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KNGF-Guidelines for non-specific Low Back Pain

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Dutch guidelines for LBP

- General Practitioners (update 2006)
- Occupational physicians (2007, in press)
- Physiotherapists (2001)*
- Manual therapists (2003)*
  - update scheduled in 2007
- Exercise therapists (2007, in press)
- Multi-professional (2003)

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Authors

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KNGF-guideline Physiotherapy (2001)

Bekkering T, Hendriks, E, Koes B, Oostendorp R, Ostelo R, Thomassen J, Tulder van M.

KNGF-guideline Manual therapy (2003)

Heijmans M, Hendriks E, Esch van der M, Pool-Goudzwaard A, Scholten-Peeters W, Tulder van M, Weijer A, Oostendorp R.

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Outline

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- Introduction
  - purpose of guidelines
  - used methods
- Highlights guidelines
  - background & evidence
  - Indication manual therapy
  - practical implications
- Evaluation and Discussion

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Definition of a guideline (CPG)

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- Systematically developed statements which assists clinicians and patients in making decisions about appropriate treatment for specific conditions

Field & Lohr, 1992; Mann, 1996 – Hendriks et al. Physiotherapy 2000

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Purpose of CPGs

On the level of the individual physiotherapist

- assist in making daily decisions
- self evaluation
- education

On the level of the profession

- increase effectiveness
- explicitation of care
- increase uniformity

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Methods

- Systematically developed
- Drafted by clinical experts in the field
- Recommendations are based on best evidence or consensus
- Checked in work settings
- Geared with multidisciplinary expert group
- Consistent with guidelines other disciplines

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Hendriks et al. Development and implementation of National Practice Guidelines. Physiotherapy 2000, 86, 10, 535-547.

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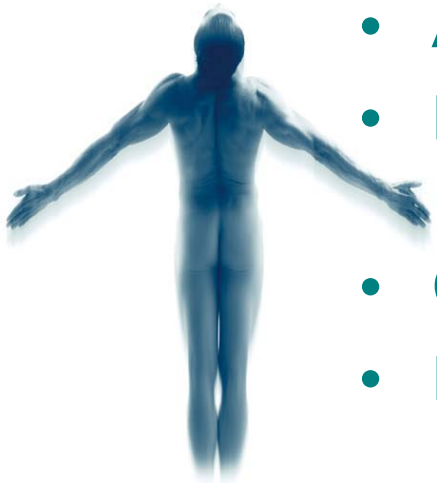
Evidence Base of Physiotherapy
Levels of Evidence (A1-D) and Grade of Recommendations (1-4)



- A1 Systematic review of RCTs (1)
- A2 RCTs (high quality and homogeneity) (1)
- B RCTs (low quality or prospective cohort studies) (2)
- C Case-studies (3)
- D Expert Opinion (4)

(CBO: EBRO-criteria 2001 – consensus within the netherlands)

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Working groups

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- First group:
  - physiotherapists and researchers
- Second group:
  - general practitioner, orthopedic physician, orthopedic surgeon, rehabilitation physician, and occupational physician, psychologist

