

Bereavement Practices of Physicians in Oncology and Palliative Care

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Background: Cancer physicians frequently interact with dying patients, but little is known about these physicians' practices. The purpose of this study was to evaluate the frequency and nature of bereavement practices among medical oncologists (MOs), radiation oncologists (ROs), and palliative care specialists (PCs); and to identify factors associated with bereavement follow-up.

Methods: Survey of all Canadian MOs, ROs, and PCs via their respective national organizations using an anonymous electronic and postal mail survey.

Results: A total of 535 of 756 eligible physicians completed the survey (71%). Overall, 33.3% (95% confidence interval [CI], 29.3%-37.4%) of respondents indicated that they usually or always make a telephone call, send a condolence card, or attend a funeral following a patient's death; 30.5% (95% CI, 26.5%-34.4%) reported performing at least 1 of these practices sometimes; and

36.2% (95% CI, 32.1%-40.3%) reported performing at least 1 of these practices rarely or never. Among the specific practices, respondents were more likely to call a family at least sometimes than to send a condolence card or attend funeral services. Palliative care specialists reported the highest rates of bereavement follow-up. In multivariate regression analysis, female sex, working in an academic setting, palliative care specialty, lack of formal palliative care program, endorsement of the statement that physicians had a responsibility to send a condolence card, and high number of patient deaths were associated with more frequent bereavement follow-up.

Conclusions: Few cancer physicians provide bereavement follow-up routinely. This suggests that consensus is lacking among cancer physicians regarding their role in bereavement care.

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BEREAVEMENT IS THE EXPERIENCE of losing a loved one to death.¹ Although a normal part of life, bereavement is associated with increased morbidity and mortality,²⁻¹⁰ with complicated grief occurring in 10% to 20% of bereaved persons.¹¹⁻¹³ Physicians have been encouraged to take responsibility for providing support and care to bereaved caregivers.¹⁴⁻²¹

Bereavement follow-up is considered a cornerstone of good palliative care.²² Usual bereavement practices include contacting family members by sending a follow-up telephone call,¹⁵ sending a condolence letter,^{15,16,23} and attending funerals, memorial services, and family meetings.^{24,25}

To our knowledge, the existing literature describing bereavement care practices is limited to 3 small surveys.²⁵⁻²⁷ One survey of 5 palliative support teams in England found that initial bereavement follow-up was mainly performed by nurses (78%).²⁵ A second study surveying 51 families in an acute care hospital in the United

States found that 62% reported some form of contact after the death of a loved one, primarily from a physician (71%).²⁶ Almost 20% of families surveyed sought professional help after the death, but no family members were referred to bereavement services by a physician.²⁶ Another American survey of 161 caregivers in a single hospice found that 30% used bereavement services in the first year after the death.²⁷

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Bereavement follow-up is an especially important issue to cancer physicians because they interact frequently with dying patients and bereaved caregivers. Caregivers of patients with cancer have increased perceived needs,^{28,29} and most bereaved caregivers of patients with advanced cancer (50%-70%) desire bereavement support following the patient's death.^{30,31} There is a paucity of literature describing bereavement activities that can-

cer physicians provide. Moreover, there seems to be no published research concerning perceived barriers or facilitators for such care. With this in mind, we designed the present study to begin to define the physician's role in bereavement care in patients with cancer. The primary aim of this study is to describe the frequency and nature of bereavement practices of Canadian cancer physicians. Secondary aims include an analysis of physician characteristics associated with bereavement follow-up and a description of perceived barriers that physicians face in providing bereavement care.

METHODS

SURVEY SAMPLE

Study participants included all 285 members of the Canadian Association of Medical Oncologists, all 276 members of the Canadian Association of Radiation Oncologists, and all 210 members of the Canadian Society of Palliative Care Physicians. Membership is defined as those physicians listed in each organization's 2007 directory and represents the large majority of Canadian medical oncologists (MOs), radiation oncologists (ROs), and palliative care specialists (PCs). To maximize response rate, we used a modified Dillman method.³² Subjects were initially approached by e-mail to complete the survey online in March 2007. Two weeks later, a follow-up reminder in the form of a hard copy of the questionnaire with a \$2 gift certificate for coffee was sent by postal mail to all subjects. Four weeks following the distribution of the mailed questionnaire, an e-mail reminder with a link to the survey Web site was sent to all subjects. Since responses were anonymous, all participants were approached 3 times. The study was reviewed and approved by the University Health Network research ethics board.

