

# Enhancing Evidence-Based Practice in a Non-clinical Setting

*- Better Evidence for Better Health Care -*

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# Physicians need solid ground



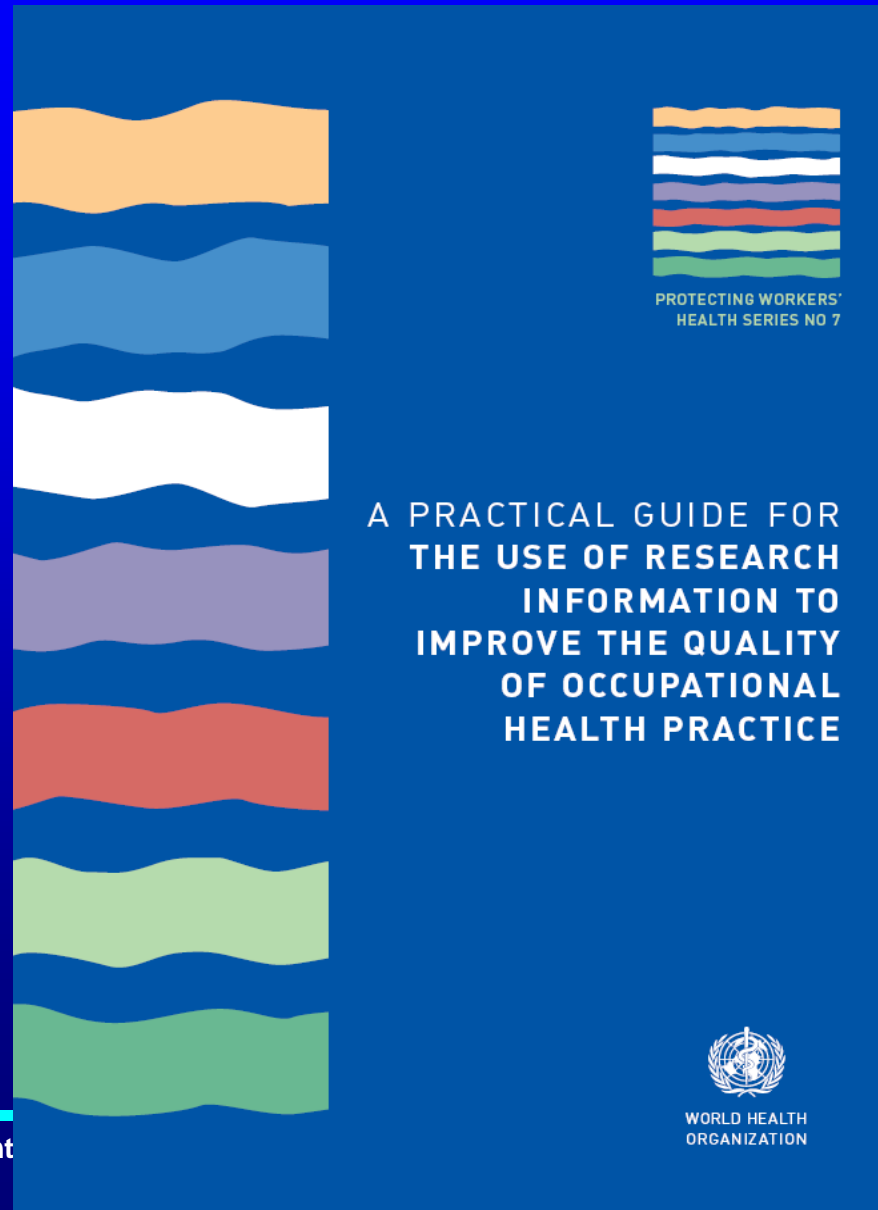
# Evidence-based decisions in health care are based on:

- **Professional expertise and clinical skills**
- **Evidence from research information**
- **Patient preferences**

# EBM in Occupational Health

- **Setting, content, and context of care in OH differ from clinical care**
- **Worker or employer preferences**

# Application of EBM in OH



# Context

- **A substantial part of daily routine in occupational health practice in the Netherlands is involvement in sickness absence management**
- **Applying evidence in the decision making process of occupational physicians (OPs) is not a regular part of this process (Schaafsma et al., 2004)**

