alone give both the space to live at one's own pace and insecurities | Having the experience and confidence of overcoming a tough major cancer surgery   |
|   | Having the experience and confidence of managing to overcome lonely and difficult times alone   |
|   | Already having the skills to get by alone   |
|   | Living slowly and at one's own pace, without any constraints  |
| Mentally tending toward despair   | Difficulty having no one to rely on or ask for help   |
|   | Seldom interacting with others and feeling lonely, but unable to seek new interactions  |
|   | Worrying about emergencies and dying alone due to old age and illness   |
|   | Depressed by the threat of cancer and wondering how much longer there is left to live   |
| Having no choice but to continue with the same daily life as always and remain positive | Worrying every day about the disease, the effects of treatment, further metastasis, and the future                                    |
|   | Pain when thinking about the reasons for the cancer and disease progression that there is no other choice but to accept the situation |
|   | Pain with having to accept that the treatment is not effective and the disease is worsening   |
|   | Feeling frustrated and depressed by the symptoms and because they stop one from doing what one wants                                  |
| Being driven by an inner strength to keep living in the last stage                      | Fear of COVID-19 infection and anxiety about stopping treatment due to measures to prevent infection                                  |
|   | Confronting a situation one cannot control  |
|   | Realization that living with cancer is one's fate   |
|   | Accepting that nothing can be done about it   |
|   | Naturally becoming more positive mentally by doing something for others   |
|   | Spending time passionately enjoying purpose in life and hobbies outside of the disease  |
|   | Feeling lively from interactions with others  |
|   | Clinging to the faint hope that the treatment will be effective   |

(Continues)



TABLE 2 | (Continued)

| Category (9)   | Subcategory (49)  |
|--|---|
| Trusting their doctor and letting the doctor decide the most suitable treatment to carry on living   | Trying to live for as long as one can be kept alive   |
|  | Wanting to make the most of normal everyday life that is more than just disease and treatment                                       |
|  | Wanting to accomplish what needs to be done so that there are no regrets  |
|  | Knowing about the disease and its treatment   |
| The degree of hardship of everyday life depends entirely on physical condition and the people/things/money obtained  | Seeking satisfactory medical treatment that will not be regretted   |
|  | Accepting treatment to carry on living  |
|  | Leaving judgment on the most suitable treatment and when to stop it up to a trusted doctor, and accepting the recommended treatment |
| Being prepared for the unexpected  | Ability to go about daily life depends on symptoms and ability to move  |
|  | Being greatly helped by the emotional and personal support of family, friends, and service providers                                |
|  | This lifestyle would not be possible without a car  |
|  | Being supported by the care of medical professionals who treat the patient as an individual   |
| Getting by through endurance, ingenuity, and effort in one's increasingly fragile "own vessel," in order to survive a little longer and fulfill one's life | Everyday life completely depends on money   |
|  | Being prepared from emergencies when living alone   |
|  | Making preparations for the final stage   |
|  | Recognizing that treatment has to continue to prolong life  |
| Not asking unnecessary questions or seeking advice from doctors or nurses  | Having to put up with being unable to live the way one used to  |
|  | Enduring the pain and inconvenience of medical visits and somehow attending the treatment   |
|  | Spending time feeling weak and physically unwell because of age and the drugs   |
|  | Scaling down life to a manageable level because of the disease  |
|  | Changing the lifestyle and pace of life to what can be continued at present   |
|  | Requesting people or care services to do what one cannot do   |
| Dealing with the symptoms of cancer and side effects in one's own way  | Not asking unnecessary questions or seeking advice from doctors or nurses   |
|  | Dealing with the symptoms of cancer and side effects in one's own way   |

Note: Making an effort to be physically strong enough to continue treatment in one's own way.

of extreme pain because the situation causing anxiety and pain will not improve but will only get worse. This category comprised six subcategories.

