

Original Article

Experiences and hidden needs of older patients, their families and their physicians in palliative chemotherapy decision-making: a qualitative study

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Received 6 November 2019; Editorial Decision 27 January 2020; Accepted 27 January 2020

Abstract

Objective: This study aimed to clarify the experiences and hidden needs of older patients with advanced cancer, their families and their physicians in palliative chemotherapy decision-making.

Materials and Methods: We conducted in-depth qualitative individual interviews with content analysis. Patients who were diagnosed as having advanced cancer, were aged ≥ 70 years ($n = 15$, median [range] = 77 [70–82] years) and had volunteered to receive palliative chemotherapy within the past 6 months were enrolled. Their families and physicians were also interviewed.

Results: The following four themes were identified: (i) physician's awareness of paternalism; (ii) readiness for communication of serious news; (iii) spiritual care need assessment and (iv) support as a team. The patients and families expected physicians to demonstrate paternalism in their decision-making because they were unconfident about their self-determination capability. Although the physicians were aware of this expectation, they encountered difficulties in recommending treatment and communicating with older patients. The patients had spiritual pain since the time of diagnosis. Psychological issues were rarely discussed during decision-making and treatment, triggering feelings of isolation in the patients and their families.

Conclusion: Older patients and their families expected a paternalistic approach by the physicians for palliative chemotherapy decision-making. The physicians found it difficult to offer treatment options because of older patient diversity and limitations in evidence-based strategies. Therefore multidisciplinary approaches and evidence-based decision support aids are warranted. Because older patients and their families often have unexpressed psychological burdens including unmet spiritual needs, medical professionals should provide psychological care from the time of diagnosis.

Key words: palliative chemotherapy, geriatric population, hidden needs, decision-making

Introduction

Currently, the number of older patients with cancer has been increasing (1,2). These patients have greater opportunities for decision-making in management strategies because of an increase in older patient-friendly treatments and improvements in health status (3,4). As treatment decision-making is an important process in the patient's overall illness experience, providing appropriate decision support to older patients with cancer is warranted for better oncology care.

The process of making treatment decisions is more complicated in older patients than in younger adults. Several factors including the differences in physical and psychological functions, unique values and preferences, family relationships and the lack of evidence in anticancer treatment increase the complexity of decision-making (5–10). Previous studies have explored the perspectives of older patients which include having a preference in their treatment decision-making (7,11,12). However, the findings vary and details are still unclear due to diverse populations.

In previous studies on decision-making by older patients, the significant role of family and physicians has been emphasized. Recent studies pertaining to decision-making among patients with cancer suggest that older patients are more likely to trust their physicians, accept their opinions and share the decision process with their families (13,14). Another study on patients with cancer reported a high frequency of conflict and disagreement in perceptions and perspectives of the patient–family–provider triad on treatment decision-making (15). Few studies have examined the experience and needs implicated in older patient triads regarding cancer treatment decision-making. Additionally, studies in the Asian population have not been conducted despite a strong family relationship and physician authority in Asian culture (16,17).

This study primarily aimed to evaluate the experiences and needs of older patients with advanced cancer, their families and their physicians in palliative chemotherapy decision-making.

Patients and methods

Study design

This study was designed as a qualitative study using in-depth interviews and was conducted at Nagoya University Hospital, Japan, from July to October 2017. We used the COREQ checklist to provide framework for the study (18). The study was approved by the Bioethics Review Committee of the Nagoya University School of Medicine (approval number 2017-0110-2) on 11 July 2017. All participants provided written informed consent.

Study participants

We screened the outpatients and inpatients with newly diagnosed advanced malignancies who were involved in treatment decision-making. We focused on patients with advanced malignancies because their attitudes become more receptive as condition worsens and as decisions become more complicated. This in turn leads to greater family and physician influence in treatment decision-making. The eligibility criteria were as follows: (i) age ≥ 70 years; (ii) confirmed decision to receive palliative chemotherapy within 6 months before study enrollment and (iii) no anticancer treatment before the current chemotherapy. We approached all patients who met the eligibility criteria and did not perform purposeful sampling. Eligible physicians were contacted and enrolled first; patient consent was then obtained. Each patient was asked to identify a primary caretaker involved in