# Intervention

- **EBM course of one and a half day**
- **Once every 2 weeks case-method learning sessions in small peer groups (6-8 peers) for 3 months**
  - Presenting and discussing occupational health case-files in a structured way
  - Searching for evidence

# Main research questions

**Does the intervention enhance:**

- 1. OPs' EBM knowledge, skills and behaviour?**
- 2. the quality of prognosis assessment and therapy advice by OPs?**
- 3. the professional performance, self-confidence and job satisfaction of OPs?**



# Method

**Design: A cluster randomized controlled trial**

**Setting: Occupational Health Services in the Netherlands**

**Participants: 131 OPs**

**Material: Questionnaires and case-files at baseline, after 3 months and 7 months**

**Interviews with 14 intervention group participants afterwards**

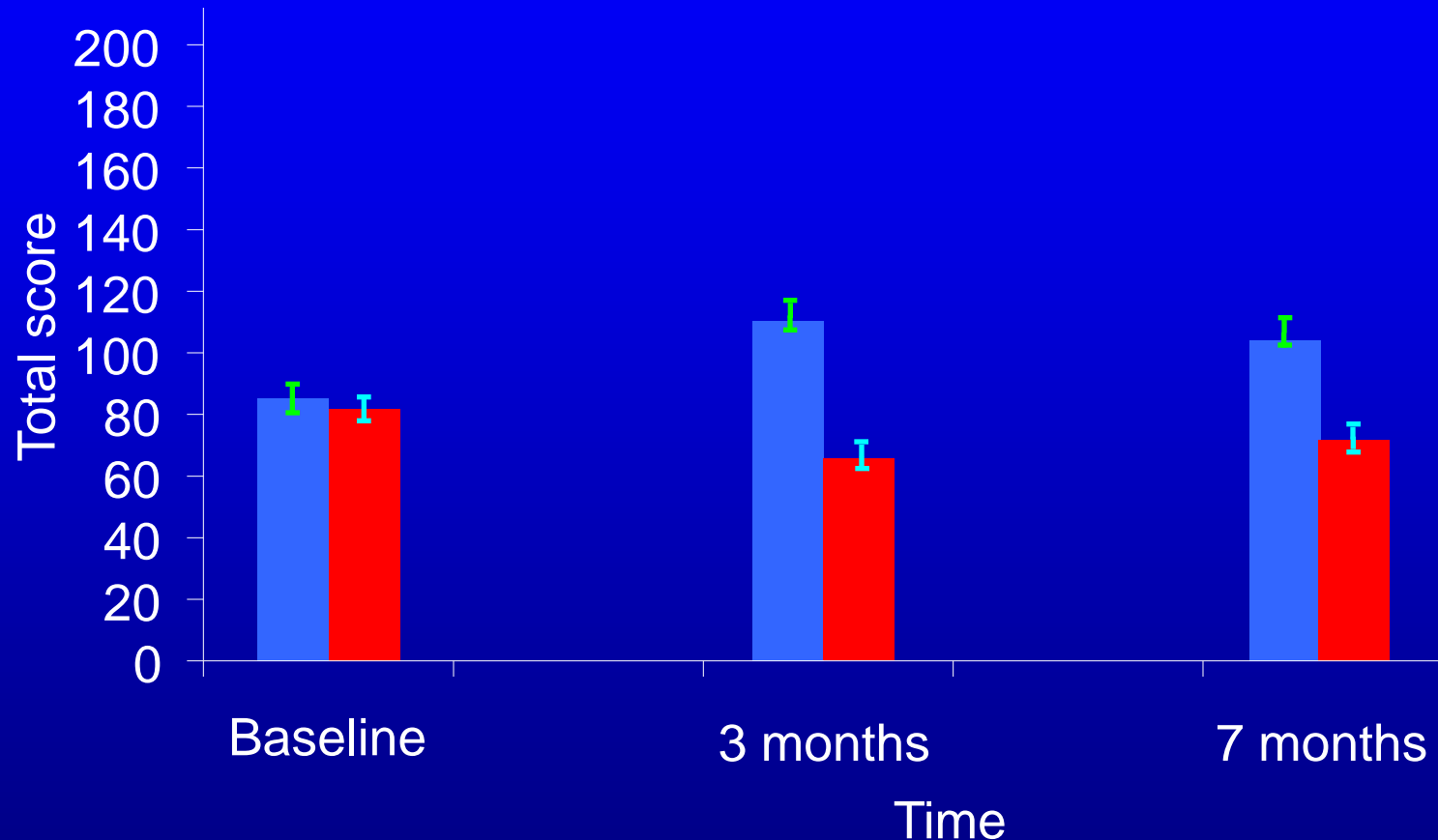
# Measurements 1: EBM knowledge, skills, and behaviour

