

Original Article

Does Dying at Home Influence the Good Death of Terminal Cancer Patients?

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Abstract

To investigate whether dying at home influences the likelihood that a terminal cancer patient will achieve a good death despite the limited medical resources available in many communities, this study investigated the relationship between the achievement of a good death and the performance of good-death services in two groups with different places of death, and explored the possible factors associated with this relationship. Three hundred and seventy-four consecutive patients with terminal cancers admitted to a palliative care unit were enrolled. Two instruments, the good-death scale and the audit scale for good-death services, were used in the study. Mean age of the 374 patients was 65.45 ± 14.77 years. The total good-death score in the home-death group ($n = 307$) was significantly higher than that in the hospital-death group ($n = 67$), both at the time of admission ($t = -5.741$, $P < 0.001$) and prior to death ($t = -3.027$, $P < 0.01$). However, the score of item "degree of physical comfort" assessed prior to death in the home-death group was lower than that in the hospital-death group ($P = 0.185$). As to the audit scale for good-death services, each subscale score and total scores in the home-death group were significantly higher than that in the hospital-death group, with the exception of the subscale "continuity of social support" (4.72 vs. 4.61, $P = 0.132$). Bereavement support (odds ratio = 1.01, 95% confidence interval = 0.62–1.39; multiple regression), alleviation of anxiety (0.81, 0.46–1.15), decision-making participation (0.61, 0.26–0.95), fulfillment of last wish (0.45, 0.08–0.82), and survival time (0.00, 0.00–0.01) were independent correlates of the good-death score (35.8% of explained variance). However, the place of death was not in the model. The study conclusively suggests the necessity for palliative home care to strengthen the competence of physical care. Moreover, earlier incorporation of palliative care into anticancer therapies can lead to better death preparation and good-death services, and thus be helpful to achieve a good death. *J Pain Symptom Manage* 2007;34:497–504. © 2007 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.

Key Words

Terminal cancer, place of death, palliative care, good death

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Introduction

Previous studies on the preferences about the place of death have shown that the vast majority of terminal cancer patients wishes to die at home,^{1–4} but many do not accomplish this cherished desire.^{4–7} Gott et al. reported that

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older people viewed home as crucial to a good death, but many anticipate that they would prefer to be cared for elsewhere when dying.⁸ This paradox is more prominent in Taiwan, owing to the poor integrity of community medical systems and insufficiencies in social support.^{9,10} As a result, the imperfections of the medical scheme, along with the common concerns among terminal cancer patients and their families, make home death in Taiwan more difficult to be realized.

The Chinese saying, "Luo Yeh Guei Gen," reflects the traditional beliefs in a good death and states that dying at home is as natural as the leaves falling down to the roots of a tree. Hunt identified the elements of a good death as control of physical symptoms, acceptance of cancer and its prognosis, preservation of hope and will to live, mobility and fighting back, enjoyment of life, and a peaceful death at home.¹¹ As death is approaching, anxiety and fear usually arise from the deterioration of physical function, loss of control, and worries about the unknown process of dying. Familiar surroundings and relationships confirm the importance of the dying person and provide a sense of security, belonging, and continuing identity.¹² Gott et al. presented the assumptions that an institutional death cannot be a good death.⁸ In other words, death at home is believed to be a major ingredient of a good death, both in Western societies and in Chinese cultures.

To help terminal cancer patients fulfill their wish to die at home is considered to be one of the main goals of hospice and palliative care. Previous studies focused mainly on the degree of satisfaction associated with palliative home care for terminal cancer patients and their families. Given the scarce medical resources of community care in Taiwan, it is worthwhile to discuss whether home death would lead terminal cancer patients toward a good death or not. This study was aimed at investigating the relationship between the achievement of good death and performance of good-death services in two groups with different places of death, and exploring the influencing factors.

Methods

Patients

A total of 374 consecutive patients with terminal cancers admitted to the hospice and

palliative care unit of National Taiwan University Hospital between April 2003 and the end of March 2004 were enrolled in the study. The palliative care unit at National Taiwan University Hospital takes care of patients with incurable cancer who are referred from other wards of the same hospital, as well as from other hospitals or from home. The decision to admit a patient is made after an initial assessment, according to the governmental regulations for hospice and palliative care. About 30% of admitted patients are discharged home in stable condition after receiving active, total inpatient care. Members of the multidisciplinary team invest considerable time in restoring the patient's best possible functional status and in planning the discharge of patients who can possibly return home.

