

# Decision-Making about the Place of Death for Cancer Patients: A Concept Analysis

Yoko Minamiguchi

Department of Nursing Science, Graduate School of Nursing, Osaka Medical College, Takatsuki, Osaka, Japan



**Corresponding author:** Yoko Minamiguchi, MSN, RN, CNS

Department of Nursing Science, Graduate School of Nursing, Osaka Medical College, Takatsuki, Osaka, Japan

Tel: 81-072-683-1221; Fax: 81-072-684-7282

E-mail: taiyouko3@gmail.com

Received: April 28, 2019, Accepted: July 08, 2019, Published: December 05, 2019

## ABSTRACT

**Objective:** The objective of the study was to conduct a concept analysis of “decision-making about the place of death for cancer patients” to develop a theoretical definition of the concept and identify its attributes, antecedents, and outcomes. **Methods:** The Rodgers’ evolutionary model of concept analysis was used. A literature search for papers published from 2000 to 2017 was conducted using the keywords: “cancer,” “place,” “death,” and “decision-making” for the search of the electronic databases. **Results:** Thirty articles were selected for this analysis. As a result, five attributes, six antecedents, and five consequences were extracted. [options to choose as a place of death], [wishes of the patients themselves], [consideration of the burden on the family], [open discussions with other persons concerned], and [best choice according to circumstances] are considered to be the characteristics in the decision-making about the place

of death for cancer patients. **Conclusions:** This concept is defined as “The best choice according to circumstances of the cancer patients among different options for a place of death, resulting from a careful evaluation of the wishes of these patients and the burden on the family, as well as through open discussions with other persons concerned.” Nurses need to assist patients discuss deaths with important others, such as family members, in making decisions about the place of death. Further studies are necessary to elucidate the details of the categories and relationships shown in the attributes in this study, investigating the actual conditions of the patients and their families.

**Key words:** Cancer, concept analysis, decision-making, the place of death

## Introduction

The concept of decision-making is important to understand human behaviors and social phenomena, and it is used in various fields in the social sciences. In the medical field, with the development of treatment methods, patients have more options for tests and

examinations, treatments, and places to die, and this has drawn attention to the decision-making of patients. Until the early 20<sup>th</sup> century, it was common to die at home, but since then places of deaths in hospitals have increased,

### Access this article online

#### Quick Response Code:



Website: [www.apjon.org](http://www.apjon.org)

DOI:  
10.4103/apjon.apjon\_38\_19

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** [reprints@medknow.com](mailto:reprints@medknow.com)

**Cite this article as:** Minamiguchi Y. Decision-Making about the Place of Death for Cancer Patients: A Concept Analysis. *Asia Pac J Oncol Nurs* 2019;7:103-12.

further expanding to hospices and other facilities, and patients are being asked to make decisions about the place of death.

Many terminal stage cancer patients attach importance to “death at a preferred place.”<sup>[1,2]</sup> Further, the agreement between the preferred place of death of the cancer patients and the place of eventual death has a positive effect on the quality of life of patients, as well as on the depression and grief of the bereaved.<sup>[3]</sup> For these reasons, it is important for cancer patients to make a decision of the place of death. However, previous studies have reported that cancer patients to experience mental conflicts in making decisions on the place of death,<sup>[4]</sup> and that there are cases where the preferred place of death does not coincide with the eventual place of death,<sup>[5]</sup> and it may be assumed that it is not easy for cancer patients to make a decision of the place of death.

Among previous studies,<sup>[6]</sup> performed a concept analysis on decision-making for the treatment of elderly cancer patients, and reported that “Patient decision-making refers to an ongoing process comprising complex cognitive, perceptual, affective, behavioral, and relational components by which individuals select an acceptable solution or a salient alternative concerning a health-related issue, influenced by interactions among individual and contextual factors, culminating in decisional outcomes, and postdecisional appraisals.” However, as it is reported that although the central player in decision-making about a place of death is the patients, such a decision will be made in relation to the family,<sup>[7,8]</sup> some patients may entrust the decision to the family due to poor medical conditions. Further, patients are likely to suffer mentally from the burden of making the decision because they have to face death when making decisions of the place of death. In addition, as it is often difficult for medical professionals to estimate how the physical conditions of terminal stage cancer patients will change, patients and family are required to make decisions of the place of death under time constraints with the uncertainties of changes in physical conditions.<sup>[9,10]</sup> Consequently, decision-making about the place of death is affected by a range of conditions such as how patients accept the physical conditions and death, the sense of value, relationship with the family, and cultural background and the medical system of the local community where the patients live.<sup>[8,11]</sup> As described above, decision-making about the place of death for cancer patients is a concept that has complicating characteristics.<sup>[8,12]</sup> At the same time, the situation of decisions of treatment is different from that of the place of death, and the conceptual characteristics of the decision-making about the place of death for cancer patients have not been established. For this reason, it

is necessary to define the conceptual characteristics of the decision-making by limiting the particulars of the decision-making to the place of death.

To enable this, this study aims to define the concept of decision-making about a place of death by elucidating the conceptual structure from the attributes that define the concept, antecedents that show the events occurring prior to the concepts, and outcomes for when the concepts are realized.