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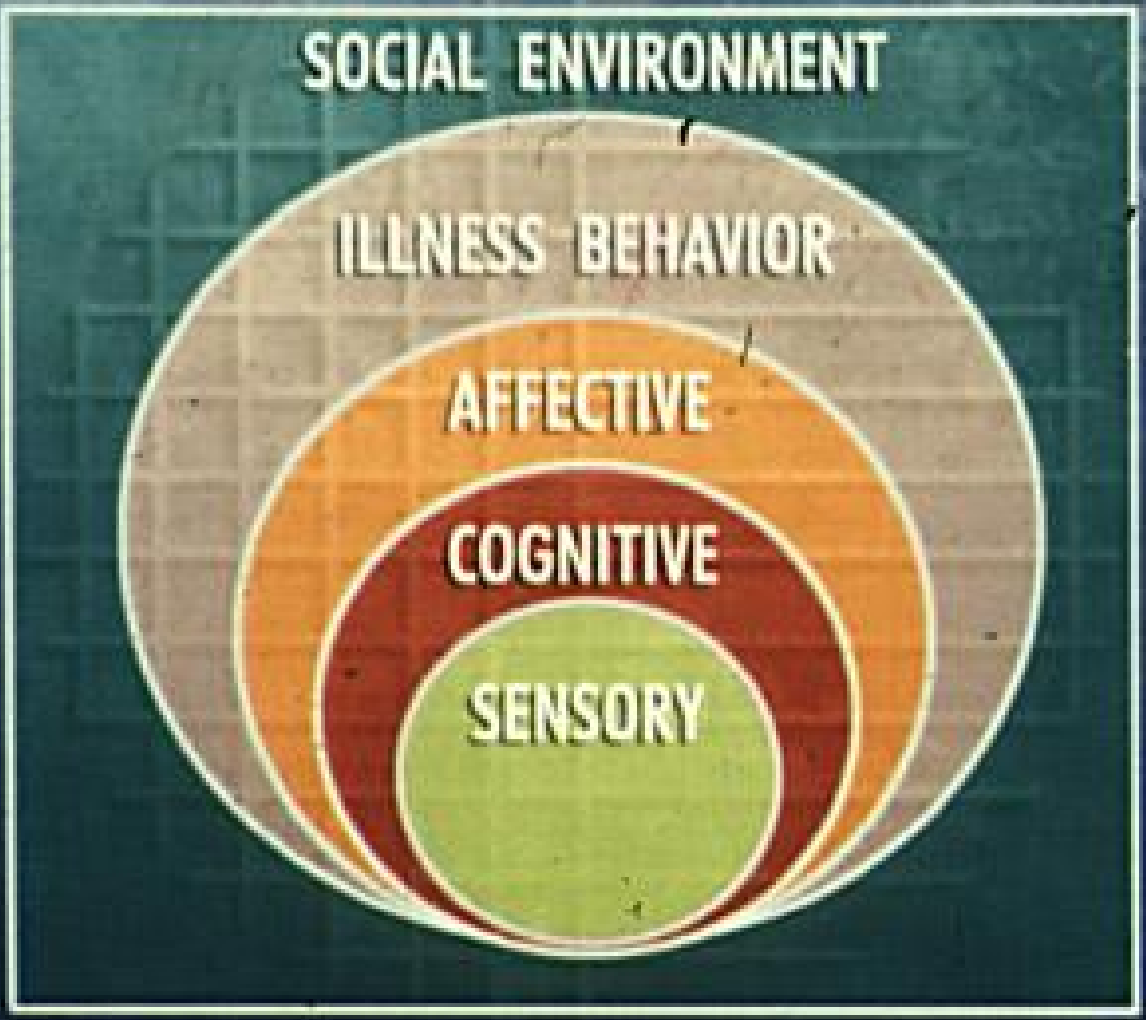
Euro Trans Med

A BIOPSYCHOSOCIAL MODEL OF CHRONIC PAIN AND DISABILITY



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Definition of LBP

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"a simple backache"

Clinical presentation usually at age 20-55 yrs, lumbo-sacral region, buttocks and thighs, pain is mechanical in nature, varies with physical activity and varies with time, patient well!