Table 1. Patients characteristics

Characteristics	Value	(%)
Total	15	
Sex		
Female	10	(66.7)
Age (yrs)		
70–75	6	(40.0)
76–80	8	(53.3)
≥ 81	1	(6.7)
Median (years)	77	
Marital status		
Single/never married	2	(13.3)
Married	13	(86.7)
Primary site		
Pancreas	3	(20.0)
Lung	2	(13.3)
Breast	2	(13.3)
Gastrointestine	2	(13.3)
Others	6	(40.3)

their treatment decision-making. Although all 17 patients who met the eligibility criteria agreed to participate in the study, two male patients died before the interview; this may have contributed to the gender imbalance in the patient sample. In total, 44 participants (15 patients, 15 physicians and 14 family members) were enrolled. One patient (Patient10) declared that no family was involved in her decision-making. Table 1 summarizes the participant characteristics. Of the 15 patients, 4 (27%) were aged ≥ 80 years. All patients except two (Patient 4 and 10) were accompanied by their families to physician appointments at which treatment decisions were made. Family members included four spouses, three siblings, five children and one child-in-law. Among the interviewed physicians, four, nine and two exhibited a clinical experience of <10 , $10–19$ and ≥ 20 years, respectively (median: 13 years). The interviewed physicians were not certificated oncologists but organ specialists because the availability of oncologists in Japan is currently limited; instead, cancer clinical practice related to chemotherapy is generally overseen by organ specialists (19).

Data collection

In-depth interviews using interview guidelines were conducted individually with privacy protection. Table 2 summarizes the guidelines, and original versions are attached as a supplement. The guidelines included a review of previous studies and the experiences of the research group. The primary researcher (R.T.) performed all the interviews according to the guidelines and encouraged the interviewees to speak as freely as possible. In the interviews, the patients and family members were asked to describe how the physicians explained the purpose of chemotherapy in order to ensure that everybody involved understood that the chemotherapy was for a palliative purpose only. All participants were made aware of their incurability and informed that the chemotherapy was strictly palliative. The physicians were asked if they explained about the disease incurability and palliative purpose of the chemotherapy, and all of them answered positively. All interviews were conducted on the basis of this confirmation; therefore, it was ensured that the participants' narratives were related to palliative chemotherapy decision-making. During the interviews, talking about topics unlisted in the guidelines

Table 2. Summary of interview guidelines

For patient	For family	For physician
<ul style="list-style-type: none"> • History until cancer diagnosis • Feeling at diagnosis • Factors affecting decision-making • Difficulty in the process of decision-making • Concerns about the treatment and disease 	<ul style="list-style-type: none"> • Life history of the patient and family • Patient's health status until diagnosis • Feeling at diagnosis • Patient's reaction to the diagnosis • Process of decision-making (conflict, emphasis on self-decision) • Concerns about the treatment and disease 	<ul style="list-style-type: none"> • Years of experience • Detail of patient's disease • Disclosure content (for patient, for family) • Reaction of patient and family to diagnosis • Patient's attitude toward decision-making
<ul style="list-style-type: none"> • Satisfaction with physician's support 	<ul style="list-style-type: none"> • Satisfaction with decision 	<ul style="list-style-type: none"> • Physician's attitude toward chemotherapy suggestion • Physician's aim of treatment for older patients with advanced cancer
<ul style="list-style-type: none"> • Future perspective of treatment and life 	<ul style="list-style-type: none"> • Satisfaction with physician's support • Aim of chemotherapy • Future perspective of treatment and life 	<ul style="list-style-type: none"> • References used for choosing treatment • Knowledge about geriatric assessment • Difficulties in process of decision-making (compared with younger patients) • Future perspective of patient's disease

was allowed. All interviews were voice recorded and transcribed. The primary researcher (R.T) enrolled participants and collected data through interviews. When narratives that appeared in previous interviews were repeatedly observed in new interviews, the primary researcher and the third researcher (Y.H) discussed and stopped the enrollment of new participants.

Data analysis

The qualitative data obtained from interviews were analyzed by qualitative content analysis (20). First, the first author, the second author (M.S.) and three research assistants, including two oncology nurses and a qualitative researcher who had previously undergone chemotherapy, independently read the interview transcripts several times to completely analyze the data. Second, each member extracted the quotations verbatim that appeared to capture critical thoughts or concepts. Third, they cooperatively divided the extracted quotations into condensed meaning units. The condensed meaning units were abstracted and labeled with a code. These codes were used to examine differences and similarities and were sorted into sub-themes and themes that represented the overall content. Finally, the underlying meaning was formulated into a theme. The primary researcher (R.T), second researcher (M.S) and three research assistants jointly analyzed the data and resolved any disagreements through detailed discussions. The third researcher (Y.H.) intervened in all the analyses and approved the results to assure objectivity and validity.