## Methods

### *Concept analysis model*

The study employed the concept analysis by Rodgers.<sup>[13]</sup> This method focuses on the changes in concepts over time and depend on situations and attempts to elucidate the characteristics of the concepts involved. The concept of decision-making about a place of death for cancer patients is influenced by changes over time, such as in medical and social conditions, views held by the individuals, and values related to death and life of patients, and also on cultural backgrounds. For this reason, we thought that this method based on the idea that concepts vary depending on the context characteristics, including time, culture, and ethnic background, would be suitable.

According to the steps of Rogers,<sup>[14]</sup> we performed analyses as follows: (1) Identify the concept and associated expressions (including surrogate terms); (2) Identify and select an appropriate realm (setting and sample) for data collection; (3) Collect data relevant to identify: (a) the attributes of the concept and (b) the contextual basis of the concept, including interdisciplinary, sociocultural, and temporal (antecedent and consequential occurrences) variations; (4) Analyze data regarding the above characteristics of the concept; (5) Identify an exemplar of the concept, if appropriate; and (6) Identify implications, hypotheses, and implications for further development of the concept.

### *Literature review*

The concept of decision-making about a place of death for cancer patients has been used since early 2000. For this reason, we decided to search articles published between 2000 and 2017. We searched the Scopus, CINAHL Plus, MEDLINE, and Ichushi Web databases for original articles in medical, nursing, and psychological, and social science fields using the combinations of keywords “neoplasms OR oncology OR cancer,” “death OR end-of-life,” “place OR location OR site,” and “decision making,” and retrieved 400 articles for all the fields. Of these, we selected 20 articles from among the identified articles by excluding 334 articles that had no descriptions about the decision-making about a place of death,

six articles that focused on childhood cancer patients and their parents, three articles focusing on noncancer patients, and one article focusing on cancer patients with developmental disorders, 27 case study reports, and nine articles addressed at only medical professionals. Adding ten articles from a manual search using commonly known literature and cited articles to the twenty, we reviewed thirty articles<sup>[7-11,15-39]</sup> in total.

### Data collection and analysis

We extracted attributes that show the nature of the concept, antecedents that show the events occurring prior to the concepts, and outcomes that show the events resulting from the occurrence of the concepts in a coding sheet. From the articles that focused on the families of cancer patients, descriptions concerning the situations of cancer patients were extracted. Dividing the descriptive data of antecedents, attributes, and outcomes into codes (one code per meaningful context), and evaluating similarities and dissimilarities of the codes, and classified the codes into subcategories and categories. Based on the results, we defined the concept of decision-making about a place of death for cancer patients and created a conceptual diagram structuring the relation of antecedents, attributes, and outcomes. To ensure the validity of the analysis, the entire process of the analysis was supervised by researchers specializing in oncology nursing.

## Results

Employing Rodgers' concept analysis approach, the attributes, antecedents, and outcomes shown in Figure 1 were extracted as the concept of decision-making about a place of death for cancer patients. Categories are indicated with square brackets ([ ]) and subcategories with angular brackets (< >).

### Attributes

Five categories and 15 subcategories were extracted as attributes to the decision-making about a place of death for cancer patients [Table 1].

### Options to choose as a place of death

As <Options to choose as a place to die>, "Hospital," "Home," and "Hospice" have been reported.<sup>[15,16]</sup>

### Wishes of patients themselves

This category includes the following subcategories: <Relief of pain symptoms>, including pain and anxiety,<sup>[8,11,17-19]</sup> availability of <Support for daily living> such as voiding assistance,<sup>[9,10,17]</sup> <Maintaining life as the patient wishes><sup>[8,9,18,20-24]</sup> such as wishing to stay at the present home,<sup>[8,18,20,21,24]</sup> and <Reliable family and medical professionals><sup>[8,18,20-22,24]</sup> such as wishing to stay with the family at home.<sup>[8,20,22,24]</sup>

### Consideration of the burden on the family

Cancer patients conducted <Assessment of care skills of the family><sup>[9,10,21,22]</sup> and were concerned about the burden on the family,<sup>[8-11,19,21,23,24]</sup> wishing not to impose a burden on family members. Patients also gave consideration to the balance between their own wishes and the burden on the family, hoping that their wishes would be realized without imposing any serious burden on the family,<sup>[10,11,18]</sup> and trying to strengthen the relationship with the family while thinking that this may become a burden on the family.<sup>[11]</sup>

### Open discussions with other persons concerned

In making decisions of a place of death, the cancer patients had an open discussion with important others, such as family members and medical professionals. In the discussion with family members, patients tried to <Confirm the wishes of the family members><sup>[9,18,21,25]</sup> and <Understand the feelings of both the patients and the family members>.<sup>[9,24]</sup> In discussions with medical professionals, patients were given <Explanations and proposals of medical professionals> through discussion based on information provided by medical professionals<sup>[26]</sup> and engaged in <Sharing opinions with medical professionals> by confirming the differences in perceptions of life expectancy and place.<sup>[15,24]</sup>

### Best choice according to circumstances

Patients made <Choices according to circumstances>,<sup>[9,10,18,27]</sup> such as selecting the best place considering the changes in disease conditions.<sup>[9-11,18,27,28]</sup> However, many cases were faced with difficult choices.<sup>[28]</sup> Further, there are <Decisions that value the wishes of both of patients and family members>, as a result of patients thinking about the matters together with their family,<sup>[19]</sup>

