



Treatment decision-making for patients with cancer aged 75 and older: perspectives from focus group interviews with patients, family caregivers, and healthcare providers

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Abstract

Purpose This study aimed to explore the treatment decision-making experiences of older patients with cancer, their family caregivers, and healthcare providers.

Methods A qualitative study was conducted using focus group interviews at a tertiary hospital in South Korea. The groups were divided into patients with cancer (aged 75 and older), family caregivers, and healthcare providers. Eight patients, 11 caregivers, and 10 healthcare providers participated in the study. The interviews were transcribed and thematically analyzed to identify key themes across the three groups.

Results Patients, family caregivers, and healthcare providers shared interrelated yet distinct perspectives on treatment decisions for older adults with cancer. Patients wanted to maintain life and quality of life but felt anxious about side effects and often deferred decisions to physicians or family. Caregivers sought to reduce suffering and protect dignity by gathering information and relying on the guidance of physicians. Healthcare providers focused on safety and shared decisions, considering preferences, prognosis, and function, but faced challenges due to time limits and the lack of age-specific guidelines.

Conclusion This study highlights the complex nature of treatment decisions for older adults with cancer, shaped by emotional, relational, and clinical influences across patients, families, and clinicians. Findings emphasize the need for personalized, ethically sensitive approaches that respect the unique values of this population. Improving decision-making in geriatric oncology requires better interdisciplinary coordination, age-specific protocols, and practical support for caregivers. Tailored decision aids can help older adults make informed, value-aligned choices that reflect both medical needs and personal priorities.

Keywords Treatment decision · Older adults · Patients with cancer · Family caregivers · Focus groups · Healthcare providers

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Introduction

The number of older patients with cancer has been increasing globally. In South Korea, adults aged 65 and older are expected to account for approximately 20% of the population by 2024, marking the official entry into a super-aged society [1]. While Japan has reached this stage earlier, Korea is becoming a super-aged society at a much faster pace, approximately 10 years faster, making it the fastest-aging country in the world. As aging is a key cancer risk factor, this shift has driven higher cancer incidence: 50.3% of cases in Korea and 57% in the USA occur in individuals aged 65 and older [2, 3]. This trend increases both clinical and economic burdens [4], underscoring the need for effective age-tailored treatment strategies [5, 6].

Treatment decision-making for older patients with cancer is complex and influenced by comorbidities, functional decline, communication barriers, and concerns about quality of life [7]. Unlike younger patients, many older adults prioritize comfort and independence over life extension, necessitating more personalized approaches that suit their values and preferences. However, limited data exist on how older adults assess treatment risks and benefits or engage in shared decision-making. Standardized clinical guidelines tailored to patient preferences are scarce [8], which makes it difficult to achieve consistent person-centered care.

Patients aged 75 and older face substantial challenges [9], including frailty, multiple chronic conditions, and reduced physiological reserves, increasing their vulnerability to treatment-related complications [10]. Therefore, more cautious and holistic decision-making is required. However, research on how this age group navigates treatment decision-making is lacking, with insufficient evidence to guide optimal care.

In Korean clinical settings, treatment decisions for older patients with cancer often involve both family members and healthcare providers [11, 12], reflecting cultural norms around family responsibility and collective caregiving. Although these dynamics may support care, they can lead to ethical concerns, particularly when patient autonomy or informed consent is compromised. Furthermore, time constraints in outpatient settings often limit opportunities for thorough discussions [13], which may contribute to discrepancies between medical recommendations and patient expectations.

While cancer treatment decision-making in older adults has been investigated in Western contexts, research in East Asia remains limited [14]. In Korea, cultural and systemic factors uniquely shape these decisions, underscoring the need to understand how older patients with cancer, their families, and healthcare providers perceive and navigate

treatment. This study explored these perspectives, focusing on individuals aged 75 and older, to identify key values, challenges, and contextual influences. By addressing this gap, this study aimed to provide more personalized, collaborative, and culturally appropriate cancer care for Korea's aging population.

Methods

Design

This study adopted a descriptive qualitative approach using focus group interviews to explore the perspectives of patients with cancer aged 75 and older, their family caregivers, and healthcare providers regarding treatment decision-making. Focus group interviews were selected because of their ability to capture diverse views and facilitate interactive discussions, especially within the context of complex social and cultural influences [15]. This method provides a deep understanding of how treatment decisions are shaped by personal experiences, values, and relationships [15, 16]. This study was conducted following the Consolidated Criteria for Reporting Qualitative Research guidelines [17].