Waddell, 1998, 2004

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Classification of LBP (based on summaries of the evidence)

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Classification according duration LBP

- 0-6 weeks acute
- 7-12 weeks sub acute
- > 12 weeks chronic

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Some Observations

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- During the last century, we have been more successful in creating chronic LBP than preventing it
- We need to change the way we think about LBP
- We need to change how we manage it
- Majoring on secondary prevention and STOP over-treating patients

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Some further observations

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- We need new ways of working together
- Establishing better primary/secondary care interfaces
- Integrating clinical management with work retention and rehabilitation

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The evidence for physical therapies

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- Exercise seems to be effective at decreasing pain and improving function in adults with sub acute and chronic LBP (grade 1)
- In acute LBP Exercise is as effective as no treatment or other treatments (grade 1)

Recently confirmed by:

Hayden et al, Ann Intern Med 2005a – COST B13 EG (Eur Spine)

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The evidence for physical therapies

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- The most important components were strength training and flexibility exercises (grade 1)
- High intensity (frequency and duration) produces better outcomes (grade 1)

Recently confirmed by:

Hayden et al, Ann Intern Med 2005b -– COST B13 EG (Eur Spine)

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The evidence for physical therapies

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- Based on only high quality trials with high intensity and supervised exercises produces sign. better outcomes than low intensity programs
- Co-interventions must not be overlooked (massage / manual therapy)

Liddle et al., PAIN 2004

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The evidence for manual therapy

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- No evidence that spinal manipulation is superior to other treatments for patients with acute or chronic LBP

Assendelft et al, Ann Intern Med 2003

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My students are dismayed when I say to them:

"Half of what you are taught as medical students will in 10 years have been shown to be wrong."

And the trouble is none of your teachers know which half."

Dr. Sydney Burwell, Dean Harvard Medical School In: Evidence based medicine, Sackett et al, 2000: 31

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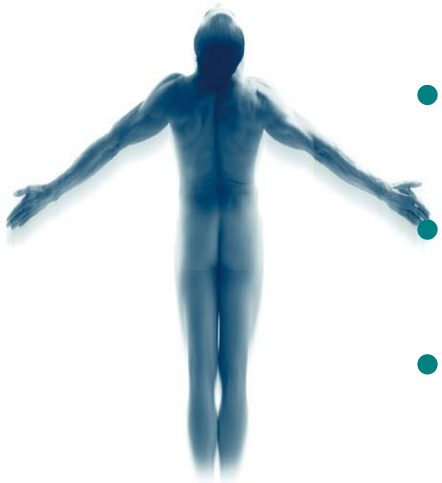
Highlights guidelines

Diagnostic triage (serious – non serious)

- Aim the diagnostic process at disabilities
- Distinguish normal and delayed recovery
- Psychosocial factors
- Pay attention to patients' coping strategy
- Give adequate information
- Give an activating treatment
- Increase activities time-contingently



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Prognosis low back pain on RTW

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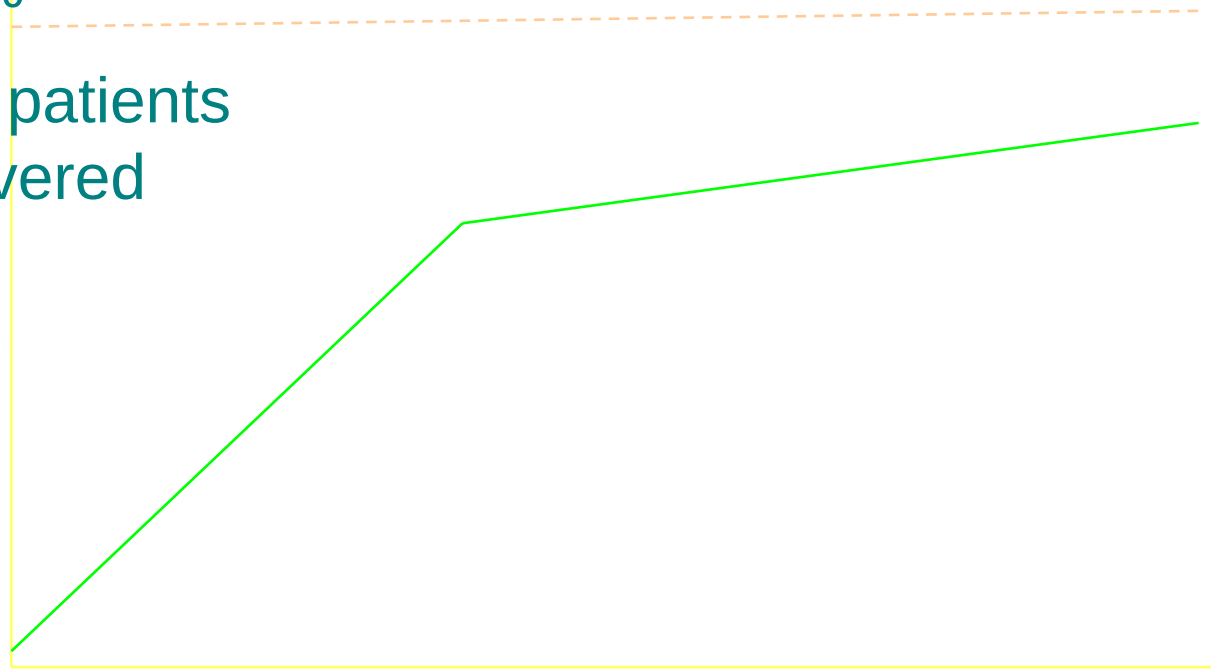

