

したので以下に報告する。

## 方法

2004年2月現在、当院に所属しホスピスケアに参加している常勤医師3名、非常勤医師2名、看護師25名、看護助手4名、薬剤師2名、ソーシャルワーカー1名、チャプレン1名、栄養部スタッフ7名、ハウスキーパー6名、事務職4名、ボランティア68名、合計123名を対象とした。

調査方法は、調査の目的を明記した依頼文を添付し、日常の臨床場面で「倫理的問題で悩んだこと」について、自由記述での回答を依頼した。(図1)

調査期間は2004年2月中旬からの2週間、回答は、個人でも部署毎にまとめた提出も可能とした。また、回答は質問紙への直接記述、院内ネット上の回答コーナーへの記述、いずれも可能とした。結果は、類似の記述内容をカテゴリー化し、倫理的視点から分析した。なお、調査における倫理的配慮として、回答は無記名とし、結果の報告において回答者個人が特定できないよう配慮した。

## 結果

### 1. 回答状況

回答は、部署毎にまとめて回答用紙に記述して提出されたものと、個人が院内ネット上の回答コーナーに記述したものを合わせて回答率は86%であった。(総記述件数について個別回答者が回答用紙提出と院内ネット上へ重複して回答した者はいない。)カテゴリー化した総記述数は142件であった。(表1)

総記述件数の内訳を職種別にみると、看護師が109件と全体の78%を占め、次いで、ボランティアが14件(10%)であった。医師、薬剤師、看護助手、ハウスキーパーからの回答はなかった。

### 2. 臨床場面での葛藤にみられる倫理的課題

142件の記述について、倫理原則<sup>9)</sup>にそって、類似の回答をカテゴリー化し、7つの項目に分類して表に示した。(表2)なお、記述内容によっては、複数のカテゴリーに重複した問題と思われる記述もあったが、比重が高いとみなされる項目に分類した。

スタッフが日常のケアの中で倫理的に疑問や葛藤を抱く場面として最も多かったのは、患者に対する「自律した存在としての関わり」に関するもので28件

(20%)である。具体的には①患者が自己決定できない状態の時、家族やスタッフの意向で決断される場合が13件あった。例えば保清・介助浴の提供は看護師が提供すべきものと判断して、患者の意向に反して一方的に行っていないか。②患者の意思に反して、周囲の事情で何かが行われる場合も13件あった。例えば患者は食べたくないというが、家族は栄養を摂って欲しいとの理由から食べさせたい。患者・家族で意見が異なる場合家族の意向が優先されていないか。③害があるが患者が「したい」という場合が2件あった。例えば自分で動きたいと転倒を繰り返す患者が、看護師を呼ばず安全面が危惧される時、承諾の上で離床センサーを設置することがあるがスタッフの意向が優先されていないか。

次に多かったのは患者の「害になることを予測し、害を与えない」に関するもの24件(16%)である。具体的には①どちらが患者にとって善か悪か悩む場合が9件あった。例えば、終末期のせん妄で鎮静をすることが本当にその患者にとって良い事か。②民間療法への協力の是非に悩む場合が7件あった。例えば民間療法への協力は患者の精神的援助になると思うが、安全性が不確実なものに協力して良いのであろうか。③ケアの提供に限界を感じる場合が3件あった。例えば自分の技術不足により時間内に十分なケアができないことが患者・家族にストレスを与えているのではないか。④患者が苦痛を感じたり嫌がっても、悪化防止や予防のために何かを行う場合が3件あった。例えば褥瘡ケアで経過を比較するために、患部の写真撮影をすることは本当に患者にとって必要なことか。⑤誰がどこまでどのように関わることが、患者にとって良い事なのかかわからない場合が2件あった。例えばチームで関わることは大切だが、多職種のスタッフが患者の部屋に出入りすることはかえって患者・家族のストレスになっていないか。

患者に対する「人間としての尊厳を尊重した関わり」に関するもの20件(14%)であった。具体的には①せん妄患者や意識障害のある患者の対応に関するものが9件あった。例えばせん妄のある患者を散歩に誘うことは気分転換になる。しかし患者には人に見られたくないという思いはないであろうか。②守秘義務に関するものが7件あった。例えば多職種のスタッフが情報の共有をすることはケア上必要だが、患者の守秘義務は守られているのか。③言葉遣いに関するこ

職 種	回答方法
看護師	109件 (78%) 個別
ボランティア	14件 (10%) 個別、曜日別
栄養科	10件 (7%) 部署別
事務部	3件 (2%) 部署別
MSW	2件 (1%) 個別
チャプレン	2件 (1%) 個別
医師	0件 無回答
薬剤師	0件 無回答
看護助手	0件 無回答
ハウスキーパー	0件 無回答
全記述数	142件

表1 総記述件数の職種別分類

1. 自律した存在としてのかかわり	28件 (20%)
①患者が自己決定できない状態の時、家族やスタッフの意向で決断される場合	13件
②患者の意思に反して、周囲の事情で何かが行われる場合	13件
③害があるが患者が「したい」という場合	2件
2. 害になることを予測し、害を与えない	24件 (16%)
①どちらが患者にとって善が悪か悩む場合	9件
②民間療法への協力の是非	7件
③ケアの提供に限界を感じる場合	3件
④患者が苦痛を感じたり嫌がっても、悪化防止や予防のために何かを行う場合	3件
⑤誰がどこまでどのように関わることが、患者に良い事なのかわからない場合	2件
3. 人間としての尊厳の尊重	20件 (14%)
①せん妄患者や意識障害のある患者の対応について	9件
②守秘義務に関すること	7件
③言葉遣いの問題に関すること	4件
4. 公平性・平等であること	18件 (13%)
5. 希望に応える	11件 (8%)
6. 真実を伝える	6件 (4%)
7. その他 (システムの問題など)	36件 (25%)
①システムの問題	16件
②スタッフ間のコミュニケーションの問題	13件
③モラルの問題	7件

表2 スタッフが遭遇する疑問・葛藤 (N=142)

とが4件あった。例えば患者に対するスタッフの言葉遣いが幼稚言葉になっていることがある。患者を人間として尊重していると言えるのであろうか。

患者に対する「公平性・平等であること」に関するもの18件 (13%) であった。例えば訴えの多い患者には頻回に訪室するが、訴えのない患者は放置されがちである。訴えた者勝ちのケアは平等であると言える

のであろうか。

患者の「希望に応える」ことに関するもの11件 (8%) であった。例えば患者は一人で外出したいが、病院の責任上それが無理な時どうすれば良いか。

最も少なかったのは患者に「真実を伝える」ことに関するもの6件 (4%) であった。例えば告知されていない患者に、家族の希望で病名を最期まで伝えない

場合、倫理的に反していることにならないか。

その他として運営やシステム、スタッフ間のコミュニケーションに関する問題などが36件（25%）であった。

### 3. 倫理的課題への取り組み

今回の調査からスタッフが日常の場面で体験する疑問や葛藤について、一人ひとりの声をタイムリーに拾い上げ、チームで共有しながら機を逃さずに真摯に議論することは、ケアの質を向上させ、またスタッフを支援する面からも重要なことであり、そのためのシステム作りが早急に必要であると確認された。そこで本調査の結果を受けて、倫理委員会を図2に示すような流れの中に位置付け、倫理的課題に対する取り組みを開始した。