Recruitment

Participants were purposively sampled to ensure rich insights from those with relevant experience, as carefully selected participants enhance data quality in focus groups [18].

Eligible patients were aged 75+, newly diagnosed or recurrence within the past year, and fully aware of their condition. Caregivers were eligible if aged 19+, caring for a patient aged 75+ with recent diagnosis or recurrence, and had participated in the treatment decisions. Healthcare providers were eligible if they were physicians or nurses with at least 5 years' experience, directly involved in care of older patients with cancer, and had participated in decision-making within the past year. Individuals with significant communication or cognitive impairments were excluded to ensure effective participation.

Study procedure and data collection

This study was approved by the Institutional Review Board of SNUBH (IRB file no. B-2402–880-302). From February to December 2024, older patients with cancer and their family caregivers were purposively recruited from a tertiary hospital in Bundang, South Korea (SNUBH). A trained assistant approached eligible individuals at the hematology/oncology outpatient clinic, explained the study, and obtained written consent. Healthcare providers

were recruited online in September 2024 via email invitations sent by the researcher (JWK), which included the study details and a consent link. Once the target number was reached, participants were placed on a waiting list and grouped for focus interviews. Before participation, all participants completed an online self-report questionnaire that collected background information relevant to each participant group; for healthcare providers, highest educational attainment was recorded for descriptive purposes and was not treated as indicative of clinical authority.

From August to December 2024, six focus group interviews (two per group: patients, caregivers, and providers) were conducted in person or via Zoom, based on participant preferences and digital familiarity. An experienced researcher (SJH) moderated the sessions using a semi-structured guide developed from prior literature [11, 19]. Topics included treatment decision-making, influencing factors, challenges, and expectations (see Supplementary Table 1). Each session began with study orientation and ground rules, followed by open discussion, lasted 65–80 min, and was audio-recorded with consent. Data collection ended after six sessions with 29 participants, upon reaching thematic saturation.

Data analysis

All interviews were audio-recorded, transcribed verbatim, and verified for accuracy. A thematic analysis was conducted to explore the experiences of the participants and identify key patterns relevant to the study [20]. The analytic process proceeded in five stages. First, the researchers (SJH and EYK) immersed themselves in the data by reading the transcripts multiple times to gain an overall understanding of the context and content. Key statements were highlighted and annotated to capture initial impressions. Second, meaningful phrases of the text were inductively coded, generating a total of 118 codes (38 from patients, 45 from caregivers, and 35 from healthcare providers). Coding was conducted manually, and Microsoft Excel was used to organize codes and facilitate data management. Next, related codes were clustered into subthemes, which were subsequently synthesized into broader themes aligned with the study objectives. The emerging thematic structure was reviewed and refined to enhance internal consistency and conceptual clarity, resulting in five themes for each participant group. Finally, themes were clearly defined and illustrated with representative quotations to reflect participants' perspectives. To enhance analytic rigor, two researchers (SJH and EYK) coded the data independently. Discrepancies were discussed with a third researcher (JWK) until agreement was achieved.

Rigor and reflexivity

To enhance methodological integrity, three researchers engaged in ongoing reflexive practice throughout the study [21]. Each researcher documented personal assumptions, emotional reactions, professional positions, and potential sources of bias, and considered how these factors might shape interpretation of the data. Regular discussions were held to compare analytic insights and challenge one another's interpretations. Through continuous dialogue and critical reflection, the researchers sought to strengthen credibility and maintain analytic transparency.

Results

Demographic and clinical characteristics

The study included 29 participants: 8 older patients, 11 family caregivers, and 10 healthcare providers. Among the patients, five were men and three were women, mostly in their 80 s, with common cancers being gallbladder, gastric, rectal, and colon (mostly stage 3). All participants, except one, had comorbidities. Caregivers included nine women and two men, mostly in their 50 s; the majority were adult children of older patients and served as primary caregivers. Healthcare providers included physicians and nurses, with physicians representing both medical and surgical specialties. Participants had 5.5–21.5 years of clinical experience. Participants details are in Table 1, with additional data in Supplementary Table 2.

Themes

Five themes were identified for each group: patients, family caregivers, and healthcare providers. These themes and the subthemes are presented in Tables 2, 3, and 4.

1. Perspectives of older patients with cancer on treatment decision-making

Five themes captured older patients' experiences of treatment decision-making, which reflected their will to survive, trust in medical judgment, treatment-related psychological distress, focus on quality of life in later years, and family-centered approaches to decision-making.