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Prognosis

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- Natural course in open population:
  80-90% ‘recovered’ in 4-6 weeks
- Patients visiting their PCP:
  - 65% ‘recovered’ at 12 weeks
  - 35% become chronic!

Waddell, 1998;

Pengel et al., 2004; Hestbaeck et al., 2003 demonstrated less favourable outcomes on pain and functioning

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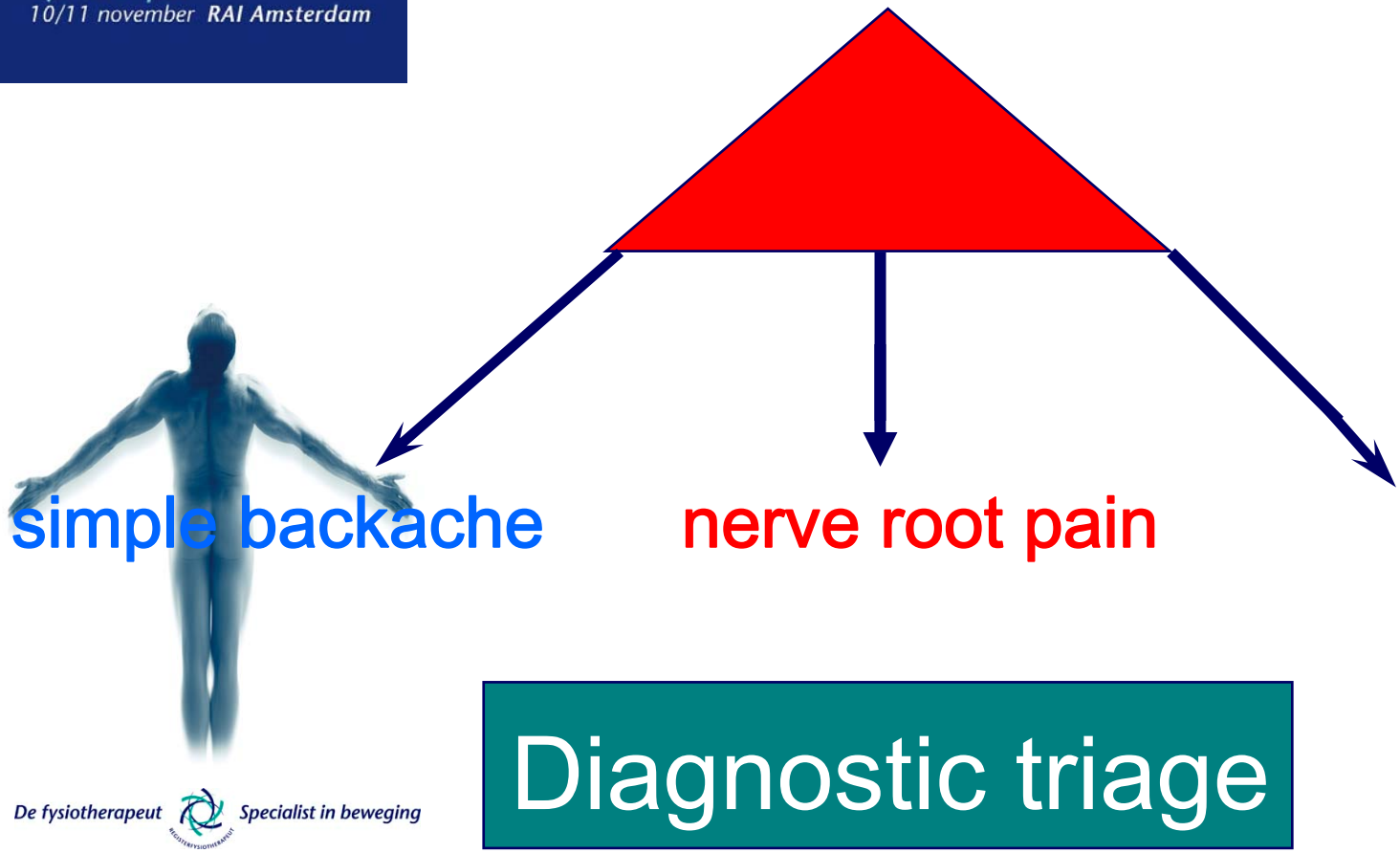
Acute Low back Pain