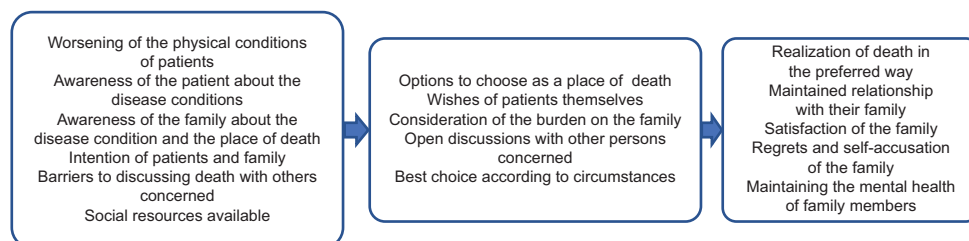


Figure 1: Decision-making about the place of death for cancer patients: Attributes, antecedents, and outcomes

Table 1: Attributes to decision-making about the place of death for cancer patients

Category	Subcategory	Code	Reference
Options to choose as a place of death	Options to choose as a place of death	Options of a place of death include "hospitals," "home," "hospice," and "nursing home"	15, 16
Wishes of patients themselves	Relief of pain symptoms	Patients can receive palliative care from medical professionals at home	8
		Hospitals and hospices can alleviate pain symptoms. Hospitals and hospices can alleviate pain symptoms	8, 11, 17-19
	Support for daily living	Families can entrust medical professionals with support of activities in daily life	10, 17
		Patients can rely on help about voiding from medical professionals	9
	Maintaining life as the patient wishes	Patients wish to stay at their own home	8, 18, 20, 21, 24
		Patients can maintain their usual lifestyle at home	8, 18, 20-24
		Wish to be in a hospice where there is as much privacy as they like	21
		Wish to die in a beautiful and relaxing hospice	18
		Families can maintain their usual roles	9, 24
	Reliable family and medical professionals	Wish to stay at home with family members	8, 20, 22, 24
Wish to die surrounded by family members		21	
There are medical staff and volunteers like the family in hospices		18, 21	
Have people who can always share emotions nearby		21	
Consideration of the burden on the family	Concerned about the burden on the family	Wish not to impose a burden on family members	8-11, 19, 21, 23, 24
		Patients wish not to leave families with memories related to death	18
		Location of the hospital is convenient for families	19
		Economic burden is smaller	19
		Patients hope that their wishes would be realized without imposing any burden on the family	10, 11, 18
		Try to strengthen the relationship with the family while thinking that it could become a burden on the family	11
	Assessment of care skills of the family	Family members of patients can help them at home anytime	21
		Assess whether patients can have adequate nursing care by family members at home	9, 10, 22
		Assess the limitations and possibilities of family care	21
		Assess the limitations and possibilities of family care	21
Open discussions with other persons concerned	Confirm the wishes of the family members	Confirm the intention of families through discussion with them	9, 21, 25
		Discuss with families and find good ways for everyone	18
	Understand the feelings of both the patients and the family members	Discuss with family members and understand feelings of all parties	9, 24
	Explanations and proposals of medical professionals	Accept proposals of physicians on a place of death	15
		Discuss with the medical professionals based on information provided	26
	Sharing opinions with medical professionals	Eliminate gaps in understanding about life expectancy and place to die between patients and medical professionals	15, 24
Discuss with patient and family including medical professionals		24	
Best choice according to circumstances	Choices according to circumstances	Choose the best place considering the changes in disease conditions	9, 10, 18, 27
		Make a difficult choice when there is no other way	28
		Choose the best place for patients and people around them	11
	Decisions that value the wishes of both patients and family members	Decide considering the best way for both patients and their families	18
		Patients and their families decide a place together	19
	Decisions that value the wishes of patients	Patients and their families decide a place together to realize the wishes of the patients	21
		Patients explain their thoughts and the family members will accept them	19

and selecting the best choice for both parties.<sup>[18]</sup> There are also <Decisions that value the wishes of patients>, where patients and family members decide to support the patient wishes<sup>[21]</sup> and that patients explain their ideas convincingly to the family members.<sup>[19]</sup>

### Antecedents and outcomes

Six categories were extracted as antecedents for a place of death for cancer patients [Table 2].

Cancer patients were in the situation where they need to make decisions of a place of death due to [Worsening of the physical conditions of patients], such as <Situations where there is no response to invasive treatment>,<sup>[15,29]</sup> <Declining physical functioning>,<sup>[24,30]</sup> and <Appearance of pain symptoms>.<sup>[8,10,29,30]</sup> A place of death was agreed on when the disease conditions coincided with an [Awareness of the patient on the disease conditions], such as <Understanding of that the disease condition is worsening><sup>[9,19,23,24]</sup>



Table 2: Antecedents for decision-making about the place of death for cancer patients