Theme 1.1. Strong will to survive This theme consisted of three subthemes: hope for a continued life, determination to live for the family, and willpower driven by positive expectations of recovery. Participants described a strong will to survive as central to their treatment decision-making. Instead

Table 1 Demographic and clinical characteristics of the participants ($N=29$)

Characteristics	<i>N</i> (%)	Median (range)
Patients with cancer ($N=8$)		
Age (years)		84 (76–85)
70–79	2 (25.0)	
80–89	6 (75.0)	
Gender		
Male	5 (62.5)	
Female	3 (37.5)	
Level of education		
≤ High school	5 (62.5)	
≥ College	3 (37.5)	
Type of cancer		
Gallbladder ca	3 (37.5)	
Colorectal ca	2 (50.0)	
Gastric ca	2 (50.0)	
HCC	1 (12.5)	
Cancer stage		
Stage 2	1 (12.5)	
Stage 3	7 (88.5)	
Employment		
Yes	0 (0.0)	
No	8 (100.0)	
Cohabiting family		
None	2 (25.0)	
Yes	6 (75.0)	
Having private insurance		
Yes	1 (12.5)	
No	7 (88.5)	
Comorbidities		
Yes	7 (88.5)	
No	1 (12.5)	
Key concern when deciding on treatment		
Financial burden	1 (12.5)	
Fear of treatment side effects	2 (25.0)	
Burden due to old age	4 (50.0)	
Concerns about functional decline	1 (12.5)	
Family caregivers ($N=11$)		
Age (years)		54 (47–77)
40–49	1 (9.1)	
50–59	7 (63.6)	
60–69	1 (9.1)	
70–79	2 (18.2)	
Gender		
Male	2 (18.2)	
Female	9 (81.8)	
Level of education		
≤ High school	2 (18.2)	
≥ College	9 (81.8)	
Employment		
Yes	5 (45.5)	

Table 1 (continued)

Characteristics	<i>N</i> (%)	Median (range)
No	6 (55.5)	
Relationship to the patients		
Spouse	2 (18.2)	
Child	8 (72.7)	
Daughter-in-law	1 (9.1)	
Healthcare providers ($N=10$)		
Age (years)		35 (32–48)
30–39	6 (60.0)	
40–49	4 (40.0)	
Gender		
Male	4 (40.0)	
Female	6 (60.0)	
Profession		
Physicians ^a	9 (90.0)	
Nurses	1 (10.0)	
Highest educational attainment		
Bachelor's degree	2 (20.0)	
Master's degree	5 (50.0)	
Doctoral degree (Ph.D.)	3 (30.0)	
Clinical experience (years)		
≥ 5 years, < 10 years	6 (60.0)	
≥ 10 years, < 15 years	1 (10.0)	
≥ 15 years, < 20 years	1 (10.0)	
≥ 20 years	2 (20.0)	

ca cancer, HCC hepatocellular carcinoma

^aPhysicians represented various medical and surgical specialties

of losing hope after the diagnosis, they maintained positivity and optimism, which motivated them to pursue active treatment. Many participants expressed a desire to continue living for their loved ones, drawing emotional strength from these relationships, and adopting a proactive attitude toward treatment. As one patient noted, “Even though I was diagnosed with cancer, I still want to live. I want to eat what I enjoy, see the people I want to see, and just live freely (P7).”

For many participants, this determination was closely linked to family relationships. The patients described how their children and grandchildren reinforced their resolve to continue treatment aimed at prolonging their lives. One patient explained, “Seeing my children and grandchildren gives me a strong desire to live and strengthens my determination to continue treatment (P1).” Others expressed confidence in recovery based on prior health experiences, believing that successful past surgeries signaled their ability to overcome cancer. “I had heart surgery in the past and recovered well, so when I was diagnosed with stomach cancer, I decided to undergo surgery and recover again (P4).” Another added, “I’ve always been confident in my health. Knowing that my cancer could be removed laparoscopically

Table 2 Patient perspectives on treatment decision-making

Theme	Subtheme
Strong will to survive	• Hope for a continued for life • Determination to live for the family • Willpower driven by positive expectations of recovery
Trust in physician's judgement	• Confidence in doctor's medical expertise • Acceptance of doctor's judgement
Treatment-related psychological distress	• Uncertainty about one's ability to cope with treatment • Psychological trauma from past experiences
Focusing on quality of life in later years	• Prioritizing dignity over life extension • Desire to maintain independence
Family-centered decision-making	• Reliance on family judgement • Adherence to family guidance