simple backache

nerve root pain

possible serious spinal pathology

Diagnostic triage

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Diagnostic triage LBP

The royal college of general practinionars, 1997

?

simple backache

~~nerve root pain~~

~~possible serious spinal pathology~~

Contra-indication manual therapy

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‘’Psychosocial factors’’

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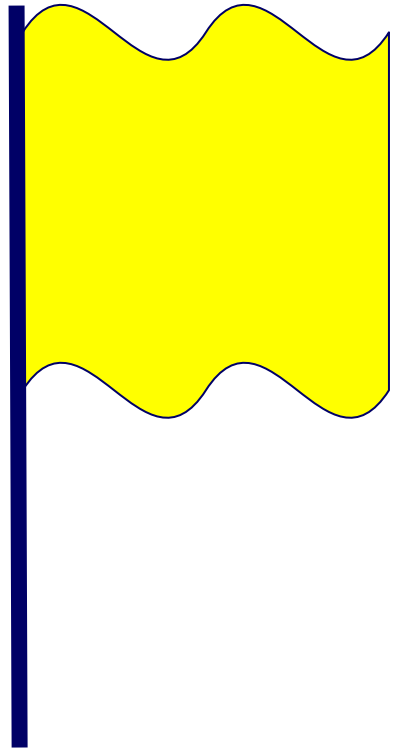
- Attitudes
- Behavior
- Compensation issues
- Diagnosis and treatment
- Emotions
- Family
- Work



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...AND YOU THINK YOU HAVE STRESS..

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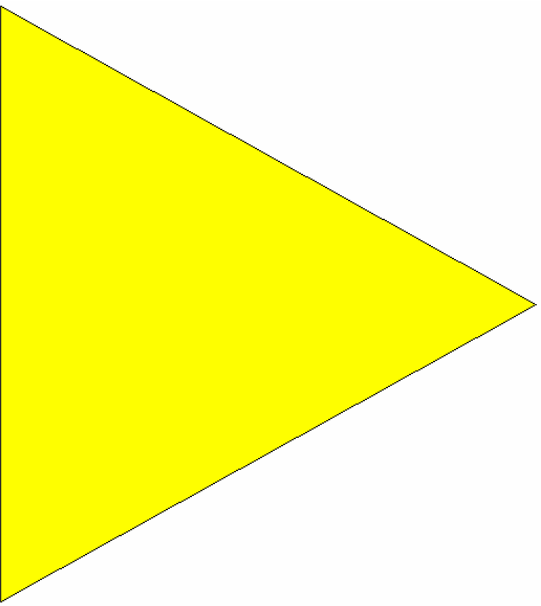
Original Yellow Flags