SURVEY INSTRUMENT

We designed the survey to assess 4 key domains: respondent demographics, physician bereavement practices, physician opinions, and perceived barriers and needs (eText; <http://www.archinternmed.com>). We asked about bereavement practices most commonly described in the literature, including making telephone calls; sending condolence cards; attending funerals or family meetings; and referring to bereavement counselors, support groups, or bereavement programs.^{15,17,30,33,34} Bereavement practice items were assessed using a 5-point Likert scale with "always" and "never" as anchors. Demographic items included specialty, sex, age, practice location, years in practice, hours worked per week, time spent on patient care, proportion of patients with advanced illness, number of patient deaths per month, and number of new patients per month. Opinion items included 8 questions assessing degree of attachment to patients. These variables were based on previous work suggesting that attachment may play a role in the patient-clinician relationship and adaptation to loss.^{35,36} Eight items examined barriers to bereavement care, and 7 items addressed perceived needs from a bereavement support program. The survey was pilot tested on a convenience sample of 5 MOs, 3 PCs, and 2 ROs at our own institution.

STATISTICAL ANALYSIS

Summary statistics were used to describe respondent characteristics and frequency of bereavement practices. The Fisher exact test was used to compare bereavement practices be-

tween specialty groups. Bereavement practices were grouped into 3 categories: active practices (making telephone calls, sending cards, attending funerals), passive practices (answering telephone calls, attending family meetings), and referral practices (referral to bereavement counselor, support program, or support group). To derive a binary measure of active bereavement practice, we assigned each physician a score based on his or her response to the active bereavement practice items. For each of these items, we assigned a score of 1 to 5, where a physician who stated that he or she never performed the practice scored 1, and a physician who indicated that he or she always performed the practice scored 5. Each physician's responses to the 3 items were summed and then divided by 3 to obtain a mean active bereavement score. The mean score was dichotomized into 3 or higher (sometimes, usually, or always) and lower than 3 (rarely, or never).

Three sets of predictors of active bereavement practice were explored: (1) respondent demographics; (2) physician opinions; and (3) perceived barriers to active bereavement. Physician opinion predictors were categorized into greater than 3 (agree or strongly agree), 3 (neutral), and less than 3 (disagree or strongly disagree). Similarly, perceived barrier predictors were categorized into 3 or greater (somewhat important, important, or very important) and less than 3 (not important or not important at all).

Logistic regression analysis was used to examine the association between each of the above sets of predictors with active bereavement practice (mean active bereavement score ≥ 3). For the multivariate analysis, we used a stepwise selection method with cutoffs of $P < .25$ to enter the model step, and $P < .05$ to remain to arrive at the final multivariate model. SAS version 9.1 software (SAS Institute, Cary, North Carolina) was used for all analyses.

RESULTS

SAMPLE CHARACTERISTICS

Surveys were sent to a total of 771 physicians (285 MOs, 276 ROs, and 210 PCs), and 7 were returned to sender (4 MOs, 1 RO, 2 PCs), leaving 764 surveys. Eight respondents were retired or had greater than 75% missing data (4 MOs, 2 ROs, and 2 PCs), leaving a total of 756 eligible subjects. A total of 535 completed surveys (189 MOs, 184 ROs, and 162 PCs) were returned for a total response rate of 71% (66% of MOs, 67% of ROs, and 77% of PCs).

Characteristics of the respondents are summarized in **Table 1**. The median age was 48 years, and 40% were women; 55% worked in an academic setting, and 74% spent over half their time in patient care. The median number of patient deaths per month was 3 for MOs, 2 for ROs, and 8 for PCs. Each specialty represented approximately one-third of the total number of respondents. More than 40% of physicians were in practice for longer than 15 years.

DESCRIPTION OF BEREAVEMENT PRACTICES

Frequencies of bereavement practices by type of practice and specialty are summarized in **Table 2**. The frequency of bereavement practices varied greatly by specialty and type of bereavement practice. Overall, PC physicians reported the highest frequency of bereavement follow-up and ROs the lowest.