Patients discharged from the hospital were referred to a palliative home care program. The enrolled patients were divided into a hospital-death group and a home-death group according to the place of death. The selection of patients and design of this study were approved by the ethics committee of the hospital.

Instruments

A structured questionnaire consisting of three parts was used for the assessment of all of the subjects. The three parts of the questionnaire included questions on demographic characteristics, a good-death scale, and an audit scale for good-death services. The entire three-part questionnaire was tested for content validity by a panel composed of two physicians, two nurses, one psychologist, two chaplains, and one social worker, all of whom were experienced in the care of the terminally ill. Each item in the questionnaire was appraised from "very inappropriate and not relevant (1)" to "very appropriate and relevant (5)." A "content validity index" (CVI) was used to determine the validity of the structured questionnaire and yielded a CVI of 0.91, which indicated good content validity. In addition, 12 bereaved families filled out the questionnaire to confirm the questionnaire's face validity and ease of application.

Demographic characteristics assessed by the questionnaire included sex, age, primary tumor sites, and places of death. The other two parts included a good-death scale and an audit scale for good-death services.

Good-Death Scale. The measure was used to assess the physical, psychological, and spiritual status of the terminal cancer patients. This assessment form was designed after investigators carefully scrutinized the literature in this area. All of the items were also grounded on the basis of real life experiences of the investigators involved in palliative care. On the basis of Weisman's definition of good death and modified in accordance to Taiwanese culture, this scale in the study consists of five items, including 1) awareness: awareness of one's dying (0 = complete ignorance, 3 = complete awareness), 2) acceptance: accepting death peacefully (0 = complete unacceptance, 3 = complete acceptance), 3) propriety: arranging one's will (0 = no reference to the patient's will, 1 = following the family's will alone, 2 = following the patient's will alone, 3 = following the will of both the patient and the family), 4) timeliness: death timing (0 = no preparation, 1 = the family alone had prepared, 2 = the patient alone had prepared, 3 = both the patient and their family had prepared), and 5) comfort: degree of physical comfort three days before death (0 = a lot of suffering, 1 = suffering, 2 = a little suffering, 3 = no suffering). The reliability and validity of this scale have been established in Taiwanese palliative care units.¹³⁻¹⁵ Cronbach's alpha was also used to assess internal consistency of this good-death measure in the study sample and showed a coefficient of 0.76 for the final five items.

Audit Scale for Good-Death Services. Designed after careful scrutiny of the available literature, this good-death service measure was used to evaluate the performance of hospice care service based on three components, including structure, process, and outcome. The scale was classified into six categories, each of which contains two subscales. Each subscale is appraised on a scale of 1 (extremely unsatisfied) to 5 (extremely satisfied). The categories and subscales were as follows: 1) physical care: symptom control and satisfaction of the patients and their family, 2) autonomy: respect for dignity and respect for decision-making participation, 3) emotional support: alleviation of anxiety and resolution of depression, 4) communication: verbal support and nonverbal support, 5) continuity of life: continuity of social support and

affirmation of one's past life, and 6) closure: fulfillment of last wish and bereavement support.

Bartlett's test of sphericity (BT) and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were performed initially to determine whether services data were suitable for exploratory factor analysis (EFA). The results showed that the data were appropriate for EFA (KMO = 0.659; BT = 1723.38, $P < 0.001$). Therefore, the draft items were analyzed using principal component factor analysis followed by orthogonal varimax rotation. The number of principal components to be extracted was determined by examining the eigenvalues (greater than 1.0) and Cattell's Scree test. Meanwhile, the cut point of factor loading was set at 0.5. Items with low factor loading (< 0.5) were deleted from each subscale. Finally, the subdomains were reconstructed to four factors and named "Physical care," "Autonomy," "Support," and "Continuity of life." The internal consistency was demonstrated with Cronbach's alpha coefficient ranging from 0.61 to 0.87 in the four subdomains and 0.91 for total items of this measure. These four factors accounted for 67% of the total variance of the variables. The results of the EFA for the construct validity of the measure were acceptable. The findings from this study supported that the instruments, including the good-death scale and the audit scale of good-death services, demonstrated an acceptable level of reliability and validity.

Data Collection

A multidisciplinary hospice team composed of physicians, nurses, clinical psychologists, clinical Buddhist chaplains, social workers, and volunteers involved in the care of the patients collected data daily. The final scores of the two scales were decided jointly at weekly team meetings. The collected data of those patients were analyzed at the time of admission and prior to the patients' death (usually retrospectively) at the meetings.

