Assessment of quality of life by clinicians — experience of a practical method in lung cancer patients

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Objective. To evaluate a practical method (brief scale) of assessing the quality of life in patients with lung cancer.

Design. To compare the scores obtained by means of the brief scale with those obtained on formal tests. The brief scale consists of an Outlook score (measuring psychological status) and a Support score (measuring psychosocial support). The formal tests were the Hospital Anxiety and Depression Scale (HADS) for psychological status, and the Rotterdam Symptom Checklist (RSCL) and Spitzer QL-Index for quality-of-life assessment.

Setting. Lung cancer follow-up clinic, Groote Schuur Hospital.

Participants. A total of 40 patients selected by random sample.

Main outcome measures. The correlation between the brief scale and standard formal tests.

Results. The HADS indicated that psychological morbidity was present in 30% of patients. Both the RSCL and the Spitzer QL-Index indicated a significantly poor quality of life in 25% of patients. The Outlook score correlated with both psychological status and quality of life. The Support score correlated with psychological status but not with the assessment of quality of life. It did, however, correlate with the independent evaluation of social support in the Spitzer QL-Index.

Conclusions. The brief scale is a cost-effective and useful tool for quality of life assessment in the clinical management of patients with lung and other cancers.

The practice of medicine is concerned not only with prolongation of the survival of patients, but also with their quality of life. However, although subjective assessment of the factors affecting quality of life may form part of the clinician's management of a patient with lung cancer, it may

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vary from one clinician to another and may not be as comprehensive as it should be. In recent years, increasing attention has therefore been given to a more scientific assessment of quality of life which includes emotional, social and spiritual aspects of the patient's well-being.[1] Numerous instruments to assess quality of life have been introduced over the past decade, and these are still being developed in the light of experience.

The methodology of these tests has been developed by social scientists without the significant involvement of clinicians.[2] Patients are usually asked to complete questionnaires that are then evaluated by psychologists. This technique has been useful in determining the prevalence of psychological morbidity such as depression or anxiety, and to compare the effects on the quality of life of two different forms of treatment. However, such a procedure is of limited value to the practising clinician and is not cost-effective.

Patients and methods

The quality of life of patients depends on many different factors, including biological, psychological and social factors.[1] The measurement of biological factors such as symptoms and signs, general well-being, e.g. performance[3] (Table I), and specific organ function, e.g. dyspnoea score,[4] are already part of routine clinical practice. In order to include and document psychological and social factors, we needed an objective assessment tool which could be scored easily and which would also be meaningful to others. It could also serve as a focus for further understanding and as a screening device for psychosocial morbidity. It was also important that it be brief enough for clinicians to memorise and use routinely.

Table I. World Health Organisation Performance status score (abbreviated)

Able to carry out normal activity without restriction	0
Symptomatic but fully ambulatory	1
Capable of self-care and up and about more than 50% of waking hours	2
Confined to bed or chair more than 50% of waking hours	3
Confined to bed or chair	4

We therefore chose the Spitzer QL-Index as a basis for our test. The Spitzer QL-Index was developed in 1981 and is regarded as the most widely used quality-of-life scale.[5] It consists of five questions, the first three of which assess physical/biological factors by focusing on, firstly, the patient's activity, secondly the ability to care for one's self and thirdly, the feeling of well-being. Question four addresses the level of social support and question five psychological well-being, both of which are frequently overlooked in routine clinical assessment, and which therefore formed the basis of the brief assessment scale which was developed (Table II). This assessment tool was introduced to all professional staff and incorporated into routine clinical practice at the lung cancer clinic at Groote Schuur Hospital.

Table II. The Outlook and Support scores

Brief quality-of-life scale

Outlook (Assess the patient's general mood and outlook since the last visit)

1a. Have you felt down or depressed (most of the time?/only sometimes?/never?)

1b. Have you felt anxious or afraid (most of the time?/only sometimes?/never?)

2. Are you able to cope and make plans for the future? (If not, determine whether this is because of practical or emotional reasons.)

Further exploratory questions in the event of anxious or depressed feelings:
* What do you do when you feel like this? Does it help?
* Do you feel you need help in dealing with these feelings?

Score	Calm and positive outlook	(1)
	Somewhat anxious and/or depressed outlook	(2a/2d)
	Distinctly anxious and/or depressed outlook	(3a/3d)

Support (Assess the patient's quality of emotional and physical support from others since the last visit)

1. If you feel sad or afraid, or need help, whom do you turn to for support?

2. Are they able to help you (emotionally — physically?)

Further exploratory questions:
* Have you found it difficult to discuss your illness with those close to you?
* Have you felt lonely and isolated?