①倫理ポストを設置し日常のケアの中からスタッフが投じた様々な問題をタイムリーに拾い上げる。

②提起された問題について倫理委員会で整理し、問題点を明確化し対処方法について検討する。倫理的問題が含まれている場合には、委員会で検討する。倫理以外の問題が大きいとみなされる場合には、適切な部署へ振り分け、検討を依頼する。

③倫理委員会での検討結果は、全職種が集まるミーティング（当院では「チームの日」と呼ぶ）で報告し、必要があれば継続的にチームでの話し合いの時間を持つ。

④「チームの日」での話し合いの結果を倫理委員会に報告し、再検討した結果をスタッフに再度フィードバックする。

⑤倫理委員会は決定事項を掲示すると共に、倫理委員会の議事録原本をスタッフがいつでも閲覧できるように保管する。

## 考 察

### 1. 日常の疑問の中にある倫理的課題

ホスピスで働くスタッフが抱く疑問や葛藤について自由記述による調査を行った結果、日常の臨床の中で想像以上の疑問や葛藤を抱えながら働いている現状が明らかとなった。当院では、日々のケアに関するカンファレンス、チーム内の問題について話し合う場、デスカンファレンス、また1事例について議論を深める事例検討会など、様々な場でチームメンバー同士が話し合う場が設定されている。しかし、今回の調査によ

り日常の臨床場面で、スタッフが様々な問題を感じつつも、チームミーティングの中で発言できずに、心の中に溜めている様子がうかがえた。また日常見逃されがちで一見小さな出来事と思われる中に、倫理的に重要な課題が潜んでいることも確認された。スタッフがふと感じる疑問や葛藤を、大事なメッセージとして倫理委員会はタイムリーに拾い上げ、受け止めることが何よりも重要であり、倫理的課題に取り組む第一歩であると考えられる。また、スタッフ自身も、一つひとつの出来事の中に倫理的な課題が含まれていることに気づくことが重要であり、今回の調査はスタッフの臨床倫理に対する意識を高めるという点からも非常に意義深いものであったと思う。

回答状況は職種間の差が大きく、看護師が総記述件数の78%と圧倒的に多かった。その理由の一つとして、看護師は直接ケアに携わっているため患者に最も近い存在として、患者・家族の代弁者・擁護者としての気持ちと、医療従事者としての責任との間で気持ちが揺れ、葛藤を抱きやすいということが考えられる。一方、医師をはじめ、他の職種からの回答が少なかったことには、様々な要因が推測されるが、彼等は看護師に比べ患者・家族との関係において一定の距離があり、客観的な立場でかかわることが多いこともあるのではないかと推測される。職種間の意識の違いが、治療の選択や鎮静の問題など、チームでのディスカッションや意思決定のプロセスにおいて、あらたな疑問や葛藤を生じる原因の一つにもなっているように思う。日常の小さな疑問をチームの中で共有できるシステムを作っていくことが重要であると考えられる。

### 2. 相反する課題への葛藤とチームでの取り組み

本調査では回答者の記述内容において、複数の項目に重複しているとみなされる記述が多かった。その内容を見てみると“真実を伝える”ことに関する葛藤は最も少なく、ホスピスでは真実を伝えることが基本姿勢となっており、一般病院に比べ患者・家族と医療者との間で分かち合い受け止めるコミュニケーションが行われているためではないかと推測される。

一方、“自律した存在としての関わり”“害になることを予測し害を与えない”“人間としての尊厳の尊重”が上位を占めていた。このことは患者を自律した存在として認め、患者の意思を尊重し、最善のケアを提供しようとするほど、患者の苦痛を緩和し危険を

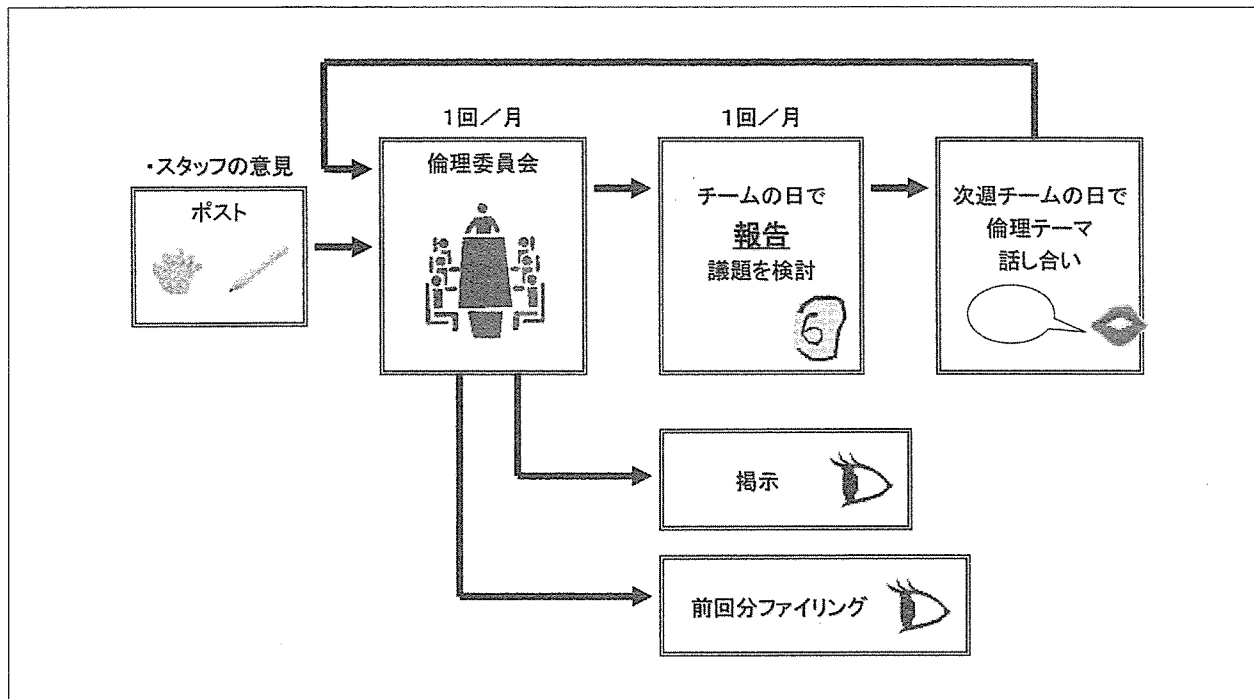


図2 ピースハウスにおける倫理的課題への取り組み

防止し害を与えないという医療者として基本的を守るべき規範との間で葛藤を感じ、あらためて「ホスピスケアとは何か」と悩み、苦しむ姿がうかがえた。答えを見つけることの難しい、これらの問題にどのように向き合っていけばよいのか。スタッフが一人で問題を抱えることなく、一つひとつの出来事、1事例ごとにチームで話し合い問題を共有しながら対処していくこと、そしてそのプロセスを大切にすることが重要であると考えている。

### 3. スタッフの抱える疑問に見える様々な局面

全回答の中の25%、4分の1は倫理的課題に直結した問題より、運営やシステムに関すること、スタッフ間のコミュニケーションやモラルの問題などであった。ホスピスケアの現場においてチーム内で情報を共有し、関係を調整することは必要不可欠であり、倫理的課題に取り組んでいく上でも重要な鍵となると思う。しかしその様な人間関係や従来の医療システムとは異なる環境が、スタッフの心の中に消化できないモヤモヤとした感情を抱かせる要因となっていることもあるかもしれない。さらに身体症状へのアプローチだけでなく、家族関係やスピリチュアリティの問題などへの対処が求められる時、スタッフ一人ひとりの価値観や感情も絡みあい複雑さを増していくように思う。