### **3.4 | Category 4: Having no Choice but to Continue With the Same Daily Life as Always and Remain Positive**

After sinking into a painful situation, they confront their current situation, realizing that they cannot do anything about their cancer and that it is their fate to live with cancer. They unconsciously make use of their experiences of overcoming difficulties, realizing they have no choice but to let down their defenses by accepting the situation, and they return to doing the things they have normally done, such as doing things for others, having social interactions, having a purpose in life, or enjoying hobbies. In this way, they naturally become more positive mentally, and as a result, the slope leading to despair becomes less steep. This category comprised six subcategories.

#### **3.4.1 | Realization That Living With Cancer Is One's Fate**

Well, if there is metastasis, I just hope it doesn't get any bigger. Living with cancer like this, you just have to get on with your life. That's it, really. (F176)

#### **3.4.2 | Naturally Becoming More Positive Mentally by Doing Something for Others**

If there is something that you have to take responsibility for doing, you naturally become more positive mentally, or rather, you have no choice but to be positive. So in that sense, I think it is good to do things for other people. Like taking care of my mother, for example. (I77).

### **3.5 | Category 5: Being Driven by an Inner Strength to Keep Living in the Last Stage**

In the midst of an unbearably painful situation, they are able to look forward a little and must keep living, even though it may not be for long, and show they are able to carry out their everyday life supported or guided by the strength that wells up from inside, either consciously or unconsciously. This category comprised four subcategories.

#### **3.5.1 | Trying to Live for as Long as One Can Be Kept Alive**

Well, I've managed to stay alive to reach this age, after all. That's good enough. What comes next can't be helped. I will just keep living for as long as they keep me alive. (K52)

### **3.5.2 | Wanting to Make the Most of Normal Everyday Life That Is More Than Just Disease and Treatment**

You often hear people talk about how valuable normal, everyday life is, don't you? I think so, too. It's something to be grateful for. Being able to spend time with my daughter. It's precious time. (C150).

I have some chickens and a field. I really value them. It's good to have the things that are always important in life, rather than just disease and treatment all the time. (H134)

### **3.6 | Category 6: Trusting Their Doctor and Letting the Doctor Decide the Most Suitable Treatment to Carry on Living**

This shows people who wish to prolong their lives as much as possible while recognizing that they do not have long, or those who wish to continue working at a job that gives them purpose, seeking medical treatment they can accept without regrets and collecting information about their disease and treatment in order to live in the way they each desire. They trust the doctor who best understands their cancer and who carries out the most suitable treatment for them, leaving the details of the treatment and the time to stop treatment up to the doctor. This category comprises four subcategories.

### **3.7 | Category 7: The Degree of Hardship of Everyday Life Depends Entirely on Physical Condition and the People/Things/Money Obtained**

This shows that while the disease and treatment have a physical and lifestyle impact, and everyday life in general is not easy, it tends to become increasingly difficult; the degree of hardship varies greatly depending on individual differences such as whether the symptoms have eased and the individual can move; human support from medical professionals, family, and friends; whether the individual is able to drive; and economic circumstances. This category comprised five subcategories.

#### **3.7.1 | Ability to Go About Daily Life Depends on Symptoms and Ability to Move**

My symptoms aren't too bad, so I can move. Whether I can move around as I please will probably play a large part in whether I can lead a normal life under treatment. (E126)

The time has come to think about whether I can really continue everyday life under treatment while I am living alone. I am gradually becoming unable to do the housework that I used to do. I get tired as soon as I move. (B90)



### 3.7.2 | Everyday Life Completely Depends on Money

(I have to lie on the bench when waiting because of pain and malaise, but) If I don't work even during treatment I won't have any money, and I won't be able to carry on living as I do. (A44)

You know, your financial state can make a big difference to your treatment and your everyday life. Without any money, you can't live at ease, and your disease doesn't get better even when it could have. (F144)

### 3.8 | Category 8: Being Prepared for the Unexpected

This shows the people getting rid of things and making the preparations that they can by themselves in order to have no problems and not be a nuisance to others if there is an emergency, if the symptoms worsen, or when the end comes, since they are older, living alone, and have advanced cancer. The category comprises two subcategories.