Results

The analysis identified the following four main themes related to palliative chemotherapy decision-making in older patients: (i) physician's paternalism; (ii) readiness for communication of serious news; (iii) spiritual care needs assessment and (iv) support of the patient's whole life as a team. The summarized themes along with the meaning units are presented in Supplement B. Sub-themes and indicative quotes are presented in Table 3 and against each theme below.

Physician's paternalism

The patients preferred to follow physicians' recommendations rather than to struggle to make a decision with their limited understanding

and knowledge ('indifference to autonomy'). Some patients had fatalistic attitudes and staked their fate on the physicians or the hospital they chose ('stake the fate on a hospital and physicians').

I only followed the doctor ... Gathering information is too difficult for an older person like me ... The doctor is the only one I can rely on. (Patient 3)

The families also expected the physicians to lead the discussion because they were not confident about their knowledge and trusted the professionals' decision.

We had no choice but to leave it to the doctor. We are not professionals, don't have the knowledge to choose the best ... My mom didn't say anything to the doctor because she is reserved, but I asked him what we wanted to know. (daughter of Patient 11)

The physicians were aware that the patients and families expected them to lead their decisions, and they accepted it because they were afraid that older patients would make unreasonable decisions due to the lack of understanding or strong opinions of family members. The physicians had polarized opinions about decision-making support for older patients; some mentioned that it was less stressful because older patients are receptive and undemanding, but others voiced opposite opinions because deciding 'the best treatment' for older patients is difficult considering their diversity and the limited evidence available. In fact, most physicians felt uncertain about choosing the appropriate treatment for older patients with advanced cancer ('physician's struggle for decision'). No physicians used formal geriatric assessments and other tools because of the lack of time and knowledge. For more objective decision-making, they desired sufficient time and human resources to assess the patients comprehensively and needed more evidence-based, practical support tools such as cancer treatment guidelines or patient assessment tools.

Especially in an outpatient clinic, we never have enough time to talk about the details, so we have to learn as much as possible about the patient in a short time ... I hope we could have someone or something to help us, but there is no practical answer. (physician of Patient 15)

Table 3. Examples of theme, sub-theme and meaning unit emerged from content analysis of the study participants' quotes

Theme	Sub-theme	Meaning unit
Physician's paternalism	Indifference to autonomy	Whatever treatment I am going to undergo, there is no special goals because I have nothing left behind. Older people seem to be receptive and fatalistic. Families' opinions can be strong enough to threaten the self-decision of elderly patients.
	Stake the fate on a hospital and physicians	I was worried whether I should leave my life to this hospital. I am grateful that I could have been luckily involved in a good hospital from an early phase. The senior my husband respected said, 'If I were you, I follow the professional's opinion', and these words changed my husband's feeling. I believe it was right to choose this hospital.
	Physician's struggle for decision	I think that palliative chemotherapy is not as effective as expected despite its hardship. I want to treat as much as possible, regardless of the patient's age. I can estimate the patient's tolerance to chemotherapy only by a glance. I overlap my parents when I face an elderly patient. I need a standard anticancer treatment guideline for the older population.
Readiness for communication about serious news	Denial of disease	I have thought cancer is someone's business and never thought I would get it. When I turned 75, I received various documents from the government to become a 'legal' old person, and it made me uncomfortable. I feel my disease and treatment like something happening to someone else. Because I have been healthy until my age, I can't accept that I got incurable cancer.
	Readiness for receiving serious news	I want to know about my illness clearly. I am afraid to know the true condition of my disease. Serious news is significant for the family as well as for the patient. I prefer to receive a medical explanation before my mother because I don't want to give her a shock.
	Concern about understanding	If possible, I don't want to talk about negative news with my patient. My mother seems to forget inconvenient information such as life expectancy even though the doctor gave her explanation. The explanation of chemotherapy is too difficult for me to understand. I am not confident whether I can explain the treatment options so that older patients can understand accurately.
Spiritual care needs assessment	Spiritual pain of patients	I don't want to trouble any people because of my disease. I am upset because my relatives who know my disease try to do too many things for me. I cannot die because I still have things to do. My husband seems to choose his treatment with thinking of the families left behind.
	Goal of spiritual care	Since older people have their own values and philosophies on life and death, I try to respect them as much as possible when considering the treatment options. I hope my mother lives as she is until the end of life.
Support of the patient's whole life as a team	Empathy	I am always healed with the doctor's compassion. I feel relieved when someone listens to my feeling. I have persons who understand my suffering. My husband and I can understand what we think without words because we have always been together in our life. I feel lonely because I have no one to talk about my true heart.
	Supportive environmental assessment	Economic issues rarely emerge in medical discussions. I was disappointed when I noticed the treatment I wanted was not covered by medical insurance, although I had paid for it for a long time. The establishment of a supportive environment is essential for conducting safe chemotherapy in elderly patients.