Statistical Analysis

Data management and statistical analysis were processed using SPSS V12.0 statistical software (SPSS, Chicago, IL). The demographic data were described with frequency, mean, and standard deviation. The differences between the two groups in good-death scores

at two different time points and that in the audit scale for good-death services scores were analyzed with the use of the independent *t*-test. A paired *t*-test was applied to compare the differences in the scores for the items of the good-death scale at different times in each group. Univariate analysis, including the Chi-squared test, the Fisher exact method, independent *t*-test, and the Pearson correlation coefficient analysis, was performed between the possible correlates (demographic data, survival time, place of death, items of audit scale for good-death services) and the scores of the good-death scale to identify significant differences. Afterward, backward stepwise multiple regression analysis was used to investigate significant predictors of a good death. A two-tailed *P*-value of less than 0.05 was considered to indicate statistical significance in this study.

Results

The basic characteristics of the 374 terminal cancer patients in the study are summarized in Table 1. There were 199 male patients (53.2%) and 175 female patients (46.8%), with a mean age of 65.45 ± 14.77 years and a range from 9 to 97 years. Three hundred and seven patients (82.1%) died in the hospital (the hospital-death group), while 67 patients (17.9%) died at home (the home-death group). The differences between the two groups in sex distribution and mean age were not significant. The proportion of elderly patients (>65 years old) was 61.2% in the home-death group and 53.4% in the hospital-death group.

The primary sites of cancer in the hospital-death group were liver (23.8%), lung (21.5%), and gastrointestinal tract (19.6%). In the home-death group, the primary sites of cancer were lung (26.9%), gastrointestinal tract (19.4%), and liver (16.4%). Otherwise, there were seven patients with pancreatic cancer, six patients with hematological malignancies, and one patient with bone cancer; all died in the hospital.

The good-death scores at admission are demonstrated in Table 2. There were significant differences between the home-death group and the hospital-death group in total good-death score (12.80 vs. 10.81; range 0–15, $P < 0.001$) and scores of items “awareness,”

Table 1
Demographic Characteristics of the Patients with Terminal Cancer ($n = 374$)

Characteristic	n (%)	Hospital-Death	Home-Death
		Group n (%)	Group n (%)
Sex			
Male	199 (53.2)	164 (53.4)	35 (52.2)
Female	175 (46.8)	143 (46.6)	32 (47.8)
Age (years)			
≤ 35	8 (2.1)	7 (2.3)	1 (1.5)
36–64	161 (43.0)	136 (44.3)	25 (37.3)
≥ 65	205 (54.8)	164 (53.4)	41 (61.2)
Primary sites of cancer			
Liver	84 (22.5)	73 (23.8)	11 (16.4)
Lung	84 (22.5)	66 (21.5)	18 (26.9)
Gastrointestinal tract	73 (19.5)	60 (19.6)	13 (19.4)
Head and neck	35 (9.4)	26 (8.5)	9 (13.4)
Cervix/ovary	23 (6.1)	19 (6.2)	4 (6.0)
Breast	20 (5.3)	17 (5.5)	3 (4.5)
Pancreas	7 (1.9)	7 (2.3)	0 (0)
Uncertain	7 (1.9)	6 (2.0)	1 (1.5)
Blood	6 (1.6)	6 (2.0)	0 (0)
Bone	1 (0.3)	1 (0.3)	0 (0)
Other	34 (9.1)	26 (8.5)	8 (12.0)
Place of death			
Hospital	307 (82.1)		
Home	67 (17.9)		

“acceptance,” “timeliness,” and “comfort.” The score of item “comfort” in home-death group vs. hospital-death group was 2.58 vs. 1.90 ($t = 8.390$, $P < 0.001$).

Comparing the good-death scores prior to death in the two groups (Table 3), we found that the total good-death score in the home-death group was significantly higher than that in the hospital-death group (14.13 vs. 13.48; range 0–15, $P < 0.01$). Significant differences were also shown in the item scores between the home-death group and the hospital-death group, including “awareness,”

Table 2
Scores of the Good-Death Scale at Admission between the Hospital-Death Group ($n = 307$) and the Home-Death Group ($n = 67$)

Subscale	Hospital-Death	Home-Death	<i>t</i>
	Group Mean (SD)	Group Mean (SD)	
Awareness	2.04 (.83)	2.44 (.78)	−3.561 ^a
Acceptance	2.18 (.69)	2.43 (.60)	−2.727 ^b
Propriety	2.52 (.86)	2.52 (.91)	0.024
Timeliness	2.16 (1.02)	2.83 (.53)	−7.776 ^a
Comfort	1.90 (.60)	2.58 (.60)	−8.390 ^a
Total score	10.81 (2.86)	12.80 (2.51)	−5.741 ^a

^a $P < 0.001$.