Table 3 Family caregiver perceptions of treatment decision-making

Theme	Subtheme
Alleviating patient suffering	• Concerns about treatment-related adverse effects • Efforts to relieve cancer-related symptoms
Physical capacity of the patient	• Assessment of the physical resilience of the patient to treatment • Consideration of the patient's ability to maintain self-care
Preserving the dignity of the patient	• Honoring patients' wishes while fulfilling familial responsibilities • Prioritizing comfort over cure
Confidence in the expertise of the physician	• Trust in the patient-centered approach • Expectations regarding new treatments
Self-directed search for medical information	• Drawing on acquaintances and personal experience • Seeking information through the online and media sources

Table 4 Healthcare provider perspectives on treatment decision-making

Theme	Subtheme
Respecting and supporting patient autonomy in decision-making	• The patient's motivation and willingness to receive treatment • Consideration of the patient's personal values and life goals • Ensuring informed and valid decision-making
Assessing the capacity of the patient to tolerate treatment	• Physical ability to withstand treatment • Socioeconomic resources and support
Facilitating shared decision-making with patients and families	• Respecting both the patient and family perspectives • Ensuring sufficient time and explanation to support shared decisions
Tailoring treatment to the life priorities of the patient	• Clarifying patient's preferred life direction • Balancing life extension with quality-of-life considerations
Making safe and individualized treatment recommendations	• Balancing treatment risks with patients safety and clinical responsibility • Providing data-informed, individualized recommendations

made me feel less burdened and willing to proceed with treatment (P5)."

Theme 1.2. Trust in physicians' judgment Two subthemes were identified within this theme: confidence in doctors' medical expertise and acceptance of their judgment. Patients expressed strong trust in their physicians, which was based

on long-standing relationships developed throughout the treatment and decision-making processes. They believed that doctors had the clinical expertise to make the appropriate decisions and would always act in their best interests. One patient stated, "I believe I'm still alive today because of the doctor's precise judgment from the very beginning of my treatment. He provided thorough explanations and I have

complete trust in his medical expertise, given his extensive experience (P5).” Because of this trust, many patients relied heavily on their physicians and accepted treatment recommendations without hesitation. Some described agreeing to treatment decisions almost automatically, explaining that “When the doctor recommended surgery, I simply agreed and followed his advice without much thought. I believe the doctor knows best when it comes to a patient’s illness (P4)”. This reliance on physicians often reduced patients’ perceived decision-making burden.

Theme 1.3. Treatment-related psychological distress Two subthemes were identified: uncertainty about one’s ability to cope with treatment, and psychological trauma from past experiences. Older patients with cancer were often highly anxious about whether they could physically or emotionally withstand treatment. One participant said “When I was first diagnosed with rectal cancer, I said I wouldn’t have surgery. I was already 85 years old and I worried about how I could live with a stoma. I also have a sensitive stomach, so I was afraid that if I had to undergo chemotherapy, it would be too hard on me. I wasn’t sure if I’d be able to endure it. (P3).” This anxiety was frequently fueled by fear of unfamiliar suffering and by physicians’ explanations of potential adverse experiences. Some patients reported lingering psychological trauma from previous treatments, which caused long-lasting emotional and physical distress. One patient explained, “When I was first diagnosed with cancer, chemotherapy was an incredibly tough experience for me. I suffered from severe nausea and couldn’t eat. Now that my cancer has recurred and I need treatment again, I feel like I could never go through chemotherapy again. So I told my doctor that I preferred surgery instead (P7).” These past experiences led to strong hesitation to undergo similar treatments again, and such concerns played a major role in shaping decisions.

Theme 1.4. Focusing on quality of life in later years This theme included two subthemes: prioritizing dignity over life extension and the desire to maintain independence. Many older adults with cancer emphasized quality of life over longevity, favoring treatments that aligned with their personal values rather than those aimed solely at prolonging survival. One patient stated, “I feel that I’ve lived long enough. If treatment only causes pain, I don’t see the point. Even if I have just one more day, it should be lived with dignity. That’s why I prefer treatment that allows me to live without pain, even if it doesn’t extend my life (P3).” Another central concern was the preservation of independence. Participants described their ability to manage daily activities as closely tied to their identity and well-being, and many expressed a strong desire to avoid becoming a burden to their families. One patient stated, “What matters most to me is being able to live independently. I don’t want to rely on my children

for a long time. Even if my life is short, I want to cook, clean, and sleep on my own. If I were to lose my mind or become bedridden, I wouldn’t want to continue treatment (P7).” These perspectives shaped preferences for treatments that maintained function and comfort rather than those that risked compromising quality of life.

