A Survey of Quality of Life Following Surgery for Malignant Pleural Mesothelioma: Reflects the patients’ commitment to Learning about the Disease

D A Raffle, A Barua, A E Martin-Ucar

Thoracic Surgery Unit
Nottingham University Hospital Trust
Overview

- Definition
- Indications for study
- Patients and Methods
- Results
- Questionnaires
- Discussion
Health related Quality of life

In 1948, the World Health Organisation (WHO) defined health as:

“A state of complete physical, mental and social well-being, and not merely the absence of disease ”.

World Health Organisation (WHO) 1948
Why do we measure Quality of Life in healthcare?

- The value of measuring quality of life has been increasingly recognised. It should identify and better describe the *damaging effects of the disease or its treatment*.

- Responses to quality of life questionnaires help health professionals to understand better the burden that a particular treatment can place upon patients’ as well as *providing data to help others in the future*.

- The consequences of treatment and treatment-related side effects may affect all of a patient's life, hence it is important to *assess all aspects of a treatment's effects*.

Indications for Study

- Published information on the effects on Quality of Life after surgical interventions for cancer
- But little after surgery for Malignant Pleural Mesothelioma.
- Main role of intervention is palliation and debulking
- Impact of disease and treatment must be part of discussion with patients and carers
Indications for Study

• Increasing incidence of the disease and patients searching for treatments

• The appointment of a new Consultant Thoracic Surgeon with an interest in surgery for Malignant Pleural Mesothelioma.

• To provide information on post-surgery symptoms/Health related QoL for patients in the future.
Methods

- The generic EORTC QLQ-30 & the lung specific QLQ-13 questionnaires were given to all patients with a known diagnosis of malignant pleural mesothelioma who opted for different forms of surgery as part of their treatment.

- Patients were consented to receive the questionnaires, the first of which were filled in at the pre op assessment visit.

- The questionnaires were then posted to the patients at 6 weeks, 3, 6, 9 & 12 months (no reminders were sent).
Data Sources

- European Organisation for the Research and Treatments of cancer’s generic Questionnaires:
  - EORTC QLQ-C30
  - EORTC QLC-LC13
  - EORTC Study Group on Quality of life. (1994)

- Surgical and Department Databases
EORTC QLQ-C30

Generic cancer questionnaire, includes:

- 1 global HRQoL scale
- 5 functional scales
  - role, social, emotional, physical, cognitive
- 3 general symptom scales
  - fatigue, pain, nausea
- 6 single item measures
EORTC QLQ-C30 (version 3)

We are interested in some things about you and your health. Please answer all of the questions yourself by circling the number that best applies to you. There are no “right” or “wrong” answers. The information that you provide will remain strictly confidential.

Please fill in your initials: [ ] [ ] [ ] [ ]
Your birthday (Day, Month, Year): [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
Today’s date (Day, Month, Year): 31 [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase? Not at All A Little Quite a Bit Very Much
2. Do you have any trouble taking a long walk? 1 2 3 4
3. Do you have any trouble taking a short walk outside of the house? 1 2 3 4
4. Do you need to stay in bed or a chair during the day? 1 2 3 4
5. Do you need help with eating, dressing, washing yourself or using the toilet? 1 2 3 4

During the past week:

6. Were you limited in doing either your work or other daily activities? Not at All A Little Quite a Bit Very Much
7. Were you limited in pursuing your hobbies or other leisure time activities? 1 2 3 4
8. Were you short of breath? 1 2 3 4
9. Have you had pain? 1 2 3 4
10. Did you need to rest? 1 2 3 4
11. Have you had trouble sleeping? 1 2 3 4
12. Have you felt weak? 1 2 3 4
13. Have you lacked appetite? 1 2 3 4
14. Have you felt nauseated? 1 2 3 4
15. Have you vomited? 1 2 3 4
16. Have you been constipated? 1 2 3 4

During the past week:

17. Have you had diarrhea? Not at All A Little Quite a Bit Very Much
18. Were you tired? 1 2 3 4
19. Did pain interfere with your daily activities? 1 2 3 4
20. Have you had difficulty in concentrating on things, like reading a newspaper or watching television? 1 2 3 4
21. Did you feel tense? 1 2 3 4
22. Did you worry? 1 2 3 4
23. Did you feel irritable? 1 2 3 4
24. Did you feel depressed? 1 2 3 4
25. Have you had difficulty remembering things? 1 2 3 4
26. Has your physical condition or medical treatment interfered with your family life? 1 2 3 4
27. Has your physical condition or medical treatment interfered with your social activities? 1 2 3 4
28. Has your physical condition or medical treatment caused you financial difficulties? 1 2 3 4

For the following questions please circle the number between 1 and 7 that best applies to you

29. How would you rate your overall health during the past week?
   Not at All A Little Quite a Bit Very Much
   1 2 3 4
   Very poor
   Excellent

30. How would you rate your overall quality of life during the past week?
   Not at All A Little Quite a Bit Very Much
   1 2 3 4
   Very poor
   Excellent
1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase? | Not at All | A Little | Quite a Bit | Very Much |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

2. Do you have any trouble taking a **long** walk? | Not at All | A Little | Quite a Bit | Very Much |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

3. Do you have any trouble taking a **short** walk outside of the house? | Not at All | A Little | Quite a Bit | Very Much |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

4. Do you need to stay in bed or a chair during the day? | Not at All | A Little | Quite a Bit | Very Much |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

5. Do you need help with eating, dressing, washing yourself or using the toilet? | Not at All | A Little | Quite a Bit | Very Much |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Statistical Analysis
3 stage process

1. Convert response into a numerical score

2. Transpose score to a 0-100 scale

3. Compare the scales at 3, 6, 12 and 24 months (more recently 6 weeks)

(Fayers et al, 2001)
Patients

Between August 2009 & November 2010 questionnaires were given to:

- 22 patients (19 male 3 female)
- Median age 69
- 65% Epithelioid
Procedures

- VATS Debulking: 3
- Total Pleurectomy: 19

- R1: 16
- R2: 3
TOTAL PREOPERATIVE: 22

- NO THORACIC SURGERY: 0
- TOTAL PREOPERATIVE: 22
  - NO RESPONSE: 0
  - RESPONSE: 22 (100%)
    - DIED WITHIN 3 Months: 2
    - DIED WITHIN 6 MONTHS: 2
Comparing with other studies

- Oesophageal Surgery: 77
- Lung Surgery: 79
- Mesothelioma Surgery: 100
Conclusion

The response rate reflects the commitment of patients with malignant pleural mesothelioma to help learning about the disease and treatments.

The response rate is higher than previous similar studies performed in patients undergoing radical treatment for lung and oesophageal malignancies.
Why?

- Mesothelioma patients more “militant”?
- Patients perceive interest and commitment Specialist Team?
- Early experience?
- Patients appreciate lack of information available to them
References

European Organisation for Research and Treatment of Cancer (EORTC) available @ www.eortc.be/


World Health Organisation (WHO) available @