(Kendall, Linton and Main,1997)



- Derived from psychosocial predictors of chronicity
- Early attempt at secondary prevention from a “system’s perspective”
- Contained both health and occupational elements
- Included screening; assessment guidelines and recommendations for early management

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Indication manual therapy?

- Patient Profile:
  - Delayed recovery
  - No obstructive psychosocial (occupational) factors
  - Consistent and reproducible findings on the level of artro-kinematic impairments of the LB
  - Patient preferences

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Manual therapy

- Manual therapy is considered as a therapeutic option in patients with delayed recovery, mechanical pain with no obstructive yellow flags (chronic pain behaviour) and consistent, provocative and reproducible findings

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Indication for Manual therapy related to duration, level of recovery and yellow flags

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- *0 – 6 weeks*

  1a normal recovery

  1b delayed recovery, no yellow flags and mechanical pain (consistent findings)

- *7 – 12 weeks*

  2a delayed recovery, no yellow flags and mechanical pain (consistent findings)

  2b delayed recovery, yellow flags

- *> 12 weeks*

  3a chronic 'stable' tolerable pain with exacerbations

  3b delayed recovery and yellow flags

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Normal versus ‘delayed’ course

- Normal course: patient undertakes more activities or participation within 3 weeks
- Delayed course: patient does NOT undertake more activities or > participation within 3 weeks

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Practical implications
normal versus ‘delayed’ course

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- Ask prior level of activities / participation
- Compare with current level and the course in the last three weeks
- Number of sessions restricted <3 sessions in patients with a normal course!

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Diagnostic process aimed at disabilities

- No clear causal relationship between physical impairments and low back pain
- Duration of pain weak relationship with RTW
- Duration of disabilities is a strong prognostic factor of not RTW
- Disabilities play central role

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Practical implications
diagnostic process aimed at disabilities

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- Detailed diagnostic process is not necessary (ex. Red Flags)
- Ask about activities and participation
- Assess impairments related to disabilities
- Reassure patients
- Use outcome measures on the level of disabilities (e.g. QBPDS, PSC)

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Pay attention to yellow flags and coping strategy

- Chronic back pain is more related to psychosocial then biomedical factors
- Psychosocial: summarized as ‘coping’
- Adequate versus inadequate coping
- Adequate coping: better prognosis

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Definition coping

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Coping (no consensus definitions)

- Attributions to back pain (unreal thoughts, pain is threat)
- Feeling of control (fear of movement, able to control the back pain)
- External factors (family, partner, care givers, work environment)

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Practical implications
coping strategy

Make an inventory of

- What does the patient know about low back pain and what does he/she think?
- What does the patient to influence the complaints

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Give adequate information & advice

Goal: give the patient control over functioning

- reassure patient: no serious disease
- tell patient how to influence complaints and how to cope with recurrences

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Practical implications
give information and advice

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- low back pain favorable prognosis
- pain does not mean harm
- ergonomic advices: stay active and no bed rest, watch posture (sitting, walking, standing, lifting)
- resume activities step by step (load versus load tolerance)

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Treatment should be activating

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Based on

- staying active is better than bed rest
- behavioral principles: patient is responsible for own health

Goals

- return to activities and participation
- prevent chronic complaints and recurrences

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Practical implications
treatment should be activating

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- goals: improve functioning
- use information & advice and exercise therapy
- passive interventions not first choice (if used: shortly and to support the active treatment)

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Increase activities time contingently

