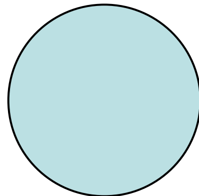
CHIROPRACTIC AND OSTEOPATHY

MUSCULOSKELETAL PROVISION IN CAM

The background
The evidence
The future



Who wins in conflict?

HISTORY

osteopathy and chiropractic vs medicine

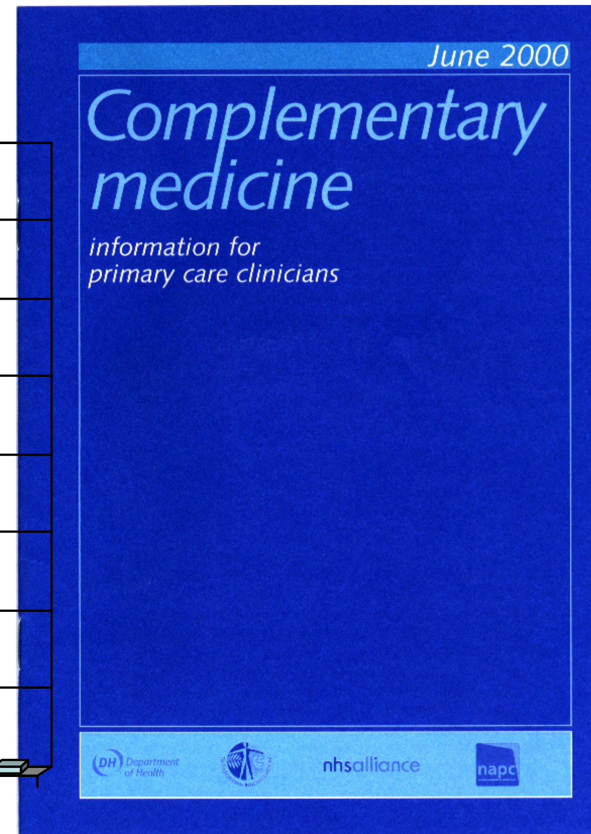
Philosophy and Practice changing attitudes
On both sides

Evidence is changing beliefs and practice
  Practice based evidence
  retrospective/prospective evidence
  good quality gold standard trials

% of PCTs Providing CAM

80
70
60
50
40
30
20
10
0

acupuncture
osteopathy
homeopathy
chiropractic
aromatherapy
hypnosis
reflexology
massage
cranial ost
nutritional
meditation
yoga
alexander
healing
herbal med
reiki
shiatsu



www.nhsalliance.org

Thomas KJ, Nicholl JP, Coleman P. Use and expenditure on complementary medicine in England: a population based survey. *Complementary Therapies in Medicine* 2001;9:2-11.

Provision in/by practice

Practitioner	All provision or referral %	NHS %
Acupuncture	33.6	14.1
Chiropractic or osteopathy	23.0	13.6
Homeopathy	21.1	12.4
Medical Herbalism	2.7	1.3
Other CAM	6.4	1.6

Thomas KJ, Nicholl JP, Coleman P. Use and expenditure on complementary medicine in England: a population based survey. *Complementary Therapies in Medicine* 2001;9:2-11.

Use of CAM practitioners by adult English population

(1998) N=2669

Practitioner	%
Acupuncture	7.0
Chiropractic	10.3
Homoeopathy	5.7
Medical herbalism	4.4
Hypnotherapy	3.1
Osteopathy	13.0

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Use of CAM practitioners by adult English population

N=2669

In one year:

22m visits
10.6% of adults
all adult age ranges
56% female
costing £450m
90% private

Conclusion: CAM is making a measurable contribution to first-contact primary care.