Score	Good social/emotional support (coping well)	(1)
	Moderate social/emotional support (coping)	(2)
	Poor social/emotional support (not coping)	(3)

Patients

Forty patients attending the lung cancer follow-up clinic were entered into this study on a random basis between February and July 1993. Their ages ranged from 40 to 80 years with a mean age of 60 years. Thirty-two were men (80%) and 8 women (20%). Stage of disease and details of histology are given in Table III, and are representative of the population as a whole. Eighteen (45%) were initially treated with radiation, 8 (20%) with surgery and 6 (15%) with chemotherapy, while 8 (20%) were given only symptomatic treatment.

Table III. Patient stage and histological findings

Stage		Histology	
Stage 1	10 (25%)	Squamous	14 (35%)
Stage 2	2 (5%)	Adenocarcinoma	12 (30%)
Stage 3	17 (43%)	Undifferentiated	8 (20%)
Stage 4	11 (28%)	Small cell	3 (8%)
		Miscellaneous	3 (8%)

Methods

Patients attending the clinic routinely undergo evaluation of physical well-being, which includes level of pain, performance status and dyspnoea score. Quality-of-life assessment with the brief scale was introduced at the clinic in September 1992.

Patients in this study also underwent independent evaluation by a psychologist using the Hospital Anxiety and Depression Scale (HADS)[6] to assess psychological status, the Rotterdam Symptom Check List (RSCL)[7] and the Spitzer QL-index[5] for quality-of-life assessments. In addition to psychological assessment, patients and participating doctors were interviewed to ascertain their reaction to the introduction of this form of quality-of-life assessment.

Results

The HADS showed that psychological morbidity was present in 30% of all patients: anxiety in 17,5% and depression in 22,5%. Both the RSCL and the Spitzer QL-Index revealed significantly poor quality of life in 25% of patients.

The correlations between the different psychological tests are shown in Table IV. The Outlook score correlated with the psychological status as measured by the HADS, and the quality of life as measured by the RSCL and the Spitzer QL-Index. The Support score correlated with psychological status, but not with quality of life. However, both the Outlook and Support scores correlated significantly with corresponding questions in the Spitzer QL-Index (correlation = 0,55 and 0,53 for Outlook and Support respectively) which suggests that the Support question measures the social support factor as accurately as the full scale.

Table IV. Correlation of the tests

	RSCL	Spitzer	Outlook	Support
HADS	0,86*	0,50*	0,61*	0,43*
RSCL		−0,62*	0,64*	0,18
Spitzer			−0,66*	−0,12
Outlook				0,09

* Statistically significant.

Patients interviewed responded positively to the introduction of quality-of-life assessment, some experiencing marked relief at being 'able to discuss issues which didn't seem part of the clinic before', or 'able to talk about things that are really worrying'.

The response from doctors was rather more ambivalent, and included: 'It has improved my communication with patients'; 'It's good that those patients who have problems now talk about them'; 'What does one do once one has asked the questions — one feels that the patients want something afterwards'; 'It's a stiff and formal way of doing something I've been doing all along'.

Conclusion

A brief assessment scale, based on the Spitzer QL-Index, was designed and introduced at the lung cancer clinic at Groote Schuur Hospital. It was designed to include assessment of psychological and social factors, which are unfortunately frequently overlooked in practice, and was designed with busy clinicians in mind. It was used on 40 patients who were representative of the general lung cancer population who attend the clinic in respect of age, sex,

histology, stage and treatment.[8] The incidence of psychological morbidity was similar to that generally reported in the literature.[9]

The Outlook score calculated by clinicians correlated with psychological status and quality of life assessed by the HADS, RSCL and Spitzer QL-Index. The Support score, also assessed by clinicians, correlated with psychological status (HADS) but not with quality of life when RSCL and Spitzer QL-Index were used. However, it did correlate with the Support question in the Spitzer test carried out by a psychologist. Overall, the brief scale appears to be effective as a simple screening device for psychological morbidity and quality of life.

Use of this brief scale enables clinicians to include psychological and social factors in their routine patient assessments with the aim of making them more comprehensive and improving patient management. Patients' concerns were uncovered and could be discussed, enabling the clinician to intervene where appropriate or refer the patients for more specialised attention. Giving quality of life factors a numerical value by means of a simple score facilitated communication between professional staff, and also provided a simple means of evaluating the progress of patients over time.

The brief scale is therefore a cost-effective measure of quality of life, which is easy to carry out and could be generally used in oncology. It raises the standard of clinical care of patients with lung cancer.

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