Theme 1.5. Family-centered decision-making This theme encompassed two key subthemes: reliance on family judgment and adherence to family guidance. Many older adults expressed deep trust in their family members and believed that their loved ones would act in their best interests. Consequently, treatment decisions were often delegated to family members, particularly when patients felt uncertain or emotionally overwhelmed. One participant stated, “If my family thinks something is a good choice, then I believe it’s good for me too. I usually agree with them because I trust that they always do their best for me (P4).”

In many cases, patients took a passive role, following decisions made by family members in consultation with healthcare providers and sometimes with limited understanding of the medical details. As one patient stated, “My children made the decision after talking with the doctor. I didn’t decide anything. I just went along with what they said (P3).”

2. Family caregivers’ perceptions in treatment decision-making

Five themes captured the perceptions of family caregivers in treatment decision-making, reflecting their focus on alleviating patient suffering, evaluation of patients’ physical capacity, efforts to preserve dignity, trust in physician expertise, and self-directed information seeking.

Theme 2.1. Alleviating patient suffering Two subthemes were identified: concerns about treatment-related adverse effects and efforts to relieve cancer-related symptoms. Family caregivers emphasized the need to minimize the patient’s suffering. Given the vulnerability of older adults, family caregivers expressed particular concern that treatment could lead to a further decline due to harmful adverse effects. One participant noted, “Because of the patient’s advanced age, I was worried that if she started chemotherapy and lost her appetite, her condition might quickly decline and worsen (FC3).” At the same time, family caregivers described making difficult decisions when cancer-related symptoms became unbearable. In such cases, alleviating pain and discomfort outweighed concerns regarding treatment risks. As one family member explained, “We struggled a lot over whether to proceed with chemotherapy. However, as the cancer progressed and her pain worsened, we decided to

proceed with chemotherapy, hoping it would help relieve her symptoms (FC2).” These experiences underscored symptom relief as a central factor in decision-making.

Theme 2.2. Physical capacity of the patient This theme included two subthemes: assessment of the patient’s physical resilience to treatment and consideration of their ability to maintain self-care. Family caregivers carefully evaluated whether older patients could physically tolerate treatment, taking into account frailty, comorbidities, and prior health experiences. One caregiver stated, “Because of her age, we had to consider whether her body could handle the treatment. We wanted to do everything possible to keep her alive; however, it ultimately depended on whether she was physically strong enough to endure it. Fortunately, she had been relatively healthy for her age, which gave us confidence in proceeding with treatment (FC6).” Beyond physical strength, caregivers also assessed whether patients could maintain independence during and after treatment. The ability to manage self-care without significant reliance on others was considered central to treatment planning. “What matters is whether the patient will be able to eat, wash, and use the bathroom on her own after treatment. Even if the treatment is effective, if they end up bedridden, unable to eat independently and wearing diapers, then it doesn’t feel worthwhile (FC9).”

Theme 2.3. Preserving the dignity of the patient This theme included two subthemes: honoring patients’ wishes while fulfilling familial responsibilities and prioritizing comfort over cure. Family members described a strong moral obligation to pursue available treatment, emphasizing that choosing not to receive treatment was not considered an option. One caregiver stated, “As human beings, we cannot give up on the patient’s life. What matters is whether the treatment can help preserve it. Thankfully, my mother also had a strong will to undergo treatment, which gave us further reason to support the decision (FC7).” Simultaneously, the goal was not necessarily complete recovery but rather the maintenance of stability and quality of life. Caregivers expressed hope that treatment would prevent further decline and enable patients to live as comfortably as possible. As one participant stated, “We were unsure about chemotherapy, but we agreed to proceed with treatment in the hope that, in the last five years of my father’s life, even a modest improvement in his quality of life could be achieved (FC5).” Another participant said, “I agreed to chemotherapy because I hoped that, during the time he had left, he could eat well, perform daily activities, and live as comfortably as possible (FC11).”

Theme 2.4. Confidence in the expertise of the physician Two subthemes were identified: trust in the patient-centered approach and expectations regarding new treatments. Family

members consistently expressed strong confidence in their physicians, particularly when treatment options were clearly explained and framed in the patient’s best interests. Trust was reinforced by direct communication and perceived professional competence. As one caregiver noted, “The doctor confidently explained that there was no reason not to continue chemotherapy. Based on that trust, we agreed to proceed with treatment (FC3).” Family members also expressed optimism regarding newer cancer therapies and technologies, perceiving them as less burdensome and potentially beneficial based on clinical trials. One participant noted, “We were told that this new chemotherapy has fewer side effects. That gave us hope and helped us make a decision on administration of the treatment (FC6).” Another shared, “Now he is participating in a clinical trial. We hope that this new treatment will have some benefit, even if modest (FC11).”