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- Based on behavioral approach:
- Goal is learning to improve functioning despite pain
- Increase activities based on time
- Do not over or underexpose: increase gradual stepwise and dosed

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Practical implications

Increase activities time-contingently

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- Not pain but time determines functioning
- Exercising activities are central
- Exercising functions related to activities
- Activities based on patient's need and (focused on ADL)

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EVALUATION AND DISCUSSION

- Trudy Bekkering et al. 2003
  - Implementation study “guideline vs. usual care”

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Cluster Randomised Controlled Trial: Adherence to the Performance indicators (Bekkering et al. 2005)

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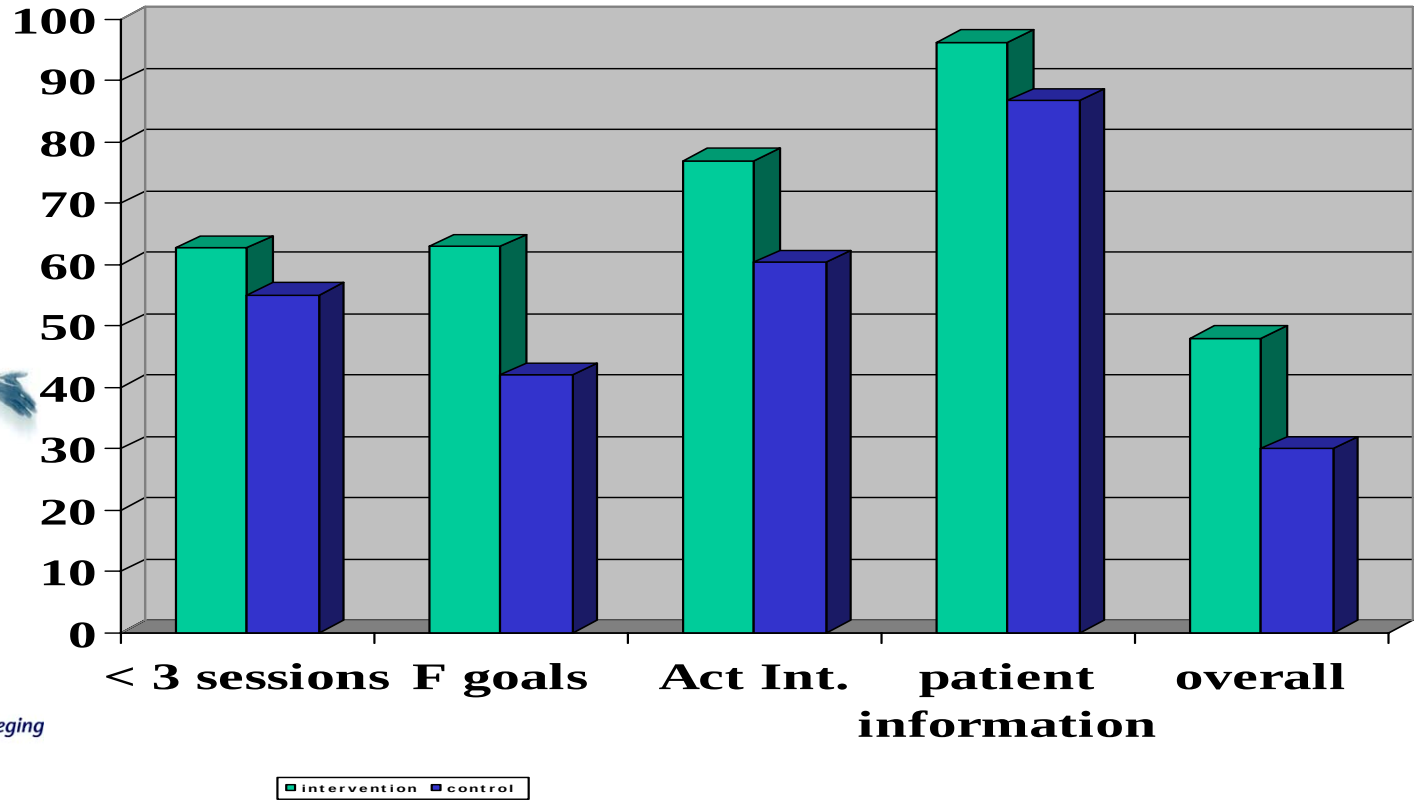