### 3.9 | Category 9: Getting by Through Endurance, Ingenuity, and Effort in One's Increasingly Fragile "Own Vessel," in Order to Survive a Little Longer and Fulfill One's Life

Patients recognize that treatment is necessary to alleviate symptoms and prolong life, and therefore no matter how hard it is, they have no choice; this is their own problem and not something to discuss with doctors or nurses, and they endure it even though they are unable to live their normal lifestyles. In this way, they live their lives, each within their "own vessel," as far as possible not being a nuisance to others and living their lives in their own way through endurance, ingenuity, and effort, changing as necessary the ways and means and the pace at which they live. A person's "own vessel" here means the range of possible activities that is created by their individual physical and mental state, the wisdom and empirical knowledge they have fostered, their sense of values, their abilities, their tolerance levels, and the human, material, and economic resources that they have accrued. This vessel changes according to circumstances, growing more fragile as a result of the symptoms of cancer, the side effects of anti-cancer drugs, and old age. This category comprised 11 subcategories.

This category is taken to be the core category, since it links to all the other categories and is the most central of the categories showing patients' lives (Figure 1).

#### 3.9.1 | Having to Put Up With Being Unable to Live the Way One Used to

Being tired like this and unable to do things I used to do is not just the drugs; it is also because of getting old. It can't be helped. (H24)

### 3.9.2 | Spending Time Feeling Weak and Physically Unwell Because of Age and the Drugs

If I don't move for a long time, because I feel unwell, I can't get out of bed. If you don't use your muscles, you lose the strength in them all at once. (C181)

For about a week after having the anti-cancer drugs, I feel lethargic and unmotivated, and my body is in a bad way. Then, just as I'm getting better, it's time for treatment again, so I always feel sick and just want to lie down. I never feel well. (B35).

#### 3.9.3 | Scaling Down Life to a Manageable Level Because of the Disease

I used to eat and drink with my neighbors, but I have given that up since becoming ill. (A36)

I looked after my mother for a long time, but when I became very ill, I had to tell her I wouldn't be able to look after her any more, and she went into a home. (J38)

#### 3.9.4 | Changing the Lifestyle and Pace of Life to What Can Be Continued at Present

I get tired straight away from housework, so I keep an eye on my condition while doing it, and I take a lot of breaks. So for example, today I will only clean the toilet. (B87)

When I'm feeling unwell, I get over it, I mean I deal with it, by just doing the things that need to be done. Meals, laundry, bathing, hospital visits, shopping. Everything else, I put off until later. (C37)

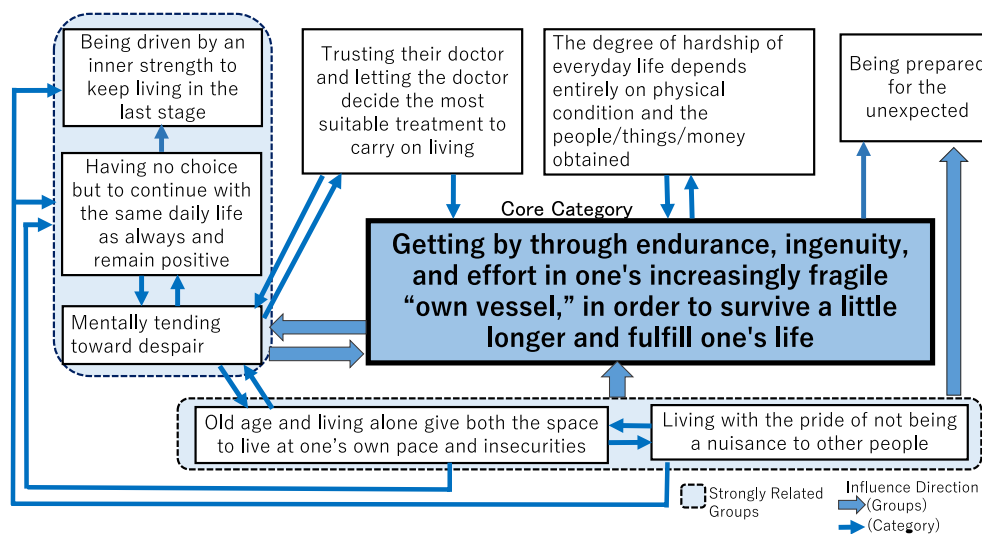
#### 3.9.5 | Not Asking Unnecessary Questions or Seeking Advice From Doctors or Nurses