Category	Subcategory	Code	Reference
Worsening of the physical conditions of patients	Situations where there is no response to invasive treatment	No options for invasive treatment left	15, 29
		Declining physical functioning	24, 30
		Appearance of pain symptoms	8, 10, 29, 30
Awareness of the patient about the disease conditions	Understanding of that the disease condition is worsening	Think about where to spend terminal period understanding that the disease condition is deteriorating	9, 23
		Unable to think about where to spend the terminal period and not accepting the disease condition	19, 24
	Difficulty in predicting the physical changes	Patients cannot easily make a choice because it is difficult to predict the physical changes until death	9, 10
	Acceptance of death	Convinced that death is approaching	8, 21, 23
		Complex feelings but not convinced that death is close	16, 24
Awareness of the family about the disease condition and the place of death	Understanding of the family about the disease condition	Families are confused because the understanding of the medical condition of the family and medical professionals differ	24
	Acceptance of the family of death of patient	Families face the fact that the death of the patient is close	28, 30
	Understanding of the family on a place of death	Families accept that patients cannot continue hospitalization	24
Intention of patients and family	Attitudes toward the decision of patient and family	Families understand the options of a place to spend the terminal period	31
		Patients have positive attitudes and determination in decision-making	8, 11
	Experience of care which patients received in the past	There are cultures where families play an important role in decision-making	7, 28
		Wishing to have the attending physician provide the end-of-life care	24
	Cultural and religious values of patients	Previous places where patients were cared for affect the decision of the place of care and death	10, 18, 22, 24
		Cultural significance in dying at home	7
		Cultural values concerning nursing care affect the decision	10
	Thoughts of the family hoping to support the wishes of the patients	Religious beliefs affect the decision	10
		Families wish to realize the desires of patients wishing to die at home	21, 24, 29
		Families undertake nursing care to realize the wishes of patients	10, 29, 30
Differences in the intentions of patients and family	Families wish to let patients live in a free and comfortable environment	24, 30	
	Patients and families will have different opinions concerning the place of death, and how to spend the terminal period	7, 17, 28, 29	
	It is difficult to speak frankly with the family because the burden on the family increases	9	
Barriers to discussing death with others concerned	Difficulty for the patient and family to talk about a place of care and death	Because patients are not informed of their life expectancy, it is difficult to talk frankly with their families	28, 29, 37
		It is difficult for patients to talk about medical topics with medical professionals	10, 16
	Difficulty for the patient to talk about the disease conditions and death with medical professionals	It is difficult for patients to talk about expert medical issues with medical professionals	16
		Medical professionals make the idea of patients on death ambiguous	9, 15
		Medical professionals are concerned about the emotional response of patients to the approaching death	16
	It is difficult for medical professionals to discuss with patients because of the difficulty in predicting the prognosis and course to death	16	
Social resources available	Nursing care services at home	It takes time to arrange services to stay at home	29, 30
		Patients will require support from medical professionals at home as the disease conditions worsen	21
		Availability of support from medical professionals at home is limited	9
		Availabilities of 24 h services by visiting nurses and nursing care staff, frequency of visits by a doctor, and availability of parenteral drugs affect the death at home	33
		Availability of 24 h services by visiting nurses and the length of the nursing care services at home affect the death at home	34
	Characteristics of community	Fewer people desire death at home in densely populated communities	25, 27, 32
		It is common to die at home in wealthy communities	20
	Medical professionals patients can consult with	Patients can consult with medical professionals about palliative care	36
		There is a key medical professional	35
		Patients can consult with medical professionals about decision-making	11
	Support from the family	Patients need support from the family to stay at home	10, 17
		Families are aware of roles concerning nursing and end-of-life care	28, 37
		Males prefer to die at home	27
		Families can take care of patients because they have experience of giving end-of-life care for other family members	9, 24
		Families feel uneasy about taking care of patients at home and providing end-of-life care	28, 37
Families cannot take care of patients at home because of their work and health conditions		29, 37	
Information on social resources	Information on the facilities providing end-of-life care is needed	21	

and <Acceptance of death>.<sup>[8,16,21,23,24]</sup> In cases where family members are involved in the decision-making about a place of death, patients made the decision when the disease conditions coincided with the [Awareness of the family about the disease condition and the place of death], such as <Understanding of the family about the disease condition><sup>[24]</sup> and <Understanding of the family on a place of death>.<sup>[24,31]</sup> It is reported that there is a tendency in cultures that patients have positive attitudes and determination<sup>[8,11]</sup> and that the family plays an important role in decision-making.<sup>[7,28]</sup> From this background, the [Intention of patients and family] for a place of death involves the following subcategories: <Attitudes toward the decision of patient and family>,<sup>[7,28]</sup> <Experience of care which patients received in the past>,<sup>[10,18,22,24]</sup> <Cultural and religious values of patients>,<sup>[7,10]</sup> <Thoughts of the family hoping to support the wishes of the patients>,<sup>[10,21,24,29,30]</sup> and <Differences in the intentions of patients and family> related to the place of death and how the patient spends time till the end of life.<sup>[7,17,28,29]</sup> As [Barriers to discussing death with others are concerned], there were situations where patients and family cannot talk openly due to the <Difficulty for the patient and family to talk about a place of death>.<sup>[9,24,28,29]</sup> There were also situations where the decision-making did not proceed due to <Difficulty for the patient to talk about the disease conditions and death with medical professionals><sup>[9,10,15,16]</sup> as illustrated by the reports that it is difficult for patients to ask medical professionals about medical matters,<sup>[10,16]</sup> and that medical professionals make the ideas of patients on death ambiguous.<sup>[9,15]</sup> Further, as [Social resources available], <Characteristics of community>,<sup>[20,25,27,32]</sup> <Nursing care services at home>,<sup>[9,21,28,29,33,34]</sup> <Medical professionals patients can consult with>,<sup>[11,35,36]</sup> and <Support from the family><sup>[9,10,17,24,27-29,37]</sup> were extracted.