Active bereavement practices specifically are further characterized in the **Figure**. With respect to active bereavement practices such as making a telephone call, sending a condolence card, or attending a funeral, 33.3% (95% confidence interval [CI], 29.3%-37.4%) of the respondents indicated that they usually or always performed 1 of these bereavement practices; 30.5% (95% CI, 26.5%-34.4%) reported performing at least 1 of these practices sometimes; and 36.2% (95% CI, 32.1%-40.3%) reported performing at least 1 of these practices rarely or never. Among the specific active practices, respondents were more likely to call a family at least sometimes than to send a condolence card or attend funeral services. Most physicians surveyed rarely or never attended a funeral service.

With respect to referral practices, 9.4% (95% CI, 6.9%-11.9%) of respondents usually or always referred family members of a deceased patient to a bereavement support program, and 10.9% (95% CI, 8.2%-13.6%) usually or always referred to a bereavement counselor. The frequency of bereavement practices varied greatly by specialty and type of bereavement practice (Table 2). Overall, PCs reported the highest frequency of bereavement follow-up, and ROs the lowest.

PHYSICIAN OPINIONS

The frequency of opinions according to physician specialty is summarized in **Table 3**. Opinions varied among specialties, with 24.2% (95% CI, 18.0%-30.4%) of ROs and 19.3% (95% CI 13.6%-24.9%) of MOs agreeing that they felt a sense of failure after a patient's death, whereas no PCs agreed with this statement. Most respondents, especially PCs, reported that they like to meet their patient's family members and that they treat patients as part of a family unit. Overall, 9.1% (95% CI, 6.6%-11.5%) of respondents opined that physicians have a responsibility to send a condolence card.

PERCEIVED BARRIERS TO AND NEEDS FROM BEREAVEMENT CARE

Respondents' opinions regarding barriers to providing bereavement follow-up are summarized in **Table 4**. Lack of time and lack of resources were the most frequently endorsed barriers to bereavement follow-up across all 3 specialties. Approximately 24% of oncologists reported that not knowing whom to contact after a patient death was a significant barrier, whereas 3% of PCs cited this reason.

Respondents indicated that the most important services that could be offered by a bereavement program would be a list of bereavement support services (83.6%), identification of an appropriate family member to contact (57.5%), condolence letter instructions (27.4%), and a standardized letter (27.7%).

FACTORS ASSOCIATED WITH ACTIVE BEREAVEMENT PRACTICES

Results of the regression analysis examining factors associated with active bereavement are summarized in **Table 5**. In univariate analysis of demographic predic-

Table 1. Characteristics of Respondents

Characteristic	Respondents, No. (%) (N=535)
Sex	
Female	213 (40)
Male	320 (60)
Age, median (range), y	48 (27-80)
Specialty	
Medical oncology	189 (36)
Radiation oncology	184 (34)
Palliative care	162 (30)
Tenure as staff physician, y	
≤5	108 (20)
5-10	107 (20)
11-15	86 (16)
>15	228 (43)
Practice location	
Nonacademic	243 (45)
Academic	292 (55)
Hours worked per week	
≤40	51 (9)
41-50	175 (33)
51-60	195 (37)
61-70	74 (14)
>70	36 (7)
New patients per week, No.	
≤5	147 (28)
6-10	276 (53)
11-15	49 (10)
16-20	13 (3)
>20	33 (6)
Palliative care program present	
Yes	517 (97)
No	16 (3)
Bereavement care program present	
Yes	230 (43)
No	133 (25)
Do not know	167 (32)
Patients with advanced illness (prognosis <6 months)	
≤25	184 (36)
26-50	141 (27)
51-75	83 (16)
>75	108 (21)
Hours each week spent on patient care activities	
≤25	31 (6)
26-50	104 (20)
51-75	202 (38)
>75	192 (36)
Hours each week spent on research activities	
≤25	377 (78)
26-50	90 (18)
51-75	14 (3)
>75	3 (1)
Hours each week spent on teaching or educational activities	
≤25	405 (80)
26-50	101 (20)
51-75	1 (<1)
>75	2 (<1)
Hours each week spent on administrative activities	
≤25	380 (77)
26-50	87 (18)
51-75	14 (3)
>75	8 (2)
Patient deaths per month, median (range)	4 (0-75)