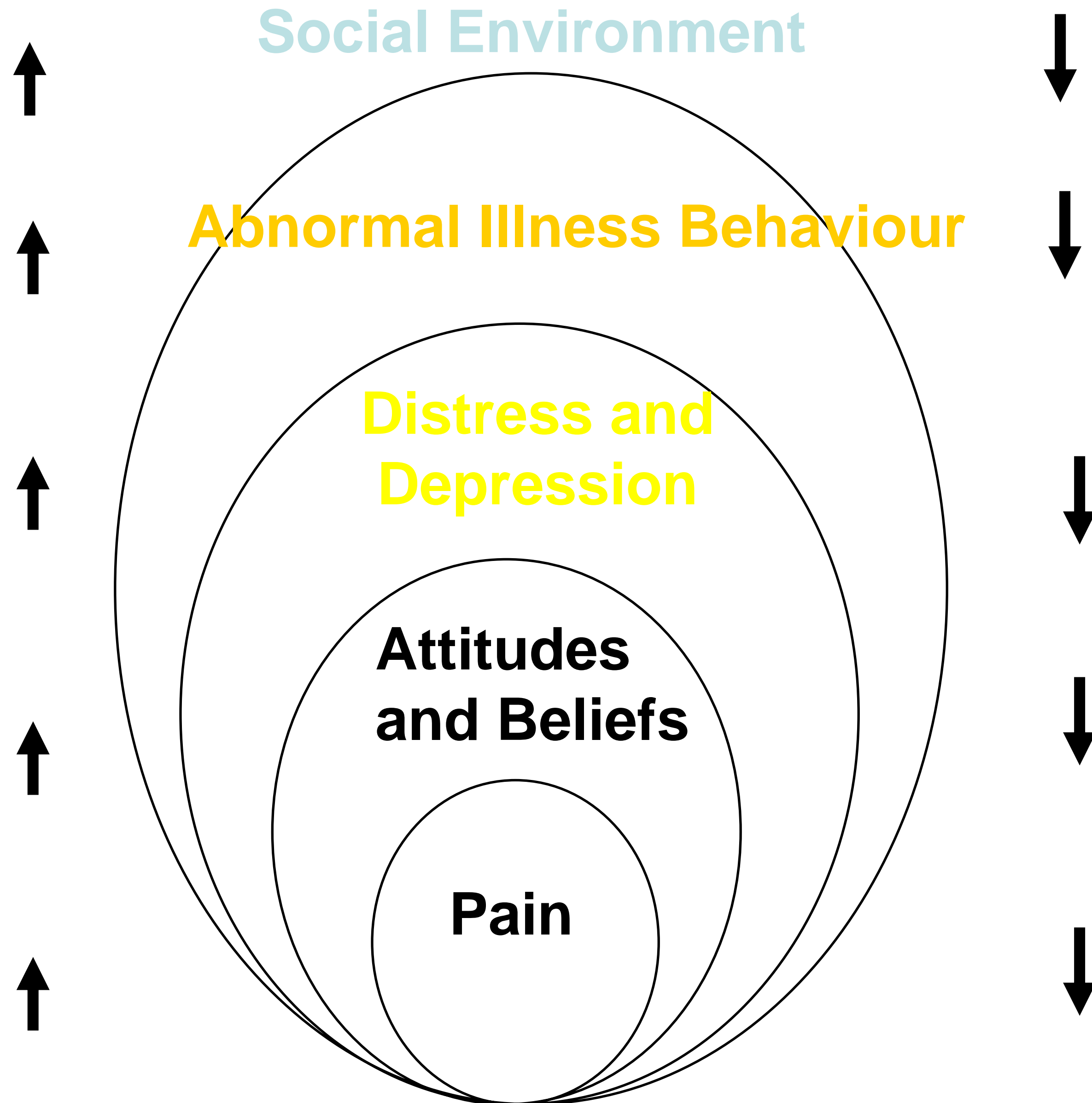
Thomas KJ, Nicholl JP, Coleman P. Use and expenditure on complementary medicine in England: a population based survey. *Complementary Therapies in Medicine* 2001;9:2-11.

The bio-psychosocial model

- What is it?
- Why learn about it?
- How do I use it tomorrow?

How pain, psychological and social factors interact

(Waddell et al 1984)



Summary of evidence-based management for low back pain

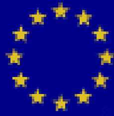
- Triage and psychosocial assessment
- Resume of findings and recommendations and reassurance for planned recovery
- Control pain
- Work with the patient to modify risk factors.
- Make recommendations for activity/work modificatio
- Use manual therapies (if applicable)
- Monitor recovery, modify care plan
- Recommendations for secondary prevention

Economic analysis

"Spinal manipulation is a cost-effective addition to "best care" for back pain in general practice."

"Manipulation alone probably gives better value for money than manipulation followed by exercise."

BEAM TTU. United Kingdom back pain exercise and manipulation (UK BEAM) randomised trial: cost effectiveness of physical treatments for back pain in primary care. *BMJ* 2004;329.