I don't feel like asking the nurses anything. Even if I have problems, I don't talk about them. What should I talk about? What difference will talking make? (K39)

I don't talk to the nurses or ask them things. I don't think it's worth talking about. (L68)

## 4 | Discussion

The participants' everyday lives were described as (Getting by through endurance, ingenuity, and effort in one's increasingly fragile "own vessel," in order to survive a little longer and fulfill one's life). At the root of their everyday lives were the pride and conviction in "not being a nuisance to others" and



**FIGURE 1** | Lives of older people with advanced cancer who live alone during outpatient cancer chemotherapy.

“independence,” despite old age, living alone, and advanced cancer.

Prior studies have shown that independent living is sought by people who are older, living alone, and undergoing outpatient cancer chemotherapy (Goodwin 2007); older, living alone, and have advanced cancer (Aoun et al. 2008); living alone and have advanced cancer (Aoun et al. 2016; O'Connor 2014); living alone and undergoing outpatient cancer chemotherapy (Benoot et al. 2014); and, older, living alone, undergoing outpatient cancer chemotherapy, and with advanced cancer (Devik et al. 2013). There is also a report that living alone provides the opportunity for self-growth and the freedom for self-determination, giving satisfaction with life (Yetter 2010). Some of the participants stated, “Being independent means it is my own life,” showing that even with serious, advanced cancer, living alone is an important need.

In addition, “not being a nuisance to others” is important to Japanese people right up to their death (Hirai et al. 2006), and in the present study, as far as possible, participants did not want to be cared for, even by their families. A study of similar patients in Norway reported that they were hesitant to ask for help, even in difficult circumstances, for fear of becoming a burden to others (Devik et al. 2013). That study and our study argue that, even with disease, living independently without being a nuisance to others is a conviction and is an important factor in the life of patients.

In the present study, the participants had this conviction while also tending toward despair, enduring the harsh symptoms and inconveniences that they had been given in return for prolonged lives and making do within their own vessels. Prior studies have reported that the longer a person spends living alone, the greater their resources to adapt to cancer treatment (Benoot et al. 2014), and that the length of time living alone can be seen as a learning process in which new skills are developed (Van den Hoonaard 2009), thus indicating the advantages of living alone. There are also reports that older people adapt to cancer better than younger people (Sammarco 2001) by, for example, regarding it as fate or destiny (Tan et al. 2015), and that they

have greater powers of control when they encounter difficulties (Thomé et al. 2003). The present study confirms that having lived long lives and overcome difficulties, the participants have experience, wisdom, and the ability to order their mental state; they understand that living with cancer is their fate, and they live their lives according to their convictions.

This therefore suggests that their care should respect their convictions and life skills, and that an approach of first strengthening their vessel is needed. Such an approach should recognize and emphasize their ability to come to terms with and cope with their multifactorial lives through their own sense of values. That is the empowerment approach that increases self-affirmation and self-efficacy. The use of peer support is important in empowerment (Ziegler et al. 2022), and this calls for the provision of settings for patients to interact naturally with each other, particularly for patients who are reticent to interact with others, despite their own loneliness.

At the same time, the situation is that they will grow frailer in the future, and their vessels will become more fragile, making independent living more difficult. The participants felt themselves becoming frailer, which has also been reported in a prior study (Devik et al. 2013). Malaise has a high incidence regardless of the type of anti-cancer drug, and negatively affects QOL (Lundh Hagelin et al. 2009). As the body’s reserve capacity is weakened in older patients, it becomes harder to recover from malaise between treatments (Devik et al. 2013), and as the participants in the present study stated, they find themselves in a situation in which they “never feel well.” In addition, peripheral neural symptoms are hard to control and are long-term (Bandos et al. 2018; Hershman et al. 2018), and the pain and suffering from side effects can be enormous. The participants were in a situation where “Ability to go about daily life depends on symptoms and ability to move.” However, some participants regarded the present time as if their lives were “on hold,” no matter how harsh the effects on their body, mind, or lives, since the treatment was the price for prolonging their lives. Nonetheless, during the period of advanced cancer, it is important that medical care provides palliative care, as well as controls the cancer