Table 2. Frequency of Bereavement Practices According to Specialty^a

Bereavement Practice	Medical Oncologists	Radiation Oncologists	Palliative Care Physicians	P Value
Active Practices				
Telephone call to family				<.001
Usually or always	40 (21.3)	17 (9.3)	55 (34.8)	
Sometimes	75 (39.9)	54 (29.5)	52 (32.9)	
Rarely	53 (28.2)	75 (41.0)	40 (25.3)	
Never	20 (10.6)	37 (20.2)	11 (7.0)	
Send a condolence letter or card				<.001
Usually or always	34 (18.2)	13 (7.1)	46 (29.5)	
Sometimes	30 (16.0)	20 (11.0)	26 (16.7)	
Rarely	40 (21.4)	59 (31.9)	37 (23.7)	
Never	83 (44.4)	91 (50.0)	47 (30.1)	
Attend funeral or memorial service				.08
Usually or always	1 (0.5)	2 (1.1)	6 (3.8)	
Sometimes	8 (4.3)	6 (3.3)	41 (25.9)	
Rarely	76 (40.7)	56 (30.6)	81 (51.3)	
Never	102 (54.5)	119 (65.0)	30 (19.0)	
Passive Practices				
Initiate a family meeting				.002
Usually or always	12 (6.4)	6 (3.3)	21 (13.4)	
Sometimes	40 (21.4)	31 (17.1)	44 (28.0)	
Rarely	73 (39.6)	51 (28.2)	63 (40.1)	
Never	61 (32.6)	93 (51.4)	29 (18.5)	
Attend requested meeting				.67
Usually or always	60 (31.9)	64 (35.0)	57 (36.3)	
Sometimes	59 (31.4)	37 (20.2)	47 (29.9)	
Rarely	64 (34.0)	56 (30.6)	45 (28.7)	
Never	5 (2.7)	26 (14.2)	8 (5.1)	
Available to answer phone calls				.01
Usually or always	167 (88.8)	152 (83.1)	147 (93.6)	
Sometimes	11 (5.9)	16 (8.7)	8 (5.1)	
Rarely	6 (3.2)	12 (6.6)	1 (0.7)	
Never	4 (2.1)	3 (1.6)	1 (0.6)	
Referral Practices				
Refer to bereavement counselor				.10
Usually or always	22 (11.8)	13 (7.1)	22 (14.1)	
Sometimes	55 (29.6)	49 (26.9)	85 (54.5)	
Rarely	54 (29.0)	112.7 (25.8)	38 (24.3)	
Never	55 (29.6)	73 (40.1)	11 (7.1)	
Refer to support program				<.001
Usually or always	12 (6.5)	7 (3.9)	30 (19.1)	
Sometimes	42 (22.6)	26 (14.4)	81 (51.6)	
Rarely	48 (25.8)	41 (22.8)	26 (16.6)	
Never	84 (45.2)	106 (58.9)	20 (12.7)	
Refer to support group				.01
Usually or always	11 (5.9)	6 (3.4)	19 (12.4)	
Sometimes	29 (15.6)	29 (16.3)	84 (54.9)	
Rarely	55 (29.6)	35 (19.6)	31 (20.3)	
Never	91 (48.9)	108 (60.7)	19 (12.4)	

^aUnless otherwise indicated, data are reported as number (percentage) of respondents.

tors, being female, palliative care specialty, access to a bereavement care program, smaller number of hours worked per week, and increasing number of deaths per month were all associated with more frequent bereavement practice. Physicians who reported a feeling of sense of failure or feeling anxious after a patient death and those who preferred to not show emotions were less likely to frequently perform bereavement follow-up. In contrast, respondents who endorsed the statement that physicians had a responsibility to write a condolence letter were significantly more likely to perform active bereavement

care. All 6 barrier variables were significant negative predictors of bereavement follow-up.

In multivariate logistic regression analysis, 6 predictors were positively associated with more frequent bereavement follow-up: female sex (odds ratio [OR] 3.37; $P < .001$), palliative care specialty (OR, 10.18; $P < .001$), academic work setting (OR, 2.50; $P = .01$), absence of palliative care program (OR, 6.70; $P = .02$), increased patient deaths per month (OR, 1.06; $P = .004$), and belief that physicians have a responsibility to write a condolence letter (OR, 13.51; $P < .001$). Three predictors were

negatively associated with bereavement follow-up: more than 75% of patients with advanced illness (OR, 0.22; $P = .02$), lack of resources (OR, 0.47; $P = .04$), and lack of time (OR, 0.32; $P = .002$).