### 4. 日常の臨床に立脚した倫理的課題への取り組み

当院では倫理委員会に位置づけたプロセスを踏みながら、臨床現場で生ずる倫理的課題に取り組み始めている。問題をタイムリーに取り上げ、スタッフと共有しながら倫理委員会を運営していく本システムは、臨床倫理への取り組みとして非常に意義深いと考える。今後はスタッフが臨床現場で遭遇した問題を自由に表出し、皆で検討していくことを通して、倫理的課題への一人ひとりの意識を高め、問題に対処できる倫理的指針を作成していきたいと考えている。

### 結 語

ホスピスで働くスタッフは、倫理的な課題に関連する疑問や葛藤をいだいており、特に患者を自律した存在として認め、最善のケアを提供したいという気持ちと、苦痛を緩和し、害を与えないという医療者としての基本姿勢との間で葛藤する機会が多かった。

倫理的な疑問や葛藤をタイムリーに取り上げ、問題の所在を明確化し、スタッフにフィードバックしながら取り組むためのシステムを構築することが重要である。

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Brief Communication

## Psychometric properties of the Japanese version of the quality of life-Cancer Survivors Instrument

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Accepted in revised form 19 June 2006

### Abstract

The purpose of this study was to describe the psychometric properties of the Japanese version of the Quality of Life-Cancer Survivors Instrument (QOL-CS-J) developed in the U.S. This study was conducted as a mail survey to survivors of more than 5 years post curative resection for non-small-cell lung cancer (NSCLC) and who had participated in an earlier survey. This survey included the medical and demographic factors, the QOL-CS scores, and the Medical Outcome Study 36-Item Short Form (SF-36). A total of 113 survivors completed the survey. To confirm the reliability, the Cronbach's  $\alpha$  coefficient of each subscale was calculated as an internal consistency ( $\alpha = 0.65$ – $0.89$ ). To confirm the validity of the trial as conducted, Pearson's correlation coefficients between the subscales of the QOL-CS and the subscales of the SF-36 were calculated. There were moderate correlations between associated subscales including QOL-CS physical to SF-36 bodily pain ( $r = 0.45$ ) and vitality ( $r = 0.52$ ), QOL-CS psychological to SF-36 mental health ( $r = 0.55$ ), QOL-CS social to SF-36 general health perception ( $r = 0.31$ ) and mental health ( $r = 0.47$ ), and QOL-CS total to each subscale of SF-36 ( $r = 0.25$ – $0.64$ ). Findings demonstrated that the QOL-CS-J adequately measured the QOL in long-term NSCLC survivors.

**Key words:** Japan, Non-small-cell lung cancer, Reliability, The Quality of Life-Cancer Survivors Instrument, Validity

### Introduction

The Quality of Life-Cancer Survivors Instrument (QOL-CS) was developed to evaluate the long-term QOL of cancer survivors, to identify enduring problems in adjustment after treatment, and to identify potential areas for support [1]. The QOL-CS has been widely used, although not the case in Japan. The purpose of this study was to evaluate the psychometric properties of the Japanese version of the QOL-CS (QOL-CS-J) tool in

Japanese survivors of non-small-cell lung cancer (NSCLC).

### Methods

#### Sample

The sample of survivors of NSCLC was derived from the database of an earlier study [2]. The initial study eligibility criteria required patients to

be of 18 years of age or older; to be aware of the diagnosis of cancer; to be able to speak Japanese; to have undergone a predetermined standard surgical procedure (lobectomy or pneumonectomy with mediastinal lymph node dissection); to have no evidence of brain tumor on computerized tomography or magnetic resonance images of the head; to have no history of or current use of chemotherapy, immunotherapy, or radiation therapy; to have no active concomitant cancer; to have undergone a curative resective procedure; and to have no other medical conditions. Detailed of the original study design and recruitment procedures have been published elsewhere [2]. An additional eligibility criterion of the current study required a survival period of the participants of five years and three months or more since the original curative surgical treatment.

### *Instruments*

#### *QOL Questionnaires*

The QOL-CS includes 41 items representing the four domains (physical, social, psychological, and spiritual well-being) of cancer-specific quality of life [1]. The instructions for the survey include the statement "How your experience of having cancer affects your quality of life." The QOL total score (average across items) and the four QOL subscale scores were used as outcomes. Transformations were performed such that higher scores indicated a better QOL for all of the subscales. To create a QOL-CS-J, we obtained copyright permission from Dr. Ferrell who developed the original QOL-CS, and translated the QOL-CS into Japanese, then back-translated the scale into English using a native English speaker who was both conversant with the appropriate terminology and was fluent in Japanese. After that, two trained attending psychiatrists who were on the cancer center staffs, and five healthy volunteers confirmed the content of each item.

The SF-36 is a generic QOL instrument that assesses eight health concepts (physical functioning, role limitations caused by physical problems, bodily pain, general health perceptions, vitality, social functioning, role limitations caused by emotional problems, and mental health) [3]. Each scale is scored from 0 to 100. Higher scores indicate a better QOL. The validity and reliability of

the Japanese version of SF-36 have been well established [4, 5].

#### *Psychosocial demographic and medical background information*

Medical information was assessed regarding the pathologic disease stage, performance status (0–4, defined by the Eastern Cooperative Oncology Group), and the presence or absence of pain and dyspnoea. Furthermore, the fighting spirit and helplessness/hopelessness as cognitive and behavior adjustment to cancer were assessed using the subscales of Mental Adjustment to Cancer scale (MAC) [6]. The validity and reliability of the Japanese version of the MAC have been confirmed [7]. Patients provided demographic information, including age, sex, occupation, and marital status.

#### *Procedure*

The Institutional Review Board and the Ethics Committee of the NCC, Japan approved this study, and each patient provided informed written consent.

All eligible outpatients were invited to participate in the study after their follow-up medical visit. The patients completed a series of questionnaires, and mailed them back. If the questionnaires contained any blanks and the patients had agreed to the terms of the study at the time of first contact, a single attempt was made to obtain the missing information by telephone.

#### *Analysis*

The Cronbach's  $\alpha$  and the item-total correlation of each subscale of the QOL-CS-J were calculated to assess internal consistency reliability.

The Pearson's correlation coefficients between each subscale of the QOL-CS-J and SF-36 were computed to assess the concurrent validity. To test discriminant validity, *t*-tests or  $\chi^2$  tests were conducted with the medical background information as the independent variable and each subscale of QOL-CS-J as the dependent variable.

Data analyses were carried out with SPSS 12.0 statistical software. A significant difference was defined as  $p < 0.05$ .

## Results

### Participants

Of the 171 patients who were deemed eligible, 39 refused to participate, and 11 could not be contacted. Of the remaining 121 patients who consented to participate, one refused afterward, and seven did not return the questionnaire by mail. Thus, 70.2% (113/171) of the eligible patients participated in the present study. The psychosocial demographic and medical variables are shown in Table 1. The association between pain and dyspnoea was not shown ( $\chi^2$  coefficient = 1.87,  $p = 0.20$ ).