^b $P < 0.01$.

Table 3
Scores of Good-Death Scale Prior to Death
Between the Hospital-Death Group ($n = 307$)
and the Home-Death Group ($n = 67$)

Subscale	Hospital-Death Group Mean (SD)	Home-Death Group Mean (SD)	<i>t</i>
Awareness	2.61 (.65)	2.82 (.52)	-2.866 ^a
Acceptance	2.68 (.58)	2.80 (.40)	-2.103 ^b
Propriety	2.70 (.71)	2.88 (.48)	-2.471 ^b
Timeliness	2.73 (.64)	2.96 (.24)	-5.053 ^c
Comfort	2.77 (.46)	2.67 (.53)	0.185
Total score	13.48 (2.23)	14.13 (1.43)	-3.027 ^a

^a $P < 0.01$.

^b $P < 0.05$.

^c $P < 0.001$.

“acceptance,” “propriety,” and “timeliness.” However, it is worthwhile mentioning that the score of item “comfort” in the home-death group was lower than that in the hospital-death group despite the difference below the significant level (2.67 vs. 2.77, $P = 0.185$).

Paired *t*-test was applied to compare the differences in total good-death scores between the two time points in each group. The changes of good-death scores in the home-death group (12.80 vs. 14.13) and the hospital-death group (10.81 vs. 13.48) were both of statistical significance ($t = 20.70$, $P < 0.001$; $t = 4.69$, $P < 0.001$).

Concerning the audit scale for good-death services, the EFA result was slightly different from the original version. Item “bereavement support” had comparatively larger factor loadings on the physical care domain (0.538), although it originally belonged to the continuity of life domain (Table 4). Moreover, the item “bereavement support” had the most significant correlation with the item “satisfaction of patients and families to physical care” ($r = 0.163$, $P < 0.01$). These results implied that item “bereavement support” should be grouped under the physical care domain in this study.

With regard to comparison of good-death services evaluated for the two groups (Table 5), each item score in both the home-death group and the hospital-death group was above 4 (range 1–5). Meanwhile, each item score in the home-death group was significantly higher than that of the hospital-death group, with the exception of item “continuity of social support” (4.61 vs. 4.72, $P = 0.132$). The item scores in the home-death group including “respect for

Table 4
Varimax Rotated Factor Matrix for the Audit
Scale of Good-Death Services ($n = 374$)

Items	Factor I	Factor II	Factor III	Factor IV
1. Symptom control	0.692	0.197	0.131	-0.147
2. Satisfaction of patients and families	0.740	0.199	0.315	0.101
3. Respect for dignity	0.154	0.919		
4. Decision-making participation		0.923		
5. Alleviation of anxiety	0.352		0.603	0.321
6. Resolution of depression	0.338		0.634	0.138
7. Verbal support			0.888	0.115
8. Nonverbal support			0.914	0.161
9. Continuity of social support			0.193	0.762
10. Affirmation of one's past life			0.305	0.770
11. Fulfillment of last wish	0.355	0.128		0.627
12. Bereavement support	0.538	-0.230	-0.152	0.201

Boldfaced numbers mean a factor-loading coefficient > 0.40 .

dignity,” “respect for decision-making participation,” “alleviation of anxiety,” “resolution of depression,” and “fulfillment of last wish” were significantly higher than that in the hospital-death group ($P < 0.001$). In general, the sum scores of total items of good-death services in the home-death group were significantly higher than that in the hospital-death group (56.69 vs. 53.97, $t = 4.334$, $P < 0.001$). With regard to the correlation between scores of good-death and good-death services, there was a significant positive correlation among the individual item or total score of the good-death scale and total score of the good-death services prior to death ($r = 0.21$ – 0.38 , $P < 0.001$) (Table 6).

Results of multiple regression analysis of the factors correlated with the good-death score are shown in Table 7. Bereavement support (odds ratio = 1.01, 95% confidence interval = 0.62–1.39), alleviation of anxiety (0.81, 0.46–1.15), decision-making participation (0.61, 0.26–0.95), fulfillment of last wish (0.45, 0.08–0.82), and survival time (0.00, 0.00–0.01) were independent correlates of the good-death score. However, place of death was not in the model of multivariate analysis. This model accounted for 35.8% (multiple R^2) of the variance in the good-death score (Table 7).