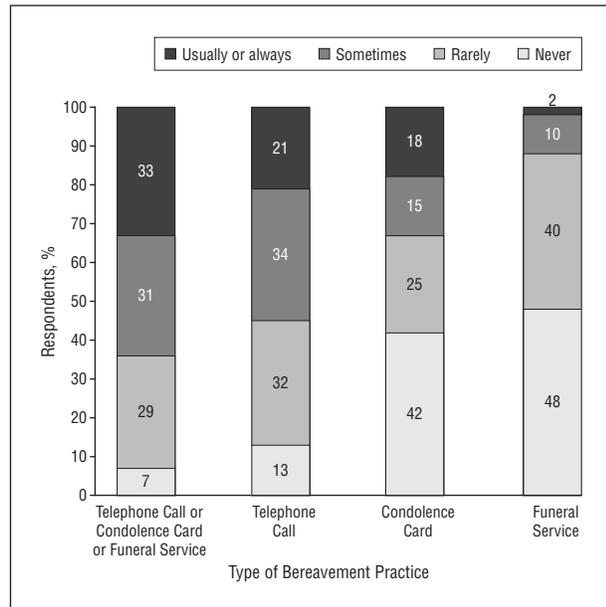


Figure. Frequency of active bereavement practices according to type of practice.

To our knowledge, this is the first study to describe bereavement care practices of cancer physicians. Identification of physician bereavement practices and opinions is the first step toward defining the physician's realistic role in bereavement care. In this study, we found great variation in physicians' bereavement practices: approximately one-third of respondents reported performing some type of bereavement follow-up routinely; one-third reported at least occasionally performing bereavement follow-up; and one-third reported rarely or never performing bereave-

Table 4. Frequency of "Important or Very Important" Barriers to Contacting Family After a Patient Dies^a

Barrier	Medical Oncologists	Radiation Oncologists	Palliative Care Physicians
Lack of time	76 (40.4)	70 (38.5)	71 (45.8)
Lack of resources	44 (23.5)	54 (30.3)	39 (24.8)
No legal responsibility to do so	9 (4.8)	19 (10.6)	5 (3.2)
Feel uncomfortable	17 (9.1)	29 (16.1)	2 (1.3)
Feel guilty about patient's death	2 (1.1)	7 (3.8)	0 (0.0)
Unsure who to contact	18 (9.6)	32 (17.6)	4 (2.6)

^aUnless otherwise indicated, data are reported as number (percentage) of respondents.

Table 3. Physician Opinions According to Specialty^a

Opinion	Medical Oncologists	Radiation Oncologists	Palliative Care Physicians	P Value
Tend to get attached to patients				.51
Agree or strongly agree	109 (58.0)	90 (49.7)	90 (57.0)	
Neutral	60 (31.9)	66 (36.5)	49 (31.0)	
Disagree or strongly disagree	19 (10.1)	25 (13.8)	19 (12.0)	
Often think about patients when not at work				.18
Agree or strongly agree	120 (63.8)	100 (54.9)	82 (52.2)	
Neutral	33 (17.6)	46 (25.3)	41 (26.1)	
Disagree or strongly disagree	35 (18.6)	36 (19.8)	34 (21.7)	
Feel sense of failure after a patient's death				<.001
Agree or strongly agree	36 (19.3)	44 (24.2)	0 (0.0)	
Neutral	62 (33.2)	43 (23.6)	12 (7.6)	
Disagree or strongly disagree	89 (47.6)	95 (52.2)	146 (92.4)	
Like to meet patient's family members				<.001
Agree or strongly agree	155 (82.4)	141 (77.0)	154 (97.5)	
Neutral	29 (15.4)	36 (19.7)	3 (1.9)	
Disagree or strongly disagree	4 (2.1)	6 (3.3)	1 (0.6)	
Like to treat patients as part of a family unit				<.001
Agree or strongly agree	124 (66.3)	121 (66.5)	152 (96.2)	
Neutral	46 (24.6)	42 (23.1)	5 (3.2)	
Disagree or strongly disagree	17 (9.1)	19 (10.4)	1 (0.6)	
Physicians have responsibility to write a condolence letter				.004
Agree or strongly agree	21 (11.2)	8 (4.4)	19 (12.0)	
Neutral	44 (23.5)	37 (20.2)	48 (30.4)	
Disagree or strongly disagree	122 (65.2)	138 (75.4)	91 (57.6)	
Feel anxious speaking to family members after a patient's death				<.001
Agree or strongly agree	27 (14.4)	38 (20.8)	9 (5.7)	
Neutral	54 (28.9)	31 (16.9)	14 (8.9)	
Disagree or strongly disagree	106 (56.7)	114 (62.3)	135 (85.4)	
Question my own mortality when my patients die				.20
Agree or strongly agree	50 (26.7)	33 (18.1)	42 (26.8)	
Neutral	46 (24.6)	57 (31.3)	45 (28.7)	
Disagree or strongly disagree	91 (48.7)	92 (50.5)	70 (44.6)	

^aUnless otherwise indicated, data are reported as number (percentage) of respondents.