Readiness for communication of serious news

All patients were made aware of the disease and its incurability. Several patients mentioned that they needed time to accept this reality and were not ready to make decisions before the treatment discussions ('denial of disease'). Most patients were not confident about decision-making skills, and hence, they were receptive to the physician's suggestions ('readiness for receiving serious news').

Because I still felt scared and nervous to see the doctor at that time, I couldn't say anything ... It was hard to understand and remember when she gave so much information. (Patient 10)

The need for information regarding their future (e.g. prognosis) varied depending on each patient's belief. Some patients desired to know an estimated prognosis to prepare for the end, whereas others did not because of the fear of knowing the truth.

I haven't asked the doctor the time left because it's scary to know ... It's better for me to continue the treatment with some hope. (Patient 9)

The families respected the patients' right to know and make self-decisions. Only one family (Patient 12's daughter) persuaded the patient to receive chemotherapy, although the patients did not desire to. Meanwhile, several families preferred to receive the negative news, such as short prognosis or treatment failure, before the patients because they did not want to expose the patients to psychological distress.

I should have asked the doctor the prognosis earlier without mom ... If so, I could have kept it a secret and protected her. (daughter of Patient 12)

The physicians felt difficulty in conveying distressing news to older patients because they were unsure about older patients' abilities such as understanding (*concern about understanding*). They decided what information to deliver and how to deliver it by considering the understanding and the preference of the patients and families. However, they voiced that in case of newly diagnosed patients, it was sometimes difficult to understand the patients and their families because of a relatively short patient-doctor relationship.

Because he looked reliable for his age, I explained the disease as I usually do for younger patients. But I'm not sure if it worked. (physician of Patient 9)

Spiritual care needs assessment

In the interviews, the patients referred to their spiritual pain they experienced since the time of diagnosis ('spiritual pain of patients'). The patients referred to the following spiritual factors: being a burden to others, loss of independence, change in body image, worries about family and isolation. They felt disappointed to have an incurable disease although they were proud of their health until then. Several patients tried to stay away from social relationships soon after diagnosis because they did not want to be seen as weak or miserable.

I thought I'd rather want to die than become a weak old person. (Patient 13)

Most patients voiced that they did not want to trouble others, especially their families, with the disease. Their compassion for the family members they would leave behind was so strong that it significantly influenced their decision policy.

I have no regret in my own life ... my only concern is that my wife will be left behind, so I must survive in any way ... but I don't want to spend much money for my treatment. (Patient 2)

The patients rarely expressed their feeling to their family members and physicians because of reservations. Some patients voiced that the physicians looked too busy and were only concerned about the treatment. The physicians and the families did not actively talk about the psychological issues, although they both hoped that the patients would live as they want with the best treatment ('goal of spiritual care'). As a result, the patients felt isolated.

I have no place to relieve my feelings ... I keep telling myself to be brave every night in my bed, while facing a silent ceiling. (Patient 7)

Support of the patient's whole life as a team

The patients were comforted by empathetic relationship they shared with their supporters, including their families and physicians ('empathy'). They needed someone who would understand or listen to them. Physicians played a significant role by providing support or encouragement to the patients despite the incurable nature of their disease and its severe side effect.

I was so sick and didn't have confidence to proceed ... but I decided to receive chemotherapy because the doctor said everything would be OK and I could do it. (Patient 10)

The families also showed sympathetic feelings toward the patients and tried to support them. Meanwhile, they concealed their negative feeling such as fear or sorrow from the patients and were sometimes depressed. Several families voiced that they were relieved to talk about their feelings in the interviews.

Honestly, I wanted mom to receive the treatment, but I didn't say anything because it's her life ... I just told her I'm always with (cries) ... I can't cry because I don't want to make mom nervous ... This is the first time I am telling someone my true heart. (daughter of Patient 13)

While the physicians hoped older patients would receive the appropriate treatment regardless of their age, they were concerned about the high risks and poor benefits of palliative chemotherapy in old age. They referred to the importance of a supportive environment to provide safe and successful chemotherapy to older patients and tried to confirm caregiving settings before treatment decisions ('supportive environmental assessment'). Financial issues were rarely discussed before the treatment.