Theme 2.5. Self-directed search for medical information This theme comprised two subthemes: drawing on acquaintances and personal experiences and independently seeking information through online and media sources. Family members actively sought additional information to better understand available treatment options. Some relied on personal networks, including friends or relatives with experience managing cancer, to inform their perspectives. One caregiver explained, “My mother had seen me go through chemotherapy when I was previously diagnosed with cancer. Because of that experience, when she was diagnosed with cancer, she initially refused to undergo chemotherapy (FC7).” Others consulted digital platforms such as YouTube, online articles, and news reports. When making treatment decisions, information from these sources was considered alongside physicians’ explanations. As one participant explained, “There is a lot of information available, so I try to focus on YouTube lectures by trusted doctors. Because detailed explanations are often limited during hospital visits, these videos have been very helpful in informing treatment decisions (FC3).”

3. Perceptions of the healthcare providers about treatment decision-making

Five themes captured healthcare providers’ perceptions of treatment decision-making, reflecting their emphasis on patient autonomy, assessment of treatment tolerance, facilitation of shared decision-making, alignment of treatment with patients’ life priorities, and provision of safe, individualized recommendations.

Theme 3.1. Respecting and supporting patient autonomy in decision-making This theme included three subthemes:

patient motivation, personal values and goals, and informed decision-making. Healthcare providers emphasized that treatment outcomes were closely linked to patients' motivation and willingness to actively participate in their care. One healthcare provider noted, "One of the most important things for us is the patient's willingness to undergo treatment. Regardless of how effective the treatment was, we can only expect good outcomes if the patient is motivated and willing to continue (HCP 4)." They also considered the values and life goals of each patient during treatment recommendation. As one clinician explained, "These days, many patients prefer to spend the rest of their lives in comfort rather than endure the hardship of treatment. Understanding the direction the patient wishes to take in life is essential in the decision-making process. (HCP 10)."

In addition, healthcare providers frequently observed that patients and families had a limited understanding of the illness or treatment options, requiring clinicians to confirm their comprehension to ensure informed and valid decisions. One provider stated, "I try to understand why a patient chose a certain treatment—whether they discussed it with their family, what kind of information they reviewed, and whether they fully understood the implications of their decision. In many cases, I find that the patient and their caregiver have very limited understanding of the illness or treatment. That's why I make an extra effort to confirm whether they fully comprehend their decision (HCP 6)."

Theme 3.2. Assessing the capacity of the patient to tolerate treatment Two subthemes were identified: physical ability to withstand treatment, and socioeconomic resources and support. Healthcare providers emphasized the assessment of overall health, noting that older patients often had comorbidities, polypharmacy, and a higher risk of complications. One participant explained, "The patient's physical health is really important. Unexpected side effects or complications can become difficult to manage. So, regardless of age, what is crucial is whether the patient is in good condition and has the physical strength to handle treatment (HCP 2)." Another participant stated, "Their physical conditions are often more complex—they usually have multiple underlying diseases, take several medications with potential interactions, and are more vulnerable to side effects. This makes it harder to manage adverse events properly. That's why we must carefully assess their overall physical condition, which makes the treatment decision process more cautious and delicate (HCP 5)."

In addition to physical health, providers also considered socioeconomic factors and caregiving support particularly for patients living alone or dependent on family members. A provider highlighted that financial instability and limited social support could add an emotional burden to both patients and families, stating, "Many older patients,

especially those over 80, live alone and rely on their children for treatment support. When financial stability is lacking, both the patient and family may experience feelings of guilt or burden. That's why I always consider their economic situation and the availability of social support when recommending treatment (HCP 9)."

Theme 3.3. Facilitating shared decision-making with patients and families This theme comprised two subthemes: respecting both patient and family perspectives, and ensuring sufficient time and explanation to support shared decisions. Healthcare providers emphasized that older patients are highly heterogeneous in terms of comorbidities and overall health status, necessitating individualized and flexible treatment decisions. One provider stated, "When I see older cancer patients, I always tell them that there's no single right answer. It's important to understand what both the patient and their family are hoping for—their preferences are what I value most in the decision-making process (HCP 2)."