Five categories were extracted as outcomes of the decision-making about a place of death for cancer patients [Table 3]. [Realization of death in the preferred way] is illustrated by <Death at the place the patient preferred><sup>[26,38]</sup> and <Mental stability of patient>.<sup>[21,24]</sup> With the time spent together by patient and their family members at home, patient [Maintained relationship with their family].<sup>[21,30]</sup> [Satisfaction of the family]<sup>[30,37]</sup> is illustrated by the report that family members felt it accomplished by providing nursing care for the patient,<sup>[37]</sup> and [Regrets and self-accusation of the family] is illustrated by the report that the family felt regret and self-accusation because they did not look after the patient at home.<sup>[10]</sup> [Maintaining the mental health of family members]<sup>[38,39]</sup> was extracted from the report that the family became less depressed when the patient died at a place preferred.<sup>[38]</sup>

### **Related concept**

From the articles analyzed, “Advanced Care Planning” was extracted as a concept related to decision-making about a place of death. It was reported that through the advanced care planning, the preference of the place of death was discussed,<sup>[33]</sup> and the discussion for decision-making about the place of death continue till finalization of advanced care planning.<sup>[8]</sup> These suggest that advanced care planning is reflected in the decisions made for the place of death.

### **Example presented by a case**

After undergoing treatment for 10 years, and with no treatment options left, Jane, a breast cancer patient aged 53, faced the necessity to make decisions on palliative and life-sustaining treatments. When Jane had to decide where she would spend the days left to her, she had <Options to choose as a place to die>: stay at home with undergoing hospice care and at special nursing care home or hospice. At the same time, she had to make a decision of life-sustaining treatments, including cardiopulmonary resuscitation and admission to the hospital or intensive care unit. Jane wanted to spend the final days as she wished, but she had [Wishes of patients themselves], such as hoping to live much longer and spend time with husband and daughters at home while giving [Consideration of to the burden on the family] because she will impose a burden on her husband and daughters who look after her. However, Jane thought that if she chooses hospice, she would not be able to live as she wishes and thinks about death more fully. The family of Jane hoped that she would receive the best care so that Jane’s wishes would be granted. For this reason, Jane repeatedly had [Open discussions with other persons concerned], such as with husband, daughters, physicians, and nurses, and Jane made a decision to make the [Best choice according to circumstances], living in a hospice as the best place for Jane, while sharing the emotions and thoughts with her family.<sup>[12,40]</sup>

## **Discussion**

### **Definition of concept**

Based on the attributes, antecedents, and outcomes extracted in this study, we defined the decision-making about a place of death for cancer patients as “The best choice according to circumstances of the cancer patients among different options for a place of death, resulting from a careful evaluation of the wishes of these patients and the burden on the family, as well as through open discussions with other persons concerned.”

### **Characteristics of the concept**

Here, we discuss the characteristics of the concept of decision-making about a place of death for cancer

Table 3: Consequences of decision-making about the place of death for cancer patients

Category	Subcategory	Code	Reference
Realization of death in the preferred way	Death at the place the patient preferred	Patients die at their preferred place	26
		Patients who die in a desired place had a high score in the good death inventory	38
	Mental stability of patient	Patients can stay in comfort	21
		Patients can stay well adjusted at home	24
Maintained relationship with their family	Ensure time for patients and family members to spend together	Patients and family can stay together at home	21, 30
Satisfaction of the family	Accomplishments of family toward nursing care	Families feel accomplishment from administering patients with the nursing care	30
	Consent of family to the decision on a place	Families feel convinced that the decision was the best choice	10
Regrets and self-accusation of the family	Regrets and self-accusations of the family arising from the end-of-life care	Families feel regrets and self-accusation when they cannot take care of patients at home	38
Maintaining the mental health of family members	Decrease in grief and feelings of depression of family members	Families feel less depressed when patients die at their preferred place	38
		Families feel less grief when patients die at their preferred place	39
		Families feel less of grief and depression when they have been less burdened in decision-making for a place	29

patients, focusing on the [Wishes of the patients themselves], [Consideration of the burden on the family], and [Open discussions with other persons concerned]. These are considered to be attributes characteristic to the decision-making about a place of death for cancer patients because they were characteristics not clearly reported in the previous studies that performed a concept analysis of decision-making.<sup>[6,41]</sup>

Simon<sup>[42]</sup> mentions that options are evaluated and compared in decision-making. It may be inferred that the cancer patients evaluate and compare options of a place of death, and make a decision of a place based on their wishes, such as to have support for alleviation of pain symptoms and activities in daily living, to be able to live in ways they prefer, have family members and reliable medical professionals, and be less of a burden on the family. Miyashita *et al.*<sup>[43]</sup> report that the concept of a good death for cancer patients in the terminal stage includes “physical and mental afflictions being alleviated,” “staying in a quiet environment,” “keeping a good relationship with family and friends,” “having reliable physicians and nurses,” and “not imposing a burden on family and other people.” These were in common with the attitude of cancer patients in the terminal stage contemplating their own wishes and the burden on their families. This suggests that contemplating options of a place of death based on their own wishes and the burden on the family and making the decision may lead to a [Realization of death in the preferred way] and [Satisfaction of the family]. Therefore, it is important for nurses to discuss with patients to be able to understand what the patients place importance on in making the decision of a place of death. However, where it is difficult to balance the wishes of the patient and the elimination of the burden on the family, patients need assistance because such difficulty may affect

[Regrets and self-accusation of family] and [Maintaining the mental health of the family members].