- **EBM knowledge and skills:**  
**Fresno test adjusted to OH setting**
- **EBM behaviour:**  
**Self assessment**

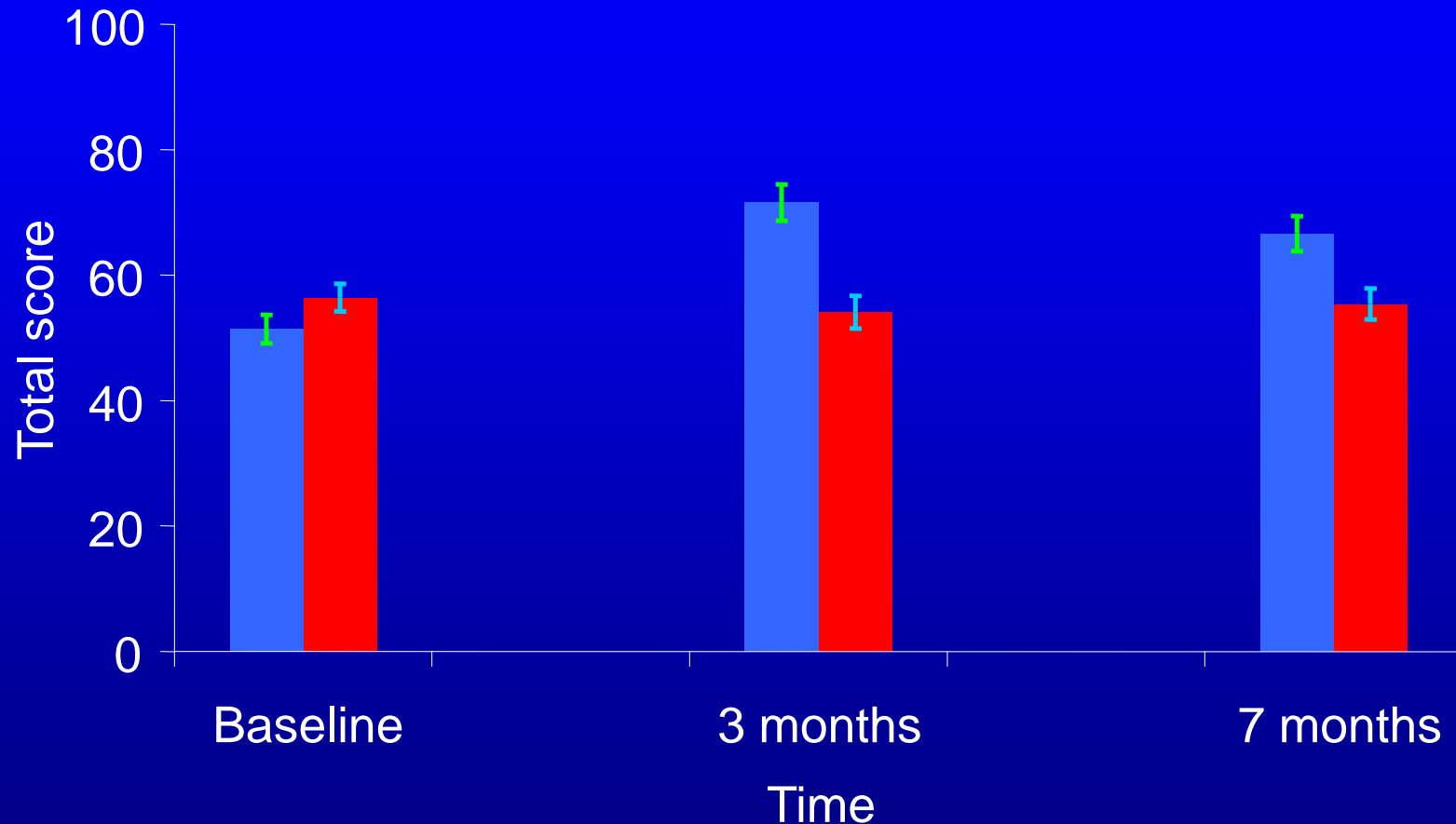
# Baseline

	Control Group	Intervention Group
<b>N of potential participants (OPs)</b>	<b>62</b>	<b>69</b>
<b>N of actual participants</b>	<b>59</b>	<b>49</b>
<b>Mean age</b>	<b>45 (SD±7)</b>	<b>47 (SD±6)</b>
<b>Years of experience as OP</b>	<b>13 (SD±7)</b>	<b>14 (SD±6)</b>

# Results 1: EBM knowledge and skills



# Results 1: EBM behaviour



# Measurements 2: Quality of prognosis and advice

**Based on the diagnosis in the case-file:**

**3 experts sought and evaluated the level of evidence for prognosis assessment and therapy advice**

# Results 2: Quality of prognosis and advice

	<b>3 months</b>		<b>7 months</b>	
<b>Correct assessment of prognosis</b>	<b>C (%)</b>	<b>I (%)</b>	<b>C (%)</b>	<b>I (%)</b>
<b>Yes</b>	<b>53</b>	<b>73</b>	<b>67</b>	<b>74</b>
<b>No</b>	<b>47</b>	<b>27</b>	<b>33</b>	<b>26</b>
<b>Correct therapy advice</b>	<b>C (%)</b>	<b>I (%)</b>	<b>C (%)</b>	<b>I (%)</b>
<b>Yes</b>	<b>67</b>	<b>88*</b>	<b>62</b>	<b>76</b>
<b>No</b>	<b>33</b>	<b>12</b>	<b>38</b>	<b>24</b>

# Measurements 3: Professional performance, self-confidence and job satisfaction

## Qualitative study:

**Interviews with 14 OPs who participated in the intervention group**



# Results 3: Professional performance

**EBM: ↑ individual professionalism & professional standards**

*“I think that your professional stance should favour evidence-based practice, regardless of whether it is facilitated by your employer. The only way to profile yourself as an occupational physician is to be a good occupational physician and to have up-to-date knowledge” (R115).*

# Results 3: Self-confidence

↑ **Self-confidence in their interactions with workers and employers**