Discussion

In this study, we evaluated the experiences and needs of older patients with advanced cancer, their families and their physicians

in palliative chemotherapy decision-making. The patients and their families showed an expectation for the physicians' paternalism and preferred to follow their recommendation. From the physicians' perspectives, the difficulty in recommending treatments and communicating with older patient was identified. The physicians suggested that the involvement of more medical staff or practical decision support tools would be helpful. Another important finding was unmet patient spiritual needs and family psychological distress they experienced since the time of diagnosis. Psychological issues were rarely discussed during decision-making and treatment despite the need for empathetic support toward patients and families. This triggered feelings of isolation in the patients and their families. The physicians found it essential to support many aspects of the older patient's life and to provide them with safe and successful chemotherapy.

Our finding of a preference for paternalism is consistent with that of previous studies, which described that older patients with cancer preferred a passive role in decision-making (7,8,11,21). These findings have been reported in both western and non-western countries, although autonomy is more emphasized in western cultures. It supports the theory that older patients with cancer may have a universal preference in treatment discussions regardless of their cultural background. Meanwhile, Elkin et al. (8) reported that the role preferences of older patients in the decision-making process were diverse and that physicians did not always correctly understand the patient's preferences. Therefore, physicians need to explore the patient's individual preferences through sufficient communication, rather than making routine judgments based on clinical background factors such as age and the cancer stage. Our findings regarding patients' perception about treatment decision-making differ from those reported by Sattar et al. (22), who conducted a similar study in older adults with cancer (aged ≥ 65 years) in the curative/palliative setting. They found that most older patients considered their treatment decision easy and preferred to play an active role in the decision-making process with a sense of autonomy. In contrast, the patients we interviewed preferred passive roles and accepted physicians' recommendations because they were unconfident about their self-determination capability. This discrepancy may be because this study targeted patients aged ≥ 70 years, including very old patients (aged ≥ 80 years) in a palliative setting. The older age and advanced disease may have decreased the patients' confidence and made them more receptive (23). It implies that the diversity in age or cancer stage in older patients also needs to be considered when providing decision support or designing future clinical studies.

Our study identified the physicians' difficulty in recommending treatment for older patients. This finding is inconsistent with a previous study that described that oncologists found it easy to decide palliative chemotherapy for older patients (13). This difference might be partly explained by the physicians' background; all study physicians were organ specialists who might have had different clinical experiences from that of oncologists. In this study, the physicians often had insufficient time and knowledge for decision support. This support is needed to help understand patients and build a relationship, especially in cases of newly diagnosed patients. This support is needed as it can have a great influence on the patient's decisions and other health outcomes, especially in older patients (24). Multidisciplinary approaches including oncology nurses or palliative care teams may help to understand patients and build a clinician-patient relationship, which can lead to better decision-making. As for our knowledge, because of the limited evidence-based resources regarding palliative chemotherapy for older patients, there is no

established consensus regarding treatment policies for older patients. Recently, a number of studies investigated the methods by which oncologists decide the treatment recommendations for older patients with cancer and showed that the treatment options offered to older patients were more diverse than those offered to younger patients; moreover, the options for older patients occasionally deviated from the guidelines (25). Although all physicians in the current study adhered to professional ethical codes and decided the treatment after sufficient discussion with other experts despite little evidence, during the process of discussion with the patients, personal senses such as individual experiences could have influenced their decisions. This was observed even for experienced physicians. Although anticancer treatment guidelines or patient assessment tools for older population exist, they are still being developed since this population has long been excluded from clinical studies (26–28). Additionally, a previous study showed that few oncologists routinely used formal geriatric assessment tools because of their inconvenience and a lack of awareness (29), consistent with the finding of our study. Further efforts are needed to improve their practicality and spread them to non-geriatricians.

All patients were made aware of the disease and its incurability, and the families respected the patients' right to know and make self-decisions. Traditionally in Japan, it is not common to tell older patients about serious diagnoses, and treatment decisions are often discussed only by the family and the physician because of strong family relationships or social prejudice against life-threatening diseases, such as cancer (30). Our results support the recent findings that discussion has become more open and patient-centered even in the older population (30,31).