Further, when cancer patients in the terminal stage make decisions of a place of death, they conducted [Open discussions with other persons concerned], such as family members and medical professionals. This type of decision-making has to be performed in a situation with uncertainties of the outlook of the medical condition of the patient, difficulty in sharing the inevitability of death among the patient, family, and medical professionals in a short period of time. For this reason, it is indispensable for the three parties to discuss openly to enable the [Best choice according to circumstances]. As an antecedent [Barriers to discussing death with others concerned] was also found, it may be inferred that talking about death openly may be difficult. However, it is indispensable for the three parties to face and talk about the death of the patient and the sorrow arising at the death to ensure a [Best choice according to circumstances] and [Realization of death in the preferred way].

### Review of applicability to practice

As the applicability of the findings to practice, we first discuss the details of antecedents and outcomes. Nurses can utilize the concepts extracted as antecedents for a viewpoint of assessments to assist cancer patients in the terminal stage in making the decision of a place of death. It was suggested that the decision-making about a place of death may need to be conducted repeatedly depending on the changes in physical conditions because it is related to the [Worsening of the physical conditions of patients]. Further, nurses need to assess how patient and family understand the disease conditions and how they think about death because decision-making about a place of death for cancer patients is related to the [Awareness of patients

about the disease conditions] as well as the [Awareness of the family about the disease conditions]. If cancer patients and their families are not aware of the disease conditions, they may not be able to understand the necessity for making decision of a place of death, and there may be cases where patients and family are afraid of facing death.<sup>[44,45]</sup> This makes it necessary for nurses to pay careful attention in encouraging patients to understand the disease conditions. For a [Realization of death in the preferred way] and a [Maintained relationship between patients and their family], extracted as outcomes can be used as an index when nurses evaluate the decision made by patients together with the patients. However, it is necessary to keep in mind that there will be cases where evaluation of patients is difficult due to the poor conditions of the patient and that the result of decisions by patients may affect the [Satisfaction of the family], [Regrets and self-accusation of the family], and [Maintaining the mental health of family members], as well as that of the patients, depending on the time of the evaluation. Nurses must pay careful attention to the bereaved family of patients specifically when the patients are unable to die at a preferred place, because the family members may feel regret and suffer from self-accusations, feeling grief, and depression as a result.

Next, as an important point which nurses have to keep in mind when assisting cancer patients in making the decision of a place of death, we discuss the assistance to patients and their families who are unable to communicate sufficiently with medical professionals. In decision-making about a place of death for cancer patients, [Open discussions with other persons concerned] is an important element. However, there are [Barriers to discussing death with others concerned]. It is difficult for patients who are not informed of the life expectancy to talk about a place of death with the family, and it is also difficult for patients and medical professionals to talk about the disease conditions and death. These difficult situations make it difficult to make a decision of a place of death. Traditionally, it was uncommon for medical professionals in Japan to inform families, instead of patients themselves, of patient life expectancy, and leave the decision to inform the patients of the life expectancy to the family.<sup>[46]</sup> However, in recent years, this tradition to inform the families of the life expectancy of their beloved family member has changed, and according to Ichikura *et al.*,<sup>[47]</sup> “the likelihood of doctors delivering bad news to patients and family members (as opposed to family members only) about the end of life increased from 2006 to 2012.” For this reason, nurses need to attend to cancer patients in a faithful manner, and understand what and how much the patients want to know in making decisions of a place of death. Further, when families play an important role in

making decisions for cancer patients, nurses need to identify the relationship between patients and their families and family functions,<sup>[48]</sup> and also need to assess the wishes of the families as well as of the patients. If the patients and their families have different wishes, it is necessary to provide assistance to accommodate the feelings and thoughts of patients and their families.

## Conclusion

This study conducted a concept analysis of the decision-making about a place of death for cancer patients using thirty articles published in Japan and other countries. As a result, five attributes, six antecedents, and five outcomes were extracted, and this concept is defined as “The best choice according to circumstances of the cancer patients among different options for a place of death, resulting from a careful evaluation of the wishes of these patients and the burden on the family, as well as through open discussions with other persons concerned.” Nurses need to assess the intentions of and relationships with patients and family and provide assistance for cancer patients so that they will be able to discuss a place of death with their family and other persons concerned, as well as express their own feelings and ideas, and reach a mutual understanding. Further studies are necessary to elucidate the details of the categories and relationships shown in the attributes in this study from the experience of patients and their families, and to develop a support model that will help cancer patients in the terminal stage of their illness and their families to make decisions of a place of death.

## Acknowledgments

I would like to express the deepest appreciation to Prof. Kumi Suzuki, Prof. Yasuhiro Tsuda, Prof. Kazuko Matsugi at Osaka Medical College Faculty of Nursing for their supervision on writing this paper.