↑↑↑ **Confidence with regard to other specialists**

*“And now I say, ‘Hey! We have a guideline’, or ‘We know that this can work with this type of therapy’. And it is adopted. And, after all, ... uhm ... in maybe three of the ten cases that we discussed, medication was prescribed based on the discussion. That never happened before” (R140).*

# Results 3: Job satisfaction

- **The focus on medical issues was highly appreciated**
- **It refreshed their curiosity and their need to study**

*“The puzzling, the searching, something like, ‘Gee, what a question. How are you going to solve that?’ and ‘What solution does that offer me?’ And you think, ‘Gee, how am I going to find that out?’ so that you can, uh, move forward” (R127).*

# Results 3: Barriers

- **Lack of time and computer skills**
- **Unfamiliarity with available evidence-based sources**
- **Limited access to the Internet, data-bases and full text articles**
- **Limited incentives from occupational health services to apply EBM in daily practice**

# Summary of Results

## Intervention

- significant and lasting increase of EBM knowledge, skills, and behaviour
- better therapy advice after 3 months, but no effect after 4 months
- valued as a useful method for enhancing professional performance, but experienced also some barriers

# Conclusions

- **It seems that EBM in daily practice of OPs is feasible and is embraced by OPs**
- **There are opportunities for EBM knowledge, skills and behaviour improvement**
- **Actual searches for evidence result in effect on quality of prognosis & therapy advices**
- **Self-confidence and job satisfaction are boosted**

# If the ice is too thin...



# Thank you for your attention

## Questions???

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