**Table 1.** Demographic data (N = 113)

	M ± SD (range)	N	%
Age (years)	67 ± 10 (39–89)		
Sex			
Male		67	59.0
Female		46	41.0
Education (years)	12 ± 3 (6–19)		
≤ 9		14	14.0
> 9		84	72.0
Marital status			
Married		91	81.0
Non-married		22	19.0
Living alone			
Yes		14	12.0
No		99	88.0
Employment			
Yes		44	39.0
No		69	61.0
Type of surgery			
Lobectomy		106	93.8
Pneumonectomy		7	6.2
House income (yen/year)			
< 3,000,000		4	4.0
3,000,000–4,000,000		31	27.0
4,000,000–5,000,000		39	35.0
5,000,000 <		39	35.0
Pathologic disease stage			
IA		69	61.1
IB		24	21.2
IIA		4	3.5
IIB		11	9.7
IIIA		4	3.5
IIIB		1	0.9

**Table 1.** Continued

	M ± SD (range)	N	%
Performance status			
0		85	75.2
1 or 2		28	24.8
Pain			
+		62	54.9
–		51	45.1
Dyspnoea			
+		62	54.9
–		50	44.3
Unknown		1	0.8
Smoking status			
Non-smoker		53	46.9
Ex-smoker		20	17.7
Quit smoker		32	28.3
Continued smoker		8	7.1
Recurrent			
+		2	1.8
–		111	99.2
Another cancer			
+		17	15.0
–		96	85.0
Other disease			
+		35	31.0
–		73	64.6
Unknown		5	4.4

### Feasibility

Ninety-three percent (113/121) of the participants who had accepted the questionnaire responded. There were no missing data except for item 7 (menstrual changes or fertility) which 15 patients (13.3%) missed out or did not respond to, and who were significantly older than the participants who did respond to this item. The mean age of the former was 72, the latter was 62 ( $t = 2.36$ ,  $p = 0.02$ ). There was no significant association with any other demographic variables (e.g. sex, marital status, etc.) and the score of item 7.

### Reliability

Table 2 shows the internal consistency using the Cronbach's  $\alpha$  coefficients ( $\alpha = 0.65$ – $0.90$ ) and the individual item to the subscale correlation value. The Cronbach's  $\alpha$  coefficients of the social and spiritual well being subscales were less than



**Table 2.** Internal consistency and item-total correlation

Items to subscale	Cronbach's alpha coefficients	I-T correlation	Mean	SD	Min	Max	Response rate
Physical well being	0.789		65.45	11.17	30	80	87
Fatigue		0.737	6.81	2.35	0	10	100
Appetite		0.761	8.64	2.05	0	10	100
Aches/pain		0.695	8.11	2.09	2	10	100
Sleep		0.781	7.98	2.44	0	10	100
Constipation		0.615	8.24	2.55	0	10	100
Nausea		0.650	9.45	1.60	0	10	100
Menstrual chg/fertility		0.523	8.64	2.72	0	10	87
Overall physical		0.489	6.95	2.36	0	10	100
Psychological well being	0.890		121.46	28.65	36	180	100
Coping		0.517	8.04	2.05	1	10	100
QOL item		0.467	7.78	1.78	2	10	100
Happiness		0.432	7.90	2.02	2	10	100
Control		0.404	7.58	2.21	1	10	100
Satisfaction		0.566	7.80	1.77	3	10	100
Concentration/memory		0.489	6.55	1.92	1	10	100
Usefulness		0.369	7.14	2.38	0	10	100
Appearance		0.448	7.62	2.75	0	10	100
Self concept		0.431	6.89	2.74	0	10	100
Initial dx distress		0.546	3.77	3.31	0	10	100
Ca treatment distress		0.606	5.19	3.53	0	10	100
Time since tx distress		0.660	7.50	2.28	0	10	100
Anxiety		0.766	6.44	2.89	0	10	100
Depression		0.792	7.87	2.40	1	10	100
Fear future test		0.749	7.04	3.03	0	10	100
Fear second ca		0.779	5.21	3.32	0	10	100
Fear recurrent ca		0.784	5.44	3.48	0	10	100
Fear spread ca		0.756	5.69	3.49	0	10	100
Social well being	0.684		59.34	11.55	18	80	100
Family distress		0.384	3.10	2.98	0	10	100
Support/others		0.063	8.12	2.61	0	10	100
Personal relationship		0.689	8.94	1.86	0	10	100
Sexuality		0.614	8.28	2.85	0	10	100
Employment		0.679	7.72	2.91	0	10	100
Home activity		0.714	7.46	2.41	1	10	100
Feel isolate		0.748	8.19	2.41	0	10	100
Financial burden		0.691	7.53	2.49	0	10	100
Spiritual well being	0.652		33.76	11.28	8	70	100
Import relig. activ		0.574	1.88	2.78	0	10	100
Import spiritual activ		0.568	1.90	2.64	0	10	100
Spiritual change		0.537	5.15	2.91	0	10	100
Uncertainty		0.144	6.02	2.78	0	10	100
Positive change		0.685	4.76	3.31	0	10	100
Life purpose		0.748	7.04	2.65	0	10	100
Hopefulness		0.734	7.02	2.69	0	10	100
Overall QOL	0.904						

0.70. Most items indicated a strong to moderate correlation with the subscale. However, items 15 (usefulness), 27 (family distress), 28 (amount of social support received), and 38 (uncertainty about the future) demonstrated a low consistency with

the subscale (psychological;  $r = 0.37$ , social;  $r = 0.38$  and  $r = 0.06$ , and spiritual;  $r = 0.14$ , respectively). The Cronbach's  $\alpha$  coefficients of all subscales were more than 0.70, when these items were excluded from each subscale.

### Validity

To confirm the concurrent validity, the Pearson's correlation coefficients between the subscales of SF-36, the fighting spirit and the helplessness/hopelessness subscales of the MAC, and the subscales of the QOL-CS-J were calculated (Table 3). There were moderate correlations between associated subscales including QOL-CS-J physical to SF-36 bodily pain ( $r = 0.45$ ,  $p < 0.01$ ) and vitality ( $r = 0.52$ ,  $p < 0.01$ ); QOL-CS-J psychological to SF-36 mental health ( $r = 0.55$ ,  $p < 0.01$ ); QOL-CS-J social to SF-36 general health perception ( $r = 0.31$ ,  $p < 0.01$ ) and mental health ( $r = 0.47$ ,  $p < 0.01$ ); QOL-CS-J spiritual to MAC fighting spirit ( $r = 0.33$ ,  $p < 0.01$ ) and helplessness/hopelessness ( $r = -0.32$ ,  $p < 0.01$ ); and the QOL-CS-J total to each subscale of SF-36 ( $r = 0.25-0.64$ ,  $p < 0.05$ ).

To test discriminant validity,  $t$ -tests or  $\chi^2$  tests were conducted between grade 0 and more than 1 of performance status, with and without pain, and with and without dyspnoea. Each score of the QOL-CS-J physical and social subscales of patients with good performance status, without pain, and without dyspnoea was significantly higher than each score of patients with poor performance status, with pain, and with dyspnoea.

### Discussion

The feasibility was reasonably good because 93% of the participants who received the questionnaire

responded, and there were no missing data except for one item. However, 13.3% of the participants apparently refused to respond to the item regarding menstrual changes or fertility. The participants who did not respond to this item were significantly older than the participants who did respond. There are two possible reasons for this: those participants who failed to respond may have already been post menopausal; or the Japanese, especially the elderly, are not accustomed to talk with other people about extremely personal matters such as menstruation or fertility.