Table 5. Logistic Regression of Predictors of Frequent Active Bereavement Practice

Characteristic	Univariate Analysis		Multivariate Analysis ^a	
	Odds Ratio	P Value	Odds Ratio	P Value
Demographic Predictors				
Age, each additional year	1.021	.08	NR	NS
Sex				
Male	1 [Reference]	<.001	1 [Reference]	<.001
Female	2.18		3.37	
Specialty				
Radiation oncology	1 [Reference]	<.001	1 [Reference]	<.001
Medical oncology	3.45	<.001	2.88	.04
Palliative care	9.72	<.001	10.18	<.001
Practice duration, y				
≤10	1 [Reference]	.81	NR	NS
>10	1.06		NR	
Academic status				
Nonacademic	1 [Reference]	.08	1 [Reference]	.01
Academic	1.48		2.50	
Palliative care program				
Yes	1 [Reference]	.06	1 [Reference]	.02
No/don't know	2.75		6.70	
Bereavement care program				
No/don't know	1 [Reference]	<.001	NR	NS
Yes	2.34		NR	
Hours worked per week				
>60	1 [Reference]	.04	NR	NS
<40	1.27	.53	NR	
New patients per week				
>6	1 [Reference]	.13	NR	NS
<5	1.43		NR	
Patients with advanced illness, %				
≤25	1 [Reference]	.16	1 [Reference]	.02
26-75	1.13	.65	0.58	.18
>75	1.73	.06	0.22	.01
Time spent on patient care, %				
>75	1 [Reference]	.73	NR	NS
51-75	0.86	.54	NR	NS
≤50	1.05	.87	NR	NS
Each additional patient death per month	1.030	.03	1.061	.004
Opinion Predictors				
Tend to get attached to patients				
≤Disagree	1 [Reference]	.27	NR	NS
≥Agree	1.49		NR	
Often think about patients when not at work				
≤Disagree	1 [Reference]	.84	NR	NS
≥Agree	0.86		NR	
Feel a sense of failure				
≤Disagree	1 [Reference]	.004	NR	NS
≥Agree	0.30		NR	
Prefer not to show emotions				
≤Disagree	1 [Reference]	.005	NR	NS
≥Agree	0.39		NR	
Treat patient as part of a family unit				
≤Disagree	1 [Reference]	.11	NR	NS
≥Agree	3.01		NR	
Physicians have a responsibility to write a condolence letter				
≤Disagree	1 [Reference]	<.001	1 [Reference]	<.001
≥Agree	11.50		13.51	
Feel anxious speaking to family				
≤Disagree	1 [Reference]	.02	NR	NS
≥Agree	0.40		NR	
Questions own mortality				
≤Disagree	1 [Reference]	.12	NR	NS
≥Agree	1.72		NR	

(continued)

ment follow-up. Predictors of more frequent bereavement follow-up included being female, working in an academic setting, palliative care specialty, no access to a

palliative care program, more patient deaths per month, and the opinion that physicians have a responsibility to write a condolence letter. Predictors of less frequent be-

Table 5. Logistic Regression of Predictors of Frequent Active Bereavement Practice (continued)

Characteristic	Univariate Analysis		Multivariate Analysis ^a	
	Odds Ratio	P Value	Odds Ratio	P Value
Barrier Predictors				
Lack of time				
Not important	1 [Reference]	.01	1 [Reference]	.002
Important	0.57		0.32	
Lack of resources				
Not important	1 [Reference]	.02	1 [Reference]	.04
Important	0.59		0.47	
No legal responsibility to contact family				
Not important	1 [Reference]	.002	NR	NS
Important	0.20		NR	
Feel uncomfortable				
Not important	1 [Reference]	<.001	NR	NS
Important	0.39		NR	
Feel guilty about patient's death				
Not important	1 [Reference]	.02	NR	NS
Important	0.30		NR	
Unsure who to contact				
Not important	1 [Reference]	<.001	NR	NS
Important	0.41		NR	

Abbreviations: NR, not reported; NS, not significant.