## Financial support and sponsorship

This study was financially supported by The Yuumi Memorial Foundation for Home Health Care.

## Conflicts of interest

There are no conflicts of interest.

## References

1. Hirai K, Miyashita M, Morita T, Sanjo M, Uchitomi Y. Good death in Japanese cancer care: A qualitative study. *J Pain Symptom Manage* 2006;31:140-7.
2. Steinhauer KE, Christakis NA, Clipp EC, McNeilly M, McIntyre L, Tulsky JA. Factors considered important at the end of life by patients, family, physicians, and other care providers. *JAMA* 2000;284:2476-82.
3. Kinoshita H, Maeda I, Morita T, Miyashita M, Yamagishi A, Shirahige Y, *et al.* Place of death and the differences in patient



- quality of death and dying and caregiver burden. *J Clin Oncol* 2015;33:357-63.
4. Murray MA, O'Connor A, Stacey D, Wilson KG. Efficacy of a training intervention on the quality of practitioners' decision support for patients deciding about place of care at the end of life: A randomized control trial: Study protocol. *BMC Palliat Care* 2008;7:4.
  5. Bell CL, Somogyi-Zalud E, Masaki KH. Factors associated with congruence between preferred and actual place of death. *J Pain Symptom Manage* 2010;39:591-604.
  6. Strohschein FJ, Bergman H, Carnevale FA, Loiselle CG. Patient decision making among older individuals with cancer. *Qual Health Res* 2011;21:900-26.
  7. Hsieh MC, Huang MC, Lai YL, Lin CC. Grief reactions in family caregivers of advanced cancer patients in Taiwan: Relationship to place of death. *Cancer Nurs* 2007;30:278-84.
  8. O'Sullivan EM, Higginson IJ. 'I'll continue as long as I can, and die when I can't help it': A qualitative exploration of the views of end-of-life care by those affected by head and neck cancer (HNC). *BMJ Support Palliat Care* 2016;6:43-51.
  9. McCall K, Rice AM. What influences decisions around the place of care for terminally ill cancer patients? *Int J Palliat Nurs* 2005;11:541-7.
  10. Thomas C, Morris SM, Clark D. Place of death: Preferences among cancer patients and their carers. *Soc Sci Med* 2004;58:2431-44.
  11. Murray MA, O'Connor AM, Fiset V, Viola R. Women's decision-making needs regarding place of care at end of life. *J Palliat Care* 2003;19:176-84.
  12. Bakitas M, Kryworuchko J, Matlock DD, Volandes AE. Palliative medicine and decision science: The critical need for a shared agenda to foster informed patient choice in serious illness. *J Palliat Med* 2011;14:1109-16.
  13. Rodgers BL, editor. *Concept analysis an evolutionary view*. In: *Concept Development in Nursing Foundations, Techniques and Application*. 2<sup>nd</sup> ed. Philadelphia: W.B. Saunders Company; 2000.
  14. Rodgers BL, editor. *Concept analysis an evolutionary view*. In: *Concept Development in Nursing Foundations, Techniques and Application*. 2<sup>nd</sup> ed. Philadelphia: W.B. Saunders Company; 2000. p. 84-5.
  15. Bostanci A, Horey D, Jackson K, William L, Pittmann L, Ward J, *et al*. Insights into hospitalisation of advanced cancer patients: A study of medical records. *Eur J Cancer Care (Engl)* 2016;25:190-201.
  16. Munday D, Dale J, Murray S. Choice and place of death: Individual preferences, uncertainty, and the availability of care. *J R Soc Med* 2007;100:211-5.
  17. Alonso-Babarro A, Bruera E, Varela-Cerdeira M, Boya-Cristia MJ, Madero R, Torres-Vigil I, *et al*. Can this patient be discharged home? Factors associated with at-home death among patients with cancer. *J Clin Oncol* 2011;29:1159-67.
  18. Chapple A, Evans J, McPherson A, Payne S. Patients with pancreatic cancer and relatives talk about preferred place of death and what influenced their preferences: A qualitative study. *BMJ Support Palliat Care* 2011;1:291-5.
  19. Yoshida S, Kojima M. Recognition of the condition of the patients with recurring pulmonary malignancies who decided to be admitted to palliative care units and factors influencing decision making at the setting of palliative treatment and care. *Bull Osaka Pref Coll Nurs* 2006;12:59-65.
  20. Higginson IJ, Costantini M. Dying with cancer, living well with advanced cancer. *Eur J Cancer* 2008;44:1414-24.
  21. Luijckx KG, Schols JM. Perceptions of terminally ill patients and family members regarding home and hospice as places of care at the end of life. *Eur J Cancer Care (Engl)* 2011;20:577-84.
  22. Tang ST. When death is imminent: Where terminally ill patients with cancer prefer to die and why. *Cancer Nurs* 2003;26:245-51.
  23. Sonoda M, Konishi S, Taniguchi S, Yamazaki R. Thoughts on the choice of a hospice for end-of-life care: Three patients with lung cancer. *Bull Kagoshima Immaculate Heart Univ* 2008;12:82-94.
  24. Sakai K, Tsukahara C, Iwaki N, Makino C. Factors influencing advanced cancer patient and their family decision making about treatment place. *Bull Sch Nurs Ishikawa Prefectural Univ* 2011;8:41-50.
  25. Gomes B, Higginson IJ. Factors influencing death at home in terminally ill patients with cancer: Systematic review. *BMJ* 2006;332:515-21.
  26. Stein RA, Sharpe L, Bell ML, Boyle FM, Dunn SM, Clarke SJ. Randomized controlled trial of a structured intervention to facilitate end-of-life decision making in patients with advanced cancer. *J Clin Oncol* 2013;31:3403-10.
  27. Schou-Andersen M, Ullersted MP, Jensen AB, Neergaard MA. Factors associated with preference for dying at home among terminally ill patients with cancer. *Scand J Caring Sci* 2016;30:466-76.
  28. Sakurai C, Majima T. 'Yure' in decisions by families of cancer patients regarding the transition to terminal palliative care. *J Cultural Nurs Stud* 2013;5:20-7.
  29. Kawase K, Inamura N, Onuki E, Ikenaga N, Fuziyama S, Wada C. Difficulties faced by family caregivers for terminal cancer patient cessation of home-based. *Palliat Care Res* 2017;12:194-202.
  30. Yoshioka R, Kato Y, Ago Y. Cognitions of families of patients with terminal cancer in terms of transition from hospital to home care. *J K W U Acad Nurs* 2017;42:71-8.
  31. Choi JE, Miyashita M, Hirai K, Sato K, Morita T, Tsuneto S, *et al*. Making the decision for home hospice: Perspectives of bereaved Japanese families who had loved ones in home hospice. *Jpn J Clin Oncol* 2012;42:498-505.
  32. Gu X, Cheng W, Cheng M, Liu M, Zhang Z. The preference of place of death and its predictors among terminally ill patients with cancer and their caregivers in China. *Am J Hosp Palliat Care* 2015;32:835-40.
  33. Khan SA, Gomes B, Higginson IJ. End-of-life care – What do cancer patients want? *Nat Rev Clin Oncol* 2014;11:100-8.
  34. Sasao S, Tanabe K, Morita T, Takahashi T, Yasuda H, Kashii T, *et al*. Facility-related factors influencing the place of death and home care rates for end-stage cancer patients. *J Palliat Med* 2015;18:691-6.
  35. Bone AE, Gao W, Gomes B, Sleeman KE, Maddocks M, Wright J, *et al*. Factors associated with transition from community settings to hospital as place of death for adults aged 75 and older: A population-based mortality follow-back survey. *J Am Geriatr Soc* 2016;64:2210-7.
  36. Wallace SK, Waller DK, Tilley BC, Piller LB, Price KJ, Rath N, *et al*. Place of death among hospitalized patients with cancer at the end of life. *J Palliat Med* 2015;18:667-76.
  37. Horii T, Mitsuki S, Shimada R, Onishi S. Qualitative studies on emotions of family care givers for terminal cancer patient and health care supports. *Bull Sch Nurs Kyoto Prefectural Univ Med* 2008;17:41-8.