A strong to moderate correlation value was indicated for the individual items to the subscale, except for four items; usefulness, family distress, the amount of received social support, and uncertainty about the future. When these items were excluded from each subscale, the internal consistencies of all subscales and total scores were good. There are three possible reasons that these four items showed low associations with each subscale: the participants' characteristics differed from the original QOL-CS validation study, in which 43% of the participants were breast cancer patients and 81% were female [1]; in the current study, the content validity was insufficient, that is, the content of the items was not confirmed by cancer patients; or the cultural differences, that is, the family-centered model of decision making and Buddhism and/or Shintoism as the religious beliefs in Japan. However, these four items had also been

**Table 3.** Concurrent validity

	QOL-CS				
	Physical	Psychological	Social	Spiritual	Total
QOL-Psychological	0.596**				
QOL-Social	0.569**	0.696**			
QOL-Spiritual	0.101**	0.191*	0.160		
QOL-Total	0.737**	0.934**	0.797**	0.407**	
SF-Physical functioning	0.339**	0.256**	0.273**	0.164	0.315**
SF-Role-Physical	0.267**	0.251**	0.253**	0.129	0.251*
SF-Bodily Pain	0.454**	0.272**	0.208*	0.163	0.384**
SF-General health perception	0.420**	0.554**	0.310**	0.162	0.533**
SF-Vitality	0.520**	0.414**	0.288**	0.235*	0.508**
SF-Social functioning	0.302**	0.265**	0.295**	0.095	0.326**
SF-Role-Emotional	0.440**	0.296**	0.295**	0.180	0.349**
SF-Mental health	0.511**	0.548**	0.474**	0.200*	0.635**
MAC-Fighting spirit	0.161	0.179	0.145	0.329**	0.253*
MAC-Helplessness/hopelessness	-0.356**	-0.418**	-0.328**	-0.321**	-0.473**

\* $p < 0.05$ , \*\* $p < 0.01$ .

suggested to have a weak association with the subscale in the original study [1].

Regarding the concurrent validity, there was correlation between the physical related subscales, the psychological related subscales, and the social related subscales of the QOL-CS-J and the SF-36, and the spiritual well being subscale of the QOL-CS-J and the fighting spirit and helplessness/hopelessness subscales of the MAC. Regarding the discriminant validity, the participants with poor performance status, pain, and dyspnoea demonstrated low scores in the physical and social well being subscale of the QOL-CS-J. These results imply that the validity of the QOL-CS-J is good.

This study had two limitations. First, this study examined subjects' responses at only one point in of time. A test-retest reliability needs to be conducted to examine fully the stability of the QOL-CS-J. Second, participants in this study were the survivors of only NSCLC. Further study on cancer survivors of other types and sites needs to be conducted.

#### Acknowledgements

We thank Mrs. Nobue Taguchi, Yuko Kojima, R.N., and Ms. Ryoko Katayama, for her assistance with recruitment and data collection. This work was supported by a Grant-in-Aid for Cancer Research and the Third-Term Comprehensive 10-Year Strategy for Cancer Control and Research, Japanese Ministry of Health, Labor and Welfare. Maiko Fujimori and Makoto Kobayakawa are

awardees of Research Resident Fellowships from the Foundation for the Promotion of Cancer Research in Japan.

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# Burnout and psychiatric morbidity among physicians engaged in end-of-life care for cancer patients: A cross-sectional nationwide survey in Japan

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## Abstract

**Purpose:** To determine the prevalence of burnout and psychiatric morbidity among physicians engaged in end-of-life care for cancer patients in Japan and to explore associated factors related to end-of-life care.

**Methods:** Questionnaires were mailed to 1436 Japanese clinical oncologists and palliative care physicians with a request to complete the Maslach Burnout Inventory (MBI), the General Health Questionnaire (GHQ-12), and to report on individual factors, including confidence in patient care. High levels of burnout and psychiatric morbidity were identified using cut-off scores of the MBI and GHQ-12.

**Results:** A total of 697 physicians returned the questionnaires (response rate, 49.6%). Twenty-two percent of the respondents had a high level of emotional exhaustion, 11% had a high level of depersonalization, 62% had a low level of personal accomplishment, and 20% had psychiatric morbidity. Clinical oncologists showed a significantly higher psychiatric morbidity than palliative care physicians. Confidence in having sufficient time to communicate with patients was significantly associated with all the burnout subscales.

**Conclusions:** A low level of personal accomplishment was relatively high among Japanese physicians compared with previous studies. Insufficient confidence in the psychological care of patients was associated with physician burnout rather than involvement in end-of-life care.

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**Keywords:** burnout; psychiatric morbidity; physician; end-of-life care; Japan

Received: 23 September 2005  
Revised: 14 March 2006  
Accepted: 15 March 2006

## Introduction

Burnout is a psychological state resulting from a prolonged period of high stress levels. Unlike a major depressive disorder, burnout is a distinct work-related stress syndrome and is often defined by the three components of emotional exhaustion, depersonalization, and diminished personal accomplishment [1,2]. Burnout occurs most frequently in those whose work requires an intensive involvement with people, including medical staff such as physicians.

Several studies have suggested that physicians engaged in end-of-life care are more likely to burnout because they may experience multiple stressors including a sense of failure or frustration when a patient's illness progresses [3,4], feelings of powerlessness against illness and its associated losses [3], role conflicts and ambiguity [5], and the

failure to enable a good death [6]. According to the first report on burnout conducted via a random survey of 1000 American oncologists in 1991 [4], 56% of the 598 respondents reported having experienced burnout in their professional lives. To our knowledge, a few studies [7–13], including one nationwide study in the UK [12], have determined the prevalence of burnout among oncologists using the Maslach Burnout Inventory (MBI) [1], a standardized measure of burnout. According to these studies [7–13], oncologists or palliative care physicians were not at any greater risk of burnout, compared with other physicians, but approximately one third of them reported high levels of burnout and psychiatric morbidity. On the other hand, a nationwide study on the prevalence of burnout and psychiatric morbidity has never been conducted in Japan either among physicians or oncologists.

Physician burnout is a serious issue because of its crucial consequences for patient care: For example, depersonalization is associated with suboptimal patient care [14] and decision making in end-of-life care, such as physician-assisted suicide or euthanasia [15,16]. Moreover, oncologists with higher levels of emotional exhaustion were more likely to choose a deep-sedation treatment option in a hypothetical scenario presented to them than those with lower levels of emotional exhaustion [17]. In addition, oncologists have reported that patient care such as being involved in emotional distress or physical suffering is often a source of job stress [18,13]. Nevertheless, end-of-life care has a two-sided nature: it can be stressful if done badly, but rewarding if done well [19–21,13]. As described above, end-of-life patient care is estimated to be closely related with oncologist burnout and psychiatric morbidity, however, little is known about the association between them. Therefore, to develop strategies to alleviate physician burnout and psychiatric morbidity, we attempted in the present study to investigate physicians' involvement and confidence in patient care as factors associated with the prevalence of physician burnout and psychiatric morbidity.

The purpose of this study was to determine the prevalence of burnout and psychiatric morbidity among physicians engaged in end-of-life care for cancer patients in Japan and to explore associated factors related to end-of-life care.

## Methods

### Respondents and Procedure

This is a secondary analysis of our previous study [17] on the practices and attitudes of Japanese physicians concerning terminal sedation. We enrolled physicians who were clinical oncologists or palliative care physicians such as those who were engaged in end-of-life care for cancer patients in Japan. One source was a list of physicians from the Japanese Association of Clinical Cancer Centers, as a sample of clinical oncologists. The other source was a list of physicians from the Japanese Association of Hospice and Palliative Care Units, as a sample of palliative care physicians. Twenty-six institutions from a total of 27 hospitals that belonged to the Japanese Association of Clinical Cancer Centers and the Japanese Association of Hospice and Palliative Care Units approved the study. In February 2000, we mailed the questionnaire to 1436 eligible physicians. The inclusion criteria were: (1) being an attending physician whose specialty was primarily responsible for the care of terminally ill cancer patients, (2) having actual experience in oncology or palliative care, and (3) being unaffiliated with this study project.