^aFor the multivariate model, 383 of 535 surveys had complete data on every predictor (72%).

reavement practice were lack of resources, lack of time, and high burden of patients with advanced illness.

Several conclusions are supported by the data from our study. First, more than half of cancer physicians report performing bereavement follow-up at least occasionally, usually by telephone, but few do it routinely. The frequency of bereavement practices performed at least occasionally by cancer physicians in our study is similar to those reported in 2 previous studies of noncancer physicians in acute care settings (telephone call, 55% in our study vs 32%-69% in other studies; condolence note, 32% vs 10%-40%; funeral attendance, 12% vs 3%-25%).^{15,34}

Second, the frequency of active bereavement varied by physician characteristics. The strongest predictor of bereavement follow-up was palliative care specialty. Reasons for this association may include greater involvement in patient care at the time of patient death; practice under a model of care that encourages bereavement follow-up; increased exposure to bereavement services; and greater access to interdisciplinary resources.²² Interestingly, respondents who reported having a palliative care program were less likely to perform bereavement follow-up, suggesting that perhaps specialists delegate bereavement follow-up to palliative care services when they are available. Sex differences in bereavement follow-up may be related to higher empathic responses exhibited by female physicians in clinical situations,^{37,38} although a survey of physicians in teaching hospitals reported that up to 18% experience moderate- to severe-intensity reactions to patient death regardless of sex.³⁹ Academic work practice differences may be related to increased access to support services and interdisciplinary teams in academic settings.⁴⁰

Third, perceived lack of resources, lack of time, and caring for a high percentage of patients with advanced illness were more significant barriers to providing bereavement follow-up than feelings of attachment, suggesting that

perhaps not guilt or emotions but rather the pressures of time and high patient load lead to an entrustment of bereavement care to palliative care services.

The great variation in the frequency and type of bereavement follow-up in our study suggests that there is no consensus on what bereavement practice should be and who should be responsible for bereavement follow-up among cancer physicians despite recent literature that encourages all physicians to provide bereavement follow-up.^{4,16,19,21,41,42} Existing surveys of bereaved persons report that some form of contact is generally appreciated,⁴³⁻⁴⁵ and 1 study found that a bereavement follow-up telephone call performed 4 months after the death was viewed positively by 90% of family members.⁴⁶ However, a third to a half of caregivers report no contact from health professionals after the patient's death.^{26,34} Although the opinion that physicians have a responsibility to write a condolence letter is endorsed in the literature¹⁶ and was found in the present study to be a strong predictor of bereavement practice, this opinion was supported by fewer than 10% of respondents, and respondents did not indicate that a standardized letter would be useful. The disconnect between recommendations in the literature, caregiver experiences, and actual physician practices suggests that further dialogue regarding this issue is likely needed, especially among physicians.

We recognize that our study has several limitations. Response bias is possible, in that physicians' self-reports may overestimate actual practices; however, we attempted to overcome this by ensuring anonymity. Given that the survey was anonymous and multiple contacts were made to maximize response rate, there is a risk of duplicate responses. To minimize that, we systematically reviewed all responses to identify any surveys with matching demographics and answers. Nonresponse bias, although also possible, may have been minimized by our

acceptable response rate of 71% compared with that of approximately 54% in other physician surveys.⁴⁷ In view of the privacy policies of the associations whose members we surveyed, we were unable to compare demographic characteristics of respondents and nonrespondents. The subjects of our study are Canadian MOs, ROs, and PCs, so our conclusions may not be generalizable to other groups. Furthermore, this study did not link bereavement care practices with outcomes such as complicated grief in caregivers, caregiver satisfaction with care, or physician job satisfaction.

We report that although most cancer physicians perform some type of bereavement follow-up occasionally, usually by telephone, few do so on a routine basis. Characteristics of physicians who are more likely to perform bereavement follow-up include female sex, academic practice, palliative care specialty, more deaths per month, lack of access to a palliative care program, and having the opinion that physicians have a responsibility to write a condolence letter. Lack of resources and caring for a large number of patients with advanced illness are important barriers to routine bereavement follow-up by cancer physicians. Further research is required to define who should be responsible for providing bereavement follow-up and whether physician-caregiver bereavement interactions influence caregiver grief outcomes and physician job satisfaction or burnout.

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