Discussion

To our knowledge, this study is one of the first to investigate the relationship between

Table 5
Scores of the Audit Scale for Good-Death Services Between Hospital-Death Group (n = 307) and Home-Death Group (n = 67)

Variables	Hospital-Death Group Mean (SD)	Home-Death Group Mean (SD)	t
Factor I—physical care			
1. Symptom control	4.35 (.61)	4.55 (.59)	-2.526 ^a
2. Satisfaction of patients and families	4.52 (.57)	4.69 (.45)	-2.444 ^a
3. Bereavement support	4.63 (.56)	4.81 (.40)	-2.979 ^b
Factor II—autonomy			
1. Respect for dignity	4.45 (.57)	4.79 (.48)	-5.169 ^c
2. Decision-making participation	4.42 (.59)	4.78 (.49)	-5.177 ^c
Factor III—support			
1. Alleviation of anxiety	4.41 (.61)	4.67 (.47)	-3.922 ^c
2. Resolution of depression	4.35 (.65)	4.67 (.47)	-4.710 ^c
3. Verbal support	4.61 (.51)	4.78 (.42)	-2.847 ^b
4. Nonverbal support	4.66 (.49)	4.79 (.41)	-2.279 ^b
Factor IV—continuity of life			
1. Continuity of social support	4.61 (.57)	4.72 (.49)	-1.517
2. Affirmation of one's past life	4.54 (.55)	4.72 (.45)	-2.718 ^b
3. Fulfillment of last wish	4.43 (.60)	4.73 (.51)	-4.252 ^c
Total score (range 12–60)	53.97 (4.746)	56.69 (4.131)	-4.334 ^c

^aP < 0.05.

^bP < 0.01.

^cP < 0.001.

places of death and good death, particularly in the Asia Pacific region. Gallo et al. found that characteristics of being female, being married,

residing in a higher income area, and types of cancer with longer survival postdiagnosis were associated with dying at home rather than in a hospital or inpatient hospice.¹⁶ The result in our study was not significant in sex distribution between the home-death group and the hospital-death group. Patients with primary cancer sites of liver, pancreas, and blood died more in hospital than at home. The speculation about the results of death site is that pancreatic cancer patients may need intensive pain management and those patients with hepatocellular carcinoma or hematological malignancies are considered relatively young and expected a longer life under hospital care. The potential emergency of massive bleeding caused by tumor rupture may also lead to hospital death for patients with hepatocellular carcinoma. Regarding the age distribution, the study showed that elderly cancer patients died more at home, in accordance with the values about home death in Chinese tradition.

Each item score of the good-death scale in the home-death group is higher than that of the hospital-death group prior to death, with the exception of item "comfort." In sum, the total good-death score in the home-death group was higher than that in the hospital-death group (Table 3). The result of the study implies that better preparation in promoting awareness of illness, acceptance of dying truth, arrangement of will, and death timeliness could help terminal cancer patients toward a good death despite more physical suffering in the home-death group. However, it is clear that physical care remains a noticeable obstacle for palliative home care. Hu et al. also indicated that information about symptom control

Table 6
Correlation Between Good Death and Good-Death Services Two Days Before Death

	Physical Care	Autonomy	Emotional Support	Communication	Continuity of Life	Closure	Total Score of Good-Death Service
Awareness	0.059	0.140 ^b	0.105 ^a	0.103 ^a	0.155 ^b	0.224 ^c	0.210 ^c
Acceptance	0.132 ^a	0.110 ^a	0.239 ^c	0.154 ^b	0.229 ^c	0.247 ^c	0.305 ^c
Propriety	0.121 ^a	0.179 ^b	0.219 ^c	0.132 ^b	0.250 ^c	0.307 ^c	0.332 ^c
Timeliness	0.163 ^b	0.142 ^b	0.127 ^a	0.130 ^a	0.084	0.207 ^c	0.233 ^c
Comfort	0.360 ^c	0.055	0.221 ^c	0.129 ^a	0.120 ^a	0.153 ^b	0.296 ^c
Total score of good death	0.217 ^c	0.180 ^c	0.249 ^c	0.178 ^b	0.236 ^c	0.322 ^c	0.380 ^c

^aP < 0.05.

^bP < 0.01.

^cP < 0.001.