### Questionnaire

**Burnout:** The Maslach Burnout Inventory (MBI) [1] is a self-administered questionnaire consisting of 22 items using a 7-point Likert-type scale (possible range, 0–6) that measures the three subscales of burnout syndrome: emotional exhaustion (9 items), depersonalization (5 items), and personal accomplishment (8 items). A high level of burnout was defined as a high level of emotional exhaustion (upper third, score of 27 or higher), a high level of depersonalization (upper third, score of 10 or higher), and a low level of personal accomplishment (lower third, score of 33 or lower) based on normative data from a sample of American health professionals (physicians and nurses) [1]. We used these cut-off scores to compare the prevalence of burnout in this study with that of previous studies in oncologists [7–13]. The psychometric properties of the Japanese version of the MBI are controversial [22] and because of this we performed reliability and validity testing on our study data ourselves. The reliability of the Japanese version of the MBI [23] was evaluated by calculating the Cronbach's alpha coefficients: emotional exhaustion, depersonalization, and personal accomplishment were 0.87, 0.68, and 0.88, respectively. Discriminant validity was evaluated by calculating the Pearson's correlations coefficients of the inter-subcales of the MBI: emotional exhaustion and depersonalization ( $r=0.50$ ,  $p<0.01$ ), emotional exhaustion and personal accomplishment ( $r=-0.04$ ,  $p=0.39$ ), and depersonalization and personal accomplishment ( $r=-0.17$ ,  $p<0.01$ ). Convergent validity was evaluated by calculating the Pearson's correlations coefficients of the total score of GHQ-12 and emotional exhaustion ( $r=0.44$ ,  $p<0.01$ ), depersonalization ( $r=0.28$ ,  $p<0.01$ ), and personal accomplishment ( $r=-0.18$ ,  $p<0.01$ ). We considered these results were satisfactory and allowed the MBI results to be included in further analyses.

**Psychiatric morbidity:** The General Health Questionnaire 12-item version (GHQ-12) [24] is a self-administered questionnaire designed to screen for non-psychotic psychiatric morbidity, it is well validated including the Japanese version [25–27] and has been widely used in samples of healthcare professionals. It measures 12 symptoms of psychiatric morbidity (e.g. depression, loss of confidence, sleep disturbance). Each item is scored as 0 (less or no more than usual) or 1 (rather or much more than usual), giving a maximum total score of 12. Scores above a threshold of 4 or more are regarded as indicating psychiatric morbidity. This approach has been recommended by the developer of this scale [28] and has been shown to be applicable to the Japanese version [29]. We used it to compare the prevalence of psychiatric morbidity in this study with that reported in previous studies for oncologists [8–13].

*Individual factors:* We included physician characteristics and other individual factors in the questionnaire (available from the authors) that was developed for our previous study [17] to identify physicians' attitudes toward terminal sedation for cancer patients: the questionnaire was developed after a systematic literature review and discussions by an expert panel. Strength of religious belief was assessed by 3 items using a 5-point Likert-type scale (possible range, 1 to 5—with a higher score indicating greater strength). Involvement in end-of-life care during the past year was assessed by 3 items using a 4-point Likert-type scale (possible range, 1 to 4—with a higher score indicating greater involvement). Confidence in the physical or psychological care of patients were assessed by 5 items each using a 5-point Likert-type scale (possible range, 1 to 5—with a higher score indicating greater confidence).

### Statistical Analysis

We first calculated the Cronbach's alpha coefficients for the subscales: strength of religious belief (0.89), involvement in end-of-life care (0.88), confidence in the physical care of patients (0.77), and confidence in the psychological care of patients (0.75). Because of its excellent internal consistency, we used these as a single subscale to compare physician characteristics between two practice settings (clinical oncologists versus palliative care physicians). To compare the prevalence of burnout and psychiatric morbidity between two practice settings, we performed chi-square tests. To examine the association between high levels of burnout and psychiatric morbidity, high levels of burnout were entered as independent variables into a multivariate logistic regression analysis. To explore the association with total scores of MBI and GHQ-12, all individual factors were entered as independent variables into a multivariate linear regression analysis using forced entry.

In all statistical evaluations, *p* values of 0.05 or less were considered significant; all reported *p* values were two-tailed. SPSS ver.12.0J statistical software for Windows (SPSS Japan Institute Inc, Tokyo, Japan) was used to perform all statistical analyses.

## Results

### Physician characteristics

Of the 1436 physicians to whom questionnaires were mailed, 550 physicians responded within 1 month and 179 responded after a reminder. Thirty-two responses did not meet the eligibility criteria, so 697 responses were finally analyzed (49.6% effective response rate, 697 of 1404). The responses were obtained from 560 (43%) of the 1306

physicians working at medical centers for cancer and adult disease and from 87 (67%) of the 130 physicians working at hospices or palliative care units. The data on 50 missing values indicated the data on physicians whose practice settings were unknown. The physician characteristics are summarized in Table 1. The respondents were 28–69 years of age (mean  $\pm$  S.D., 45  $\pm$  8.2), with 0.5–40 years of oncology experience (mean  $\pm$  S.D., 16  $\pm$  8.1). When the two practice settings were compared, the clinical oncologists had a higher proportion of male physicians (95% versus 87%,  $p < 0.01$ ), more years of oncology experience (mean  $\pm$  S.D., 16  $\pm$  7.9 versus 12  $\pm$  7.6,  $p < 0.01$ ), less religious beliefs (mean  $\pm$  S.D., 2.8  $\pm$  0.9 versus 3.6  $\pm$  1.0,  $p < 0.01$ ), less involvement in end-of-life care (mean  $\pm$  S.D., 1.4  $\pm$  0.4 versus 3.3  $\pm$  0.9,  $p < 0.01$ ), less confidence in the physical care of patients (mean  $\pm$  S.D., 3.0  $\pm$  0.7 versus 3.5  $\pm$  0.8,  $p < 0.01$ ), and less confidence in the psychological care of patients (mean  $\pm$  S.D., 2.8  $\pm$  0.6 versus 3.3  $\pm$  0.7,  $p < 0.01$ ) than palliative care physicians.

### Prevalence of burnout and psychiatric morbidity

The prevalence of burnout and psychiatric morbidity are shown in Table 2. Compared with American normative data, the proportions of physicians with high levels of emotional exhaustion (22 versus 33%) and depersonalization (11 versus 33%) were lower, while the proportion of physicians with a low level of personal accomplishment (62 versus 33%) was much higher. Psychiatric morbidity was 20% among all the physicians who responded. When we compared the data for the two practice settings, the clinical oncologists showed a significantly higher prevalence of psychiatric morbidity (21 versus 12%,  $p = 0.05$ ), and a higher proportions of physicians with low levels of personal accomplishment (65 versus 53%,  $p = 0.05$ ), compared with palliative care physicians.

We next examined the association between high levels of burnout and psychiatric morbidity, as shown in Table 3. A high level of emotional exhaustion ( $p < 0.01$ ) and a low level of personal accomplishment ( $p < 0.01$ ) were significantly associated with psychiatric morbidity. On the other hand, a high level of depersonalization ( $p = 0.21$ ) was not significantly associated with psychiatric morbidity.