Providers emphasized the need to consider both viewpoints, noting that differences between patients and family members could complicate decision-making. They also highlighted that limited consultation time often constrained meaningful dialogue. As one clinician stated, "I recently had a case where the patient and family had different views on the scope of treatment. Even after several discussions, they couldn't reach an agreement. So even if the family says a decision has been made, I try to understand how that decision was established (HCP 1)."

Theme 3.4. Tailoring treatment to the life priorities of the patient This theme comprised two subthemes: clarifying patients' preferred life direction and balancing life extension with quality-of-life considerations. Healthcare providers observed that many older patients valued comfort, autonomy, and dignity over aggressive treatment. Clinicians emphasized the importance of understanding patients' core values and aligning treatment plans with those priorities. One provider emphasized, "For older cancer patients, I believe patient satisfaction is more important than simply treating the disease. I try to understand and support what they truly want and value (HCP 9)."

Healthcare providers also described conversations that focused on whether patients wished to extend their survival or prioritize comfort. Particularly in patients with limited curative potential, these discussions often influenced treatment direction. One clinician stated, "With older patients who have acute myeloid leukemia, treatment often doesn't lead to a cure. I try to have in-depth conversations to understand whether their priority is life extension or quality of life. Treatment direction is usually determined through these discussions (HCP 6)."

Theme 3.5. Making safe and individualized treatment recommendations This theme comprised two subthemes: balancing treatment risks with patient safety and clinical responsibility, and providing data-informed, individualized recommendations. Healthcare providers described a heightened sense of responsibility when their guidance substantially impacted treatment decisions, prompting careful consideration of potential risks and complications. One clinician explained, “Many older cancer patients have already surpassed average life expectancy, so deciding on a treatment plan often feels like being in a dilemma. Even small changes can lead to serious consequences. Therefore, it is crucial to anticipate potential side effects or complications in each individual patient. I also find it challenging to tailor treatment recommendations depending on whether the patient is in their 60 s, 70 s, or 80 s, as physical condition, prognosis, and treatment tolerance differ significantly across these age groups (HCP 8).”

Treatment recommendations were shaped by age, frailty, prognosis, and objective indicators, such as survival and complication rates. Given the complexity of older patients’ conditions and the limited likelihood of cure in some cases, providers emphasized thoughtful risk–benefit discussions tailored to each individual. As one provider stated, “Even if the treatment is not curative, older cancer patients can still derive meaningful benefit. We discuss what may bring greater value to their lives (HCP 6).” Surgical decisions were made with caution. One surgeon stated, “General anesthesia is always a concern, especially for older patients with multiple comorbidities. If radical surgery appears excessively aggressive, I opt for symptom-relieving procedures based on the patient’s operability. (HCP 7).”

Integration of different perspectives

Treatment decision-making for older patients with cancer is shaped by overlapping yet distinct perspectives from patients, family caregivers, and healthcare professionals. All groups emphasized the importance of preserving the quality of life and reducing suffering. However, each group navigated this priority differently. Older adults valued independence and dignity, yet often deferred decisions to their families or clinicians due to emotional vulnerability, uncertainty, or a fear of suffering. Family members, while deeply concerned about the comfort of the patient, frequently felt a moral obligation to act on their behalf and, thus, led decision-making. They strongly relied on the physicians’ expertise; however, many actively sought additional information to validate their choices. Healthcare providers emphasized clinical considerations, such as functional status and treatment tolerance, while striving to respect the values of both patients and families. However, the lack of clear

geriatric-specific guidelines and limited consultation times often constrained their ability to engage in thorough discussions. These intersecting, yet occasionally conflicting, perspectives highlight the need for structured communication strategies and system-level support to ensure collaborative and value-congruent decisions in geriatric oncology.

Discussion

This study provided an in-depth examination of treatment decision-making based on the experiences of older patients with cancer, their family caregivers, and healthcare providers. With an aging population, the prevalence of cancer in older adults is increasing; therefore, it is vital to consider age, health status, personal values, family involvement, and patient willingness. By exploring the perspectives of key stakeholders, this study revealed how treatment decisions are shaped, providing insights into real-world decision-making for patients aged 75 and older.

Older patients with cancer and their families prioritized quality of life over aggressive treatment, favoring options with fewer side effects and better symptom relief—aligning with prior findings in geriatric oncology [22]. Some patients initially hesitated because of concerns related to age or potential adverse effects; however, with guidance from caregivers or physicians, they proceeded with treatment and ultimately tolerated it better than expected. In this study, patients aged 74, 77, and 85 received oral chemotherapy or surgery with favorable outcomes, showing that, with proper support, older adults can benefit from treatment while maintaining comfort and dignity.

