Attitude towards Occupational Medicine Questionnaire

Paul B.A. Smits [1]
Lucinda de Graaf [1]
Jos H.A.M. Verbeek [1][2]
Bas Sorgdrager [1][3]

ICOH, Cancun, March 20th 2012

[1] Coronel Institute of Occupational Health, Academic Medical Center Amsterdam, The Netherlands
[3] Institute of Social Medicine, University Medical Center Groningen, The Netherlands
Introduction

Occupational medicine is not very well represented in most medical curricula. The specialty seems to operate far from the educational goals from medical students.

One of the aims of the OM educational programs is to raise the interest of medical students for the specialty and to improve their attitude towards occupational medicine.
Introduction

Aims of our study

To develop a questionnaire to measure attitude towards occupational medicine

To measure changes in attitude due to education
Methods
Two steps

First step:
- Second year medical students in Amsterdam, The Netherlands (n=141) (part of the Networm project)
- We drew up as many statements about possible attitudes both valued positively and negatively
- We used a five point Likert scale
- Questionnaires were analyzed with exploratory factor analysis to find common scales based on an Eigenvalue of more than 0.40 for individual questions and sufficient Cronbach alphas
Results step 1

The initial 45 statements could be reduced to 18 and summarized in five different scales:

- based on items with an Eigenvalue of more than 0.40
- with Cronbach alpha >0.50
Methods

Second step: Third year medical students in Groningen, The Netherlands (n=208)

Questionnaire with 18 statements
Before and after education in OM

To further confirm and adapt the questionnaire
To measure possible changes in attitude
Results step 2

The 18 statements could be further summarized in three different scales

- with a more sufficient Cronbach alpha of > .65
- that measured all three a small but significant positive change after education compared to before
Results after step 2: three scales

<table>
<thead>
<tr>
<th>Scale title</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A career in occupational medicine</td>
<td>6 items</td>
<td>0.78</td>
</tr>
<tr>
<td>2. Occupational medicine as an interesting medical speciality</td>
<td>11 items</td>
<td>0.66</td>
</tr>
<tr>
<td>3. Role and position of the occupational physician</td>
<td>1 item</td>
<td>NA</td>
</tr>
</tbody>
</table>
Results step 2: positive changes

<table>
<thead>
<tr>
<th>Scale</th>
<th>Before Mean Score (SD)</th>
<th>After Mean Score (SD)</th>
<th>Mean Difference (SD)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=208, 3th year medical students paired samples t-Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A career in occupational medicine (6 items) (min 6, max 30)</td>
<td>13.4 (3.78)</td>
<td>14.1 (3.89)</td>
<td>0.68 (3.50)</td>
<td>.006</td>
</tr>
<tr>
<td>2. Occupational medicine as an interesting medical speciality (11 items) (min 11, max 55)</td>
<td>41.8 (3.81)</td>
<td>42.7 (4.06)</td>
<td>0.94 (4.15)</td>
<td>.001</td>
</tr>
<tr>
<td>3. Role and position of the occupational physician (1 item) (min 1, max 5)</td>
<td>2.7 (0.90)</td>
<td>3.1 (0.90)</td>
<td>0.37 (1.41)</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>
Conclusions

If it is one of the outcomes of educational programs to improve medical students’ attitudes towards occupational medicine, this outcome should be measured to find the most effective components that help to achieve this.

The questionnaire that we constructed is a validated tool to measure medical students’ attitude towards occupational medicine.
Conclusions

This 18 questions did measure changes in attitude in a Dutch setting.

The challenge is -
- to improve education in occupational medicine with the help of these attitude – evaluations
- to further validate the questionnaire in other samples in different cultures and settings
Attitude towards Occupational Medicine Questionnaire

• A career in occupational medicine
• Occupational medicine as an interesting medical specialty
• Role and position of the occupational physician
A career in occupational medicine

1. The job of the occupational physician is challenging
2. I am very much attracted to the preventive aspects of occupational health
3. Occupational disability is an interesting topic to study
4. One of my options is to become occupational physician
5. I find it interesting to study occupational diseases
6. Advising companies about healthy work is attractive to me.
Occupational medicine as an interesting medical specialty

1. As a physician, you will always know what kind of job your patient holds
2. Return to work after illness forms an important part of rehabilitation
3. It is important to diagnose an illness as an occupational disease
4. From the clinical point of view, occupational diseases are not very interesting
5. There is still a lot to be discovered about occupational diseases
6. As an occupational physician you need trust between you and your patient
Occupational medicine as an interesting medical specialty

7. If you have a certain illness, it is important to take this into consideration already when choosing a career
8. Every physician should report occupational diseases
9. With every patient, the doctor looks at the complaints but also at its consequences for functioning in daily life and at work
10. There is still a lot to be discovered about return to work after illness
11. The kind of work a patient is doing forms an important part of the medical history
Role and position of the occupational physician

1. It is a problem that, as an occupational physician, one is not independent from the employer