### Factors associated with total scores of MBI and GHQ-12

The associations between individual factors and total scores of MBI and GHQ-12, as determined using a multivariate linear regression analysis, are shown in Table 4. Among the items for physician confidence in the psychological care of patients, having sufficient time to communicate with patients

**Table 1.** Physician characteristics

	Total physicians (n = 697) n (%)	Clinical oncologists (n = 560) n (%)	Palliative care Physicians (n = 87) n (%)
Age (years)			
Mean $\pm$ S.D.	45 $\pm$ 8.2	45 $\pm$ 8.2	43 $\pm$ 8.1
Range	28–69	28–68	31–69
Gender			
Male	639 (92)	531 (95)	76 (87)
Female	43 (6)	27 (5)	11 (13)
Religion			
None	521 (75)	441 (80)	49 (56)
Buddhism	108 (16)	87 (16)	9 (10)
Christianity	47 (7)	18 (3)	24 (28)
Others	13 (2)	3 (1)	4 (5)
Oncology experience (years)			
Mean $\pm$ S.D.	16 $\pm$ 8.1	16 $\pm$ 7.9	12 $\pm$ 7.6
Range	0.5–40	0.5–40	1.0–30
Involvement in end-of-life care during the past year			
Percentage of time used for palliative care			
< 25	502 (72)	452 (81)	13 (15)
25–50	103 (15)	91 (16)	9 (10)
51–75	14 (2)	7 (1)	7 (8)
> 75	67 (10)	9 (2)	58 (67)
Percentage of patients with an estimated survival time of less than 6 months			
< 25	466 (67)	423 (76)	11 (13)
25–50	116 (17)	105 (19)	6 (7)
51–75	31 (4)	21 (4)	8 (9)
> 75	70 (10)	8 (1)	61 (71)
Number of patients who died			
< 5	222 (32)	196 (35)	3 (4)
5–25	374 (54)	344 (62)	16 (19)
26–50	42 (6)	16 (3)	24 (28)
> 50	47 (7)	3 (1)	43 (50)

Note: We included 50 missing values among total physicians whose practice settings were unknown. S.D.: standard deviation.

**Table 2.** Prevalence of burnout and psychiatric morbidity

	Total physicians (n = 697) (%)	Clinical oncologists (n = 560) (%)	Palliative care physicians (n = 87) (%)	$\chi^2$	P value
High level of Emotional Exhaustion	22	23	15	2.81	0.09
High level of Depersonalization	11	10	8	0.19	0.66
Low level of Personal Accomplishment	62	65	53	4.03	0.05
Psychiatric Morbidity	20	21	12	3.80	0.05

Note: We included 50 missing values among total physicians whose practice settings were unknown.

**Table 3.** Association between high levels of burnout and psychiatric morbidity: multivariate logistic regression analysis (n = 697)

	Psychiatric morbidity		
	OR	95%CI	P value
High level of Emotional Exhaustion	4.41	2.70–7.20	<0.01
High level of Depersonalization	1.49	0.79–2.79	0.21
Low level of Personal Accomplishment	2.32	1.43–3.78	<0.01

OR: odds ratio; CI: confidence interval.

had the lowest score (mean  $\pm$  S.D., 2.7  $\pm$  1.0) and was significantly associated with all the total scores of MBI and GHQ-12: emotional exhaustion

( $p < 0.01$ ), depersonalization ( $p < 0.01$ ), personal accomplishment ( $p < 0.05$ ), and GHQ-12 ( $p < 0.01$ ). Though all the total adjusted  $R^2$  values presented in Table 4 were very low, the best performing model is that for personal accomplishment (total adjusted  $R^2 = 0.18$ ). Being male ( $p < 0.05$ ), being little involved in care for patients who died during the past year ( $p < 0.05$ ), having greater confidence in having adequate resources in physical care ( $p < 0.01$ ), having greater confidence in the assessment of patient anxiety and depression ( $p < 0.01$ ) and assessment of patient ability to make decisions ( $p < 0.05$ ) were significantly associated with higher personal accomplishment. Being a clinical oncologist was significantly associated with

**Table 4.** Factors associated with burnout and stress: multivariate linear regression analysis ( $n = 697$ )

	Emotional Exhaustion $\beta$	Depersonalization $\beta$	Personal Accomplishment $\beta$	GHQ-12 total scores $\beta$
Age (years)	-0.14	-0.11	-0.01	0.01
Gender <sup>a</sup>	0.05	0.00	-0.08 <sup>e</sup>	0.04
Practice setting <sup>b</sup>	-0.13 <sup>e</sup>	0.00	0.04	-0.13 <sup>e</sup>
Strength of religious belief <sup>c</sup>	0.07	0.03	0.08	0.09 <sup>e</sup>
Oncology experience (years)	0.08	0.03	0.07	-0.07
Involvement in End-of-life care during the past year <sup>d</sup>				
Percentage of time used for palliative care	0.01	-0.11	-0.02	-0.05
Percentage of patients with an estimated survival time of less than 6 months	0.02	-0.02	0.04	0.10
Number of patients who died	0.09	0.12	-0.13 <sup>e</sup>	0.06
Confidence in the physical care of patients <sup>e</sup>				
Knowledge and skill (pain)	0.00	0.01	0.09	-0.04
Knowledge and skill (physical symptoms)	-0.03	-0.01	0.08	-0.01
Having trained (physical management)	0.03	-0.01	-0.03	-0.05
Having adequate resources	-0.03	0.09	0.16 <sup>f</sup>	-0.03
Ability to make a prognosis	0.04	0.01	0.04	-0.04
Confidence in the psychological care of patients <sup>e</sup>				
Assessment (patient anxiety and depression)	-0.02	-0.02	0.17 <sup>f</sup>	0.06
Knowledge and skill (psychotropics and psychotherapy)	0.06	-0.02	-0.06	-0.03
Having adequate resources	-0.06	-0.01	-0.10	0.01
Assessment (patient ability to make decisions)	-0.03	-0.05	0.13 <sup>e</sup>	-0.09
Having sufficient time to communicate with patients	-0.16 <sup>f</sup>	-0.23 <sup>f</sup>	0.10 <sup>e</sup>	-0.15 <sup>f</sup>
Total $R^2$	0.07	0.09	0.21	0.09
Total adjusted $R^2$	0.04	0.07	0.18	0.06

$\beta$ : standardized coefficient.

<sup>a</sup>Coded as: 0 = Male; 1 = Female.

<sup>b</sup>Coded as: 0 = Clinical Oncologists; 1 = Palliative Care Physicians.

<sup>c</sup>Possible range 1–5. Higher scores indicate greater strength or confidence.

<sup>d</sup>Possible range 1–4. Higher scores indicate greater involvement.

<sup>e</sup>Statistically significant variables ( $p < 0.05$ ).

<sup>f</sup>Statistically significant variables ( $p < 0.01$ ).

emotional exhaustion ( $p < 0.05$ ) and total scores of GHQ-12 ( $p < 0.05$ ).

## Discussion

This is the first cross-sectional nationwide survey to determine the prevalence of burnout and psychiatric morbidity among physicians engaged in end-of-life care for cancer patients in Japan. Based on the results of present study, several findings emerged. First, 22% of the respondents had a high level of emotional exhaustion, 11% had a high level of depersonalization, 62% had a low level of personal accomplishment, and 20% had psychiatric morbidity. Second, clinical oncologists showed a significantly higher prevalence of psychiatric morbidity than palliative care physicians (21% versus 12%). Third, physician confidence in having sufficient time to communicate with patients was the factor most strongly associated with burnout.