Many patients deferred treatment decisions to their families, reflecting the family-centered cultural context common in East Asia [11]. Although such delegation may shape decision-making processes, it also underscores the importance of supporting patient involvement when cognitive capacity is preserved. Providing clear, individualized information regarding treatment risks, benefits, and prognosis may help facilitate more informed participation [19]. As advances in cancer care have improved treatment outcomes for older adults [23], the need for tailored education and counseling has become increasingly evident. In this context, oncology nurse specialists may be well positioned to support patients and families by facilitating communication and promoting shared decisions. Cultural norms may influence the extent of decision delegation, and financial considerations may also contribute. Though not the main focus, few patients reported limited financial autonomy may partially shape reliance on family members in decision-making [24]. Future research is needed to further explore how cultural and economic factors interact in this context.

Family caregivers often played a key role in treatment decisions [25]; they consistently expressed a desire to minimize the suffering of the patient and ensure comfort. Although caregivers were concerned about potential adverse effects, they trusted the physicians' judgments regarding the patient's ability to tolerate treatment. They focused on explanations related to operability, expected outcomes, and possible risks, and actively searched for information online to assess whether the proposed treatment aligned with the patient's condition and values. These findings suggest that supporting family caregivers' health literacy and critical appraisal skills could be beneficial in facilitating informed decision-making.

Cancer care for older adults requires a comprehensive and individualized approach that extends beyond tumor-related factors. Considerations of functional status and treatment tolerance is important, and comprehensive geriatric assessment may help identify relevant clinical and social factors [26–28]. However, its routine use remains limited by practical constraints. Financial capacity and caregiving support may also influence access to care, particularly for older adults with limited support, underscoring the need for broader supportive frameworks.

Consistent with prior research [8], these findings indicate a strong reliance on physicians in treatment decision-making. Although patients and families generally trusted physicians, they often felt burdened by the lack of geriatric-specific guidelines. Participants expressed a desire for shared, individualized decisions while simultaneously considering patient preferences, functional status, frailty, prognosis, and treatment tolerance [19, 29]. Without standardized guidance, navigating these complex considerations can be challenging. These findings suggest that evidence-based guidelines and decision aids may help facilitate patient-centered decision-making and reduce the burden on physicians.

Strengths and limitations

This qualitative study examined treatment decision-making among adults aged 75 years and older with cancer by drawing on the perspectives of patients, family caregivers, and healthcare professionals. Using focus group discussions, the study explored a range of clinical, emotional, and social considerations that shaped decisions. By addressing an age group that remains underrepresented in oncology research, the findings contribute to a deeper, context-specific understanding of decision-making processes that may support more individualized approaches to care.

Several limitations should be acknowledged. The study was conducted in a single tertiary-care setting in South Korea, and the findings should be interpreted within this healthcare and cultural context. In addition, focus group interactions may have influenced how participants expressed

their views. The analysis also relied on retrospective narratives, and older participants may have experienced difficulties accurately recalling past experiences. Although the findings are not intended to be broadly generalizable, the use of purposeful sampling and systematic qualitative analysis strengthened the depth and credibility of the data.

Implications and recommendations

This study underscores the need to strengthen communication and shared decision-making among older patients with cancer, families, and healthcare providers. Healthcare systems should adopt patient-centered models tailored to older adults, including longer consultations, better information access, and age-specific guidelines. Supporting caregivers through education and resources can reduce their burden and enhance participation. As treatment decisions are especially complex for those aged 75 and older, these findings can guide more informed, collaborative care. A coordinated, compassionate approach involving all stakeholders is vital to improving outcomes for this vulnerable group.

Conclusion

This study offered important insights into cancer treatment decisions in older adults by exploring perspectives of patients, caregivers, and healthcare providers. Despite differing roles, all groups emphasized the importance of quality of life and minimizing suffering. These findings highlight the need for individualized, communicative, and ethical decision-making in geriatric oncology. Enhancing interdisciplinary collaboration, creating age-specific guidelines, and supporting family caregivers with education and resources are vital to aligning treatment with clinical needs and patient values.

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Data availability No datasets were generated or analysed during the current study.

Declarations

Ethics approval This study was approved by the Institutional Review Board of SNUBH (IRB file no. B-2402–880-302). All research was conducted in accordance with the Declaration of Helsinki.

Consent to participate Written consent was obtained from participants prior to data collection.

Competing interests The authors declare no competing interests.

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