38. Shudo M. A study on the agreement between the preferred place for end-of-life care and the actual place, focusing on the factors affecting the decision of the place: Quality of hospice and palliative care evaluated by bereaved family. *J HOPE3 Stud* 2016;3:55-9.
39. Yamamoto S, Arao H, Masutani E, Aoki M, Kishino M, Morita T, *et al.* Decision making regarding the place of end-of-life cancer care: The burden on bereaved families and related factors. *J Pain Symptom Manage* 2017;53:862-70.
40. Weissman DE. Decision making at a time of crisis near the end of life. *JAMA* 2004;292:1738-43.
41. Noone J. Concept analysis of decision making. *Nurs Forum* 2002;37:21-32.
42. Simon HA. *Administrative Behavior New Edition – A Study of Decision-Making Process in Administrative Organizations*. Translated by Kuwata K, Nishiwaki N, Takayaagi M, Takao Y, Nimura T. Tokyo: Diamond, Inc.; 2009.
43. Miyashita M, Sanjo M, Morita T, Hirai K, Uchitomi Y. Good death in cancer care: A nationwide quantitative study. *Ann Oncol* 2007;18:1090-7.
44. Back AL, Arnold RM, Quill TE. Hope for the best, and prepare for the worst. *Ann Intern Med* 2003;138:439-43.
45. Byock IR. The nature of suffering and the nature of opportunity at the end of life. *Clin Geriatr Med* 1996;12:237-52.
46. Gabbay BB, Matsumura S, Etzioni S, Asch SM, Rosenfeld KE, Shiojiri T, *et al.* Negotiating end-of-life decision making: A comparison of Japanese and U.S. residents' approaches. *Acad Med* 2005;80:617-21.
47. Ichikura K, Matsuda A, Kobayashi M, Noguchi W, Matsushita T, Matsushima E. Breaking bad news to cancer patients in palliative care: A comparison of national cross-sectional surveys from 2006 and 2012. *Palliat Support Care* 2015;13:1623-30.
48. Laryionava K, Pfeil TA, Dietrich M, Reiter-Theil S, Hiddemann W, Winkler EC. The second patient? Family members of cancer patients and their role in end-of-life decision making. *BMC Palliat Care* 2018;17:29.