Before proceeding any further with this Discussion section, we would like to present several critical limitations of this study to help the readers' understanding of our interpretation of the results. First, there was a sample bias. The response rate

was relatively low (49.6%), so our prevalence may not be truly representative. Because the response rate of the clinical oncologists (43%) was lower than that of the palliative care physicians (67%) and the clinical oncologists showed a higher prevalence, physicians with high levels of burnout may not have responded to our study. Second, this study was a secondary analysis, so the number of factors included as independent variables was limited and neither the variance in burnout nor the relations among burnout, psychiatric morbidity and individual factors could be fully explained. Third, this was a cross-sectional study, so any causality between the prevalence and associated factors could not be determined.

In previous studies examining burnout in oncologists [7–13] and general physicians [30,31,14], high levels of emotional exhaustion (23–53% and 19–53%, respectively), high levels of depersonalization (13–31% and 22–64%, respectively), and low levels of personal accomplishment (21–48% and 13–31%, respectively) were observed. The present study showed a lower prevalence of depersonalization and a higher prevalence of diminished personal accomplishment, compared with the results of previous studies.



Depersonalization is associated with suboptimal patient care [14,16]; therefore, its lower level among the physicians in this study may not have a strong impact on end-of-life care.

On the other hand, the prevalence of a low level of personal accomplishment was relatively high and was significantly associated with psychiatric morbidity in the present study. Our results showing that personal accomplishment reduces the risk of psychiatric morbidity were consistent with a previous nationwide cross-sectional study [13,32]. The role of personal accomplishment is complicated: it is believed to prevent emotional exhaustion and depersonalization [1,33], whereas at a high level, it predicted higher levels of stress in a longitudinal study [34]. According to our results, improving physician confidence in assessing the mental state of patients (anxiety, depression, decision making ability) and having adequate resources for the physical care of patients may prevent a diminished sense of personal accomplishment. However, assessing a patient's mental state is difficult for oncologists because they receive little training on assessing psychological distress [35,36], so further education is needed. In addition, clarifying the physician role has been suggested as improving a diminished sense of personal accomplishment [5]. Therefore, we recommend that mental health professionals be consulted to provide education on psychological distress and to clarify the roles of physicians. In Japan, consultation teams for palliative care that include a palliative care specialist and a psychiatrist as essential members have started to receive expanded coverage under healthcare insurance since 2002; further studies are required to see whether this system will improve the confidence of physicians and prevent diminished personal accomplishment in Japan.

The overall psychiatric morbidity in this study was 20%. Since the prevalence of psychiatric morbidity in the general population of Japan is 16.5% [37], physicians engaged in end-of-life care for cancer patients were not considered to have a particularly high prevalence of psychiatric morbidity. Furthermore, psychiatric morbidity in this study was lower than that in previous studies on burnout in oncologists (25–32%) [9–13] and was nearly equal to recent data on UK doctors who were not oncologists (17–18%) [34] using the same GHQ-12 cut-off score. On the other hand, considering that the non-responders showed a higher psychiatric morbidity in a previous study [38], we might have underestimated the prevalence in the present study owing to our low response rate.

The palliative care physicians showed much lower levels of burnout and psychiatric morbidity than the clinical oncologists, and this result was similar to those of previous studies in which physicians and nurses working in hospices had lower stress levels than those working in oncology settings [39–41]. On the other hand, a previous

study in the UK [12] showed nearly the same level of psychiatric morbidity in these two practice settings. As indicated in the limitations of this study, we could not investigate the job stress factors. Clinical oncologists reported feeling more overloaded and being involved with treatment toxicity, which factors were significantly associated with psychiatric morbidity [12]. Furthermore, situational factors such as workload, control, reward, community, fairness, and values have been said to be more importantly correlated with burnout than individual factors [2,42,43]. These job stress and situational factors may be more associated with the prevalence of burnout than involvement in end-of-life care, and these factors might be related to the Japanese palliative care system in 2000. In Japan, healthcare insurance has supported dissemination of specialized palliative care services since 1991, the number of palliative care units having dramatically increased from only 5 in 1991, to 123 in 2004 [44].

Burnout was associated with physician confidence, especially confidence in the psychological care of patients, rather than involvement in end-of-life care. Among the factors, confidence in having sufficient time to communicate with patients was the most strongly associated factor. To relieve physician burnout, ensuring sufficient time to communicate with patients or the development of clinical aids to help communication within a brief time are promising strategies. Communication skills training would not help physicians to have sufficient time but may help them acquire good communication skills, minimizing the need for more time. Physicians who felt insufficiently trained or who were not confident of their communication skills were more likely to have a low sense of personal accomplishment [7,12,13]. Despite the effectiveness of communication skills training in Western countries [45,46], our preliminary study showed that while oncologists became more confident of their communication skills, their level of emotional exhaustion also increased after training [47]; further studies on communication skills training are needed in Japan.

In conclusion, a low level of personal accomplishment was relatively high among Japanese physicians compared with previous studies. Insufficient confidence in the psychological care of patients was associated with physician burnout rather than involvement in end-of-life care.

#### Acknowledgements

We are grateful to the Japanese Association of Clinical Cancer Centers and the Japanese Association of Hospice and Palliative Care Units for their collaborative support, and to all the physicians who responded to our survey. This study was supported in part by a Third Term Comprehensive 10-Year Strategy for Cancer Control from the Japanese Ministry of Health, Labour and Welfare.

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**Original Article**

# Screening for Depression in Terminally Ill Cancer Patients in Japan

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**Abstract**

This study attempted to assess the performance of several screening instruments for adjustment disorders (ADs) and major depression (MD) among terminally ill Japanese cancer patients. Two hundred and nine consecutive patients were assessed for ADs and MD using a structured clinical interview at the time of their registration with a palliative care unit, and two single-item interviews ("Are you depressed?" and "Have you lost interest?") and the Hospital Anxiety and Depression Scale (HADS) were administered. Screening performance was investigated by calculating sensitivity, specificity, the positive predictive value, negative predictive value, likelihood ratio, and stratum-specific likelihood ratios. When the screening target included both an AD and MD, the HADS is a more useful screening method than the single-item interviews. Regarding screening for MD, both single-item interviews and the HADS possess useful screening performance. Different screening instruments may be recommended depending on the depressive disorders and specific populations. *J Pain Symptom Manage* 2006;31:5–12. © 2006 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.

**Key Words**

Depression, terminally ill, screening, culture

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**Introduction**

Depression is the most prevalent psychological disorder in advanced and/or terminally ill cancer patients. Typical forms of depression experienced by cancer patients are adjustment disorders (ADs) and major depression (MD).<sup>1</sup>

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Accepted for publication: May 27, 2005.

Several studies investigating the prevalence of these depressive disorders in advanced/terminally ill cancer patients by rigorous diagnostic methods (e.g., structured clinical interview) have revealed rates of ADs of 9–35% and rates of MD of 8–26%.<sup>2–12</sup> Depression not only causes great suffering, but diminishes quality of life, amplifies pain and other symptoms, sometimes leads to suicide and requests to hasten death, and is a psychological burden on the family.<sup>13</sup> Since there are effective management strategies for these disorders, including psychotherapy and pharmacotherapy,<sup>14,15</sup> they should be treated adequately. Depression,