(Johann-Christoph and Annedore 2014). The “now” of patients with advanced cancer is important, and it is important to maintain their QOL even during treatment. Therefore, symptom relief is a major support, not just for the continuation of treatment, but also from the point of view of palliative care for physical and mental well-being. However, patients try to “Not ask unnecessary questions or seek advice from doctors or nurses,” and they seldom complain about their suffering. Prior studies have also found that patients living alone rarely complain about their symptoms or make requests (Lundh Hagelin et al. 2009; Wiik et al. 2011) and do not make use of services (Addington-Hall and Altmann 2000). Such patients need more careful observation and need approaches to be made by medical professionals.

A characteristic of the participants is that they leave the treatment up to the doctors. It is customary in Japan for doctors to make a diagnosis and select the appropriate treatment and then present this to the patients. As a result, many patients are passive. Many older people, in particular, have difficulty expressing themselves or making decisions for themselves (Tokita 2005), and their desire to entrust their treatment to a trusted doctor (Sugiyama et al. 2019) must be understood. Nonetheless, treatment decisions impact QOD. Gaps in perception with the patient (Akishita et al. 2013) can lead to over-treatment or under-treatment or to being unprepared for the end due to a lack of foresight. In addition, patients recognize treatment as a means to prolong life, and it represents their hope for survival. Treatment is also reported to reduce mental suffering (Goncalves et al. 2008). There is concern that patients will lose hope as a result of their treatment being ended or feel that they have been abandoned if they are transferred to another hospital due to the end of treatment. There is also the worry that decision-making may become more difficult in the future as a result of cognitive decline or rapid deterioration. In addition, it can become increasingly difficult for patients to maintain independent living as their “vessel” becomes more fragile due to factors such as the aging of the people who support them, savings running out due to prolonged treatment, or no longer being able to drive. Consequently, it is advisable to commence ACP to ensure that patients are able to transition to a lifestyle with the autonomy to select and use support themselves, which will help to improve both the QOL and QOD of patients living with advanced cancer.

#### 4.1 | Strengths and Limitations

Recruitment from other prefectures or facilities and multiple interviews were not possible due to COVID-19-related restrictions. In addition, all participants were treated at a major hospital in Tohoku, introducing potential bias. However, since this region has Japan’s highest aging population and declining birthrate, understanding their lives remains crucial. Future studies should include patients from diverse backgrounds, such as urban hospitals and rural hospitals, to enhance understanding.

#### 5 | Conclusions

The lifestyles of patients comprised “Getting by through endurance, ingenuity, and effort in one’s increasingly fragile ‘own vessel,’ in order to survive a little longer and fulfill one’s life.”

#### 5.1 | Relevance for Clinical Practice

The management of advanced cancer integrates cancer control and palliative care, focusing on QOL and QOD. By understanding and describing the lives of older people with advanced cancer who live alone during outpatient cancer chemotherapy, nurses can better identify and address their genuine needs. Furthermore, this understanding enables the provision of care that not only respects their individuality and dignity but also leverages their intrinsic strengths, ultimately fostering more person-centered and effective nursing practices. In future research, it will be important to develop strategies for the effective and early introduction of ACP that take into account the characteristics of patients and healthcare systems in each country and region.

#### Author Contributions

**Reiko Sugiyama:** conceptualization, methodology, investigation, funding acquisition, data curation, supervision, formal analysis, project administration, validation, visualization, resources, writing – original draft, writing – review and editing. **Yoriko Nakamura:** conceptualization, methodology, supervision, formal analysis, validation, visualization, resources, writing – review and editing, data curation.

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#### Ethics Statement

This study was conducted with the approval of the local research review board of Akita University Graduate School of Health Sciences (approval number no. 513).

#### Conflicts of Interest

The authors declare no conflicts 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.

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