Table 7
Multiple Regression Analysis of Factors Independently Correlated with Good-Death Score ($n = 374$)

Variable	Coefficient	Beta	<i>t</i> Value	95% CI
Bereavement support	1.007	0.255	5.184 ^a	0.625–1.389
Alleviation of anxiety	0.806	0.226	4.549 ^a	0.458–1.154
Decision-making participation	0.606	0.169	3.447 ^b	0.260–0.952
Fulfillment of last wish	0.448	0.126	2.369 ^c	0.076–0.819
Survival time	0.000	0.091	2.183 ^c	0.000–0.006
Constant	0.484	NA	0.251	–1.342–2.311

CI = confidence interval; NA = not applicable.

Multiple *R* value = 0.605; multiple $R^2 = 0.358$.

^a $P < 0.001$.

^b $P < 0.01$.

^c $P < 0.05$.

was the first priority with regard to the needs of home caregivers.¹⁷ Otherwise, it is worth mentioning that the “bereavement support” has significant correlation with the item “satisfaction of patients and families to physical care” ($r = 0.103$, $P < 0.01$). This result indicates that better physical care for terminal cancer patients may relieve the families’ worries and be helpful to reach better bereavement support. Therefore, with the improvement of palliative home care and the training of medical professionals, especially in physical care for the establishment of better community medical care systems, we can promote the achievement of a good death for terminal cancer patients under home care programs.

The home-death group made great progress in the good-death assessment during the two time points, although with higher scores at admission. The result of our study showed that terminal cancer patients tended to fulfill the wish to die at home if they had more death preparation, including the awareness of dying; acceptance of the outcome; arrangement of will; death timeliness; and symptom control. Such an assumption is correspondent with the findings in Hinton’s study, which indicated that terminal cancer patients with better coping responses and awareness of the prognosis were more likely to die at home.¹⁸ Furthermore, with incorporation of hospice care earlier into cancer treatment, a continuous relationship among hospice providers, cancer patients, and their families will grow, which contributes to better death preparation and discharge planning for palliative home care. Burge et al. indicated that continuity of primary care was known to be associated with both improved processes and outcomes of care.⁵ That is to say, better accommodation

to the process of dying is helpful to facilitate the accomplishment of home death.

Hu et al. explored that the barriers to discharge planning for palliative home care were ranked as unable to manage emergent medical conditions at home, better quality of care in the hospital, and insufficient number of caregivers.⁷ Concerning the emergent medical conditions related to barriers to discharge planning, inadequate training in palliative care and lack of experience in caring for terminally ill patients by community medical professionals make home care very difficult for these terminal cancer patients in present-day Taiwan.^{9,10} Therefore, many patients and families, and even the medical professionals, believed that the quality of care in hospital is better. However, contrary to the common concerns among cancer patients and their families indicated in a previous study, this study showed that the level of satisfaction for the performance of palliative home care can be higher than that of hospital care (56.69 vs. 53.97; range 12–60, $P < 0.001$). Thus, it is not impossible to provide good care and resolve these barriers to arranging home care programs. Education of patients and families on proper care at home, providing palliative home care, referring to community medical professionals, and allocating resources of social services are helpful in arranging home care programs.

The results from this study should be interpreted with caution because of several limitations. First, the assessment of good death and good-death services was carried out by the hospice team members, instead of directly reported by the patients and their families. Nevertheless, the staff of the hospice team evaluated the scores based on communication

with the patients and their families in the process of care. Our previous study also showed high concordance in the opinions among hospice care team and family members.¹⁴ However, family caregivers may still have difficulty in representing the patients for those things that cannot be directly observed, such as patients' attitudes or values. Further research involving qualitative studies or method of triangulation directly for the dying patients and families in the actual circumstances are needed. Second, further discussion is needed to know if the good-death scale used in the study is able to elucidate the true meaning of a good death in a Taiwanese cultural context. Third, despite a respectable level ($\alpha = 0.80$) for the reliability of the audit scale total score, the internal consistency of the "continuity of life" domain was only acceptable ($\alpha = 0.60$), which implicates a constraint in the psychometric testing.

In conclusion, it is necessary for palliative home care to strengthen the competence of physical care with the establishment of a community medical care system. Moreover, earlier incorporation of hospice care into the cancer trajectory can lead to a better death preparation and is thus helpful to achieve a good death. Contrary to the common concerns among cancer patients and their families, the level of satisfaction for the performance of palliative home care can be higher than that of hospital care.

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