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Equal Patient outcomes

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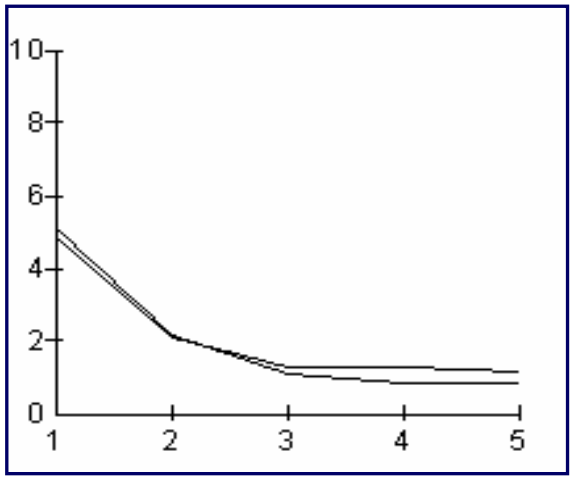
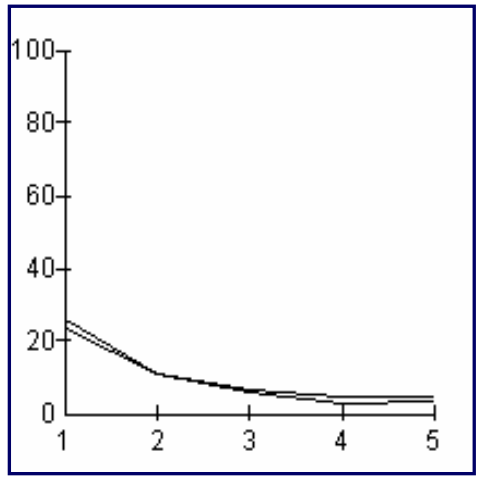


Mean pain (NRS 0-10)



Mean physical functioning (QBPDS 0-100)

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Process of care outcome

Number of sessions: mean (SD)

TG: 8.6 (7.1) *

CG: 11.2 (7.5)

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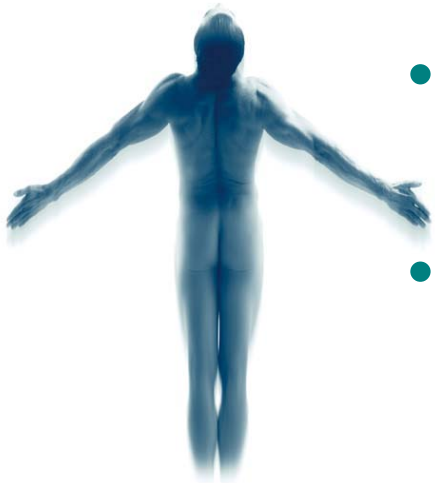
Discussion



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- Need for information on prognostic factors for patient selection
- Updating of methodology CPG development
- Integration of physio- and manual therapy guidelines (2007?)
  - Direct access since 2006
- More emphasis on the implementation

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Discussion - implementation

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- Positive effect on process of care
- No effect on patient outcome
- Positive effect on no. of treatment sessions
- Lowest adherence
  - In limiting sessions (acute and normal recovery group)
  - In using active interventions

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Implementation effective?

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Future

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- Further development and evaluation of effective implementation strategies, educational and e-learning packages
- Development of performance and outcome indicators and continuous monitoring and feedback
- Development of webbased electronic patient registration systems with feedback and reminders

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Thank you for
your kind attention