While earlier studies showed that older patients with cancer have fewer needs for prognostic information (32,33), the patients in our study showed various preferences for prognostic information. The physicians in the present study informed the patients about their life expectancy only when asked by the patients. Besides, discordance between the patients and their families was observed because some families did not want the patients to know. A previous study of older patients with colorectal cancer described that physicians did not perceive patients' preference for prognostic information accurately, which led to fewer occurrences of prognosis telling (8). Although prognostic communication in western countries has been investigated in a number of studies (8,34), that in Asian countries remains unknown because of little information. Fujimori et al. investigated the communication preferences of Japanese patients for receiving bad news (35) and showed that the patients expected their physicians to elicit their preferences and facilitate the revelation of bad news. Considering this relatively passive attitude of Japanese patients, physicians should pay attention to explicit or implicit signals from patients and encourage them to ask questions, which leads to better understanding of individual information needs.

One of our important findings is that older patients experienced spiritual pain soon after cancer diagnosis. The contents of spiritual pain are similar to that of a previous Japanese good death study, which described that older Japanese adults valued not being a burden, felt compassion for their families and wanted someone who listens to them (33). However, we found a lack of the opportunity to discuss the psychological issues, including spiritual pain, throughout the study. Although it can be partly explained by the reserved attitude of older patients, it may also be attributable to the physicians' vested interest in anticancer treatment. In the early phase after cancer diagnosis, patients have higher psychological care needs because they have to cope with various difficult situations including cancer

diagnosis, treatment choice, change of life planning and the adverse events of anticancer treatment. The patients in our study described that 'the decision to continue the chemotherapy is more difficult than that to start' (Patient 10). It indicates that decision-making should be considered not as a one-time event but as an ongoing process. As previous studies showed that early multidisciplinary care is useful (36,37), continuous comprehensive care should be provided to older patients not only from the time of diagnosis but also during treatment.

Although the families were empathetic supporters, they often suffered from psychological burdens. This finding is consistent with previous studies that reported a high frequency of psychological burdens among cancer caregivers. In addition, older age of the patient and advanced disease have been described as precipitating factors for a caregiver's burden (38,39). In this study, both patients and families avoided discussions that involved emotional expression due to fear of increasing each other's anxiety and bothering the physicians, which enhanced their sense of isolation. A German study that examined patient-caregiver communication showed that limits on cancer-related communication decreased emotional and social well-being of patients and caregivers (40). Appropriate interventions to address miscommunication and psychological problems should be provided by medical professionals to improve coping skills and quality of life of families and patients (41).

The primary study limitation is that the population was limited to a single university hospital in Japan. The participants in this study were well-informed about their disease and incurability, the families were supportive of the patients, and the physicians were relatively young. These biases likely occurred because the study was conducted at a single university hospital, and they may have impacted the results. If this study was conducted in a nonacademic community hospital, the results may have been different. The interviewer (primary researcher) had no prior relationship with any of the patients or their family members and had no clinical involvement throughout the study. However, because the participating physicians and interviewer worked in the same hospital, a social desirability bias may have occurred during the interviews. Potential differences due to cultural background cannot be ignored when applying our results to other populations. Previous studies regarding decision-making of older patients with cancer have been dominantly conducted in western regions. Although we believe that this study is of value as the first Asian research to examine perspectives of the triad among older patients regarding treatment decision-making, further research is needed to elucidate the impact of cultural background on older patient decision-making. Because of the characteristics of the retrospective studies, recall and social desirability bias may influence the study results. As the study enrolled more female caregivers, the results may not have reflected male caregivers' perspectives. Although this inequality may reflect the fact that women are still the main family caregivers, the number of male caregivers has been increasing, especially in the geriatric population, because of the increase in the aging population and nuclear families (17). Future research should consider such demographic shifts in sex and generation.

Conclusion

This study identified that older patients with cancer and their families expect physician's paternalism in their palliative chemotherapy decision-making. The physicians struggled with offering treatment options because of the diversity of older patients and the lim-

ited evidence. Multidisciplinary approaches may help physicians in understanding their patients; additional evidence regarding anticancer treatment and decision support aids for older populations are warranted. Because older patients and their family have unexpressed psychological burden including spiritual pain, medical professionals should provide psychological care from the time of cancer diagnosis.

Acknowledgment

The authors would like to thank all the patients, families, physicians and research assistants who participated for their time and interest in the study.

Funding

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

Conflict of interest statement

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Authors' contributions

Conception and design: R.T. and Y.H. Data collection: R.T. Analysis and interpretation of data: R.T., M.S. and Y.H. Manuscript writing: R.T. Approval of final article: R.T., M.S., Y.H. and Y.A.

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