
Validation of a Dutch translation of the Berlin Questionnaire on evidence-based medicine knowledge and skills

S.E. Zwolsman, M. Wieringa–de Waard, N. van Dijk

Department of General Practice
Academic Medical Center-University of Amsterdam



Background

Shaneyfelt et al *JAMA* 2006:

“Teaching of EBP should be evaluated
and guided by evidence of its own
effectiveness”

No instrument exists in the Netherlands



Aims

To validate a Dutch translation of the Berlin Questionnaire to be able to:

- Measure EBP knowledge and skills
- Evaluate EBP education in GP Specialty Training



Methods

- Instrument Berlin Questionnaire
Version A and B
15 questions → applying EBP
(Fritsche et al *BMJ* 2002)
- Translated
- Face validity



Methods

Validity

37 course participants and 7 tutors

Does the Dutch translation of the Berlin Questionnaire:

- Measure what we want it to?
- Differentiate between subgroups?



Methods

Reliability

140 GP trainees

- Are the items too easy/difficult?
- Do the items fit the whole test?
- Is the test too easy/difficult?
- Is the test internally consistent?
- What answers are often chosen?
- Are Version A and Version B interchangeable?



Results

Validity

37 course participants and 7 tutors

	Dutch versions	Original versions (Fritsche et al <i>BMJ</i> 2002)
Responsiveness	+ 1.54 points	+ 3.6 points
Known groups	Δ 4.01 points	Δ 5.60 points



Results

Reliability

	Dutch versions	Original versions (Fritsche et al <i>BMJ</i> 2002)
Item difficulty	3 items/ version	√
Item correlation	3 items/ version	√
Score variation	within range	√
Alpha	0.46 for A; 0.50 for B	0.75 for A; 0.82 for B
Factor analysis	> 1 construct	n/a
Version A versus B	5.94 vs 7.62	√



Limitations

- Low alpha
- Comparison with tutors
- Generalisability



Conclusion

The Dutch translation of the Berlin Questionnaire is a valid measure of EBM knowledge/skills