The European Acute Back Pain Guidelines (2005)

- Give adequate information and reassurance.
- Do not prescribe bed rest.
- Advise patients to stay active.
- Prescribe medication, if necessary for pain relief, at regular intervals; 1:paracetamol 2: NSAIDs.
- Consider (referral for) spinal manipulation for patients not returning to normal activities.

www.backpaineurope.org

Comparison with patients who consult physiotherapists

(N=1377 patients with back pain)

	Chiropractors/osteopaths	Physiotherapists
Consulted in past 3m	13.4	9.8
Non-manual (%)	7.8	5.1
Non-smoker (X^2)	82.4	-
SF-36 pain	57.4	45.9
SF-36 physical functioning	76.7	60.8
SF-36 general health	63.9	53.7
Exercise 30min weekly (X^2)	71.1	-

Ong C-K, Doll H, Bodeker G, et al. Use of osteopathic or chiropractic services among people with back pain: a UK population survey. *Health and Social Care in the Community* 2004;12:265-73.

Economic analysis

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Funded by the MRC and HTA programme

***UK B**ack pain **E**xercise **A**nd **M**anipulation (**UK BEAM**) Trial*

1334 patients with back pain >1m duration

"Best" GP care

+/- manipulation

"package of care"

+/- exercise classes

The patients:

England, Scotland and Wales (n=1794)

Disproportionately:

Non-manual occupations
Left school >19
Earning >£15k/yr

Thomas K, Coleman P. Use of complementary or alternative medicine in a general population in Great Britain. Results from the National Omnibus survey. *Journal of Public Health* 2004;26:152-7.

“Best” GP Care

- Bio-psychosocial assessment
- Explanation and reassurance
- *The Back Book*
- Patients should keep active, avoid best rest
- Simple analgesics if necessary

Exercise classes

Assessment by physio

Aerobic “back to fitness” exercises

Nine 60-min sessions over
12 weeks

Manipulation - treatment package

- Up to 8 treatments, over 12 weeks
- Spinal manipulation by an osteopath, a chiropractor or a physiotherapist
- 3 professions agreed standard package*
- GP management items

* Harvey, E., A. K. Burton, et al. (2003). "Spinal manipulation for low-back pain: a treatment package agreed by the UK chiropractic, osteopathy and physiotherapy professional associations." Manual Therapy 8(1): 46-51.

1-year results - RODQ

Best care + manipulation+ exercise

Best care + manipulation

Best care

Baseline

140
120
100
80
60
40
20
0

0 2 4 6 8 10 12 14 16 18 20 22 24

Std. Dev = 4.14
Mean = 9
N = 964.00

Results

"Relative to 'best' care in general practice, manipulation achieved a small to moderate benefit at 3 months and a small benefit at 12 months."

UK BEAM: United Kingdom back pain exercise and manipulation (UK BEAM) randomised trial: effectiveness of physical treatments for back pain in primary care. *British Medical Journal* 2004;19 November:1-8.

Conclusions:

Manipulation has been shown to be at least as effective as the best alternative treatment option

..but it is not a magic bullet!

Conclusions:

Manipulative treatment is seldom used as a mono-therapy

European Commission

Treatments not recommended

Acute

- Bed rest
- Massage
- Ultrasound
- Electrotherapy
- Laser
- Traction
- Acupuncture
- Heat/cold
- Trigger point injections
- Facet joint injections
- Epidural steroid injections
- Specific exercises
  - Stretching
  - Strengthening
  - Flexion
  - Extension
- Back schools
- Behavioural therapy
- TENS

Chronic

- Interferential therapy
- Laser
- Lumbar supports
- Shortwave diathermy
- Ultrasound
- Heat
- Traction
- TENS
- Massage
- NSAIDs (long term)
- Acupuncture
- Epidural steroid injs
- Intradiscal injs
- Botulinum toxin
- SI joint injs
- Sclerosant injs
- Trigger point injs
- RF facet denervation
- IDET and IRFT
- RF lesioning of DRG
- Spinal cord stim
- Fusion surgery

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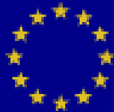

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The Evidence on Manipulative Therapies for Back Pain (Cochrane Review - 2003)

“Spinal manipulative therapy was superior (at least 10% superior) only to sham therapy or therapies judged to be ineffective or even harmful.”

“There is no evidence that spinal manipulative therapy is superior to other standard treatments for patients with acute or chronic low back pain.”

Assendelft WJJ, Morton SC, Yu EI, et al. Spinal manipulative therapy for low back pain: a meta-analysis of effectiveness relative to other therapies. *Ann Intern Med* 2003;138:871-81.

“Any new technique should prove to be at least as effective as the best available treatment option.”

van Zundert J. Clinical research in interventional pain management techniques: The clinician's point of view. *Pain Practice* 2007;7:221-9.

Conclusions:

Public use of CAM is increasing

Manual therapies most used by public but not most commissioned in primary care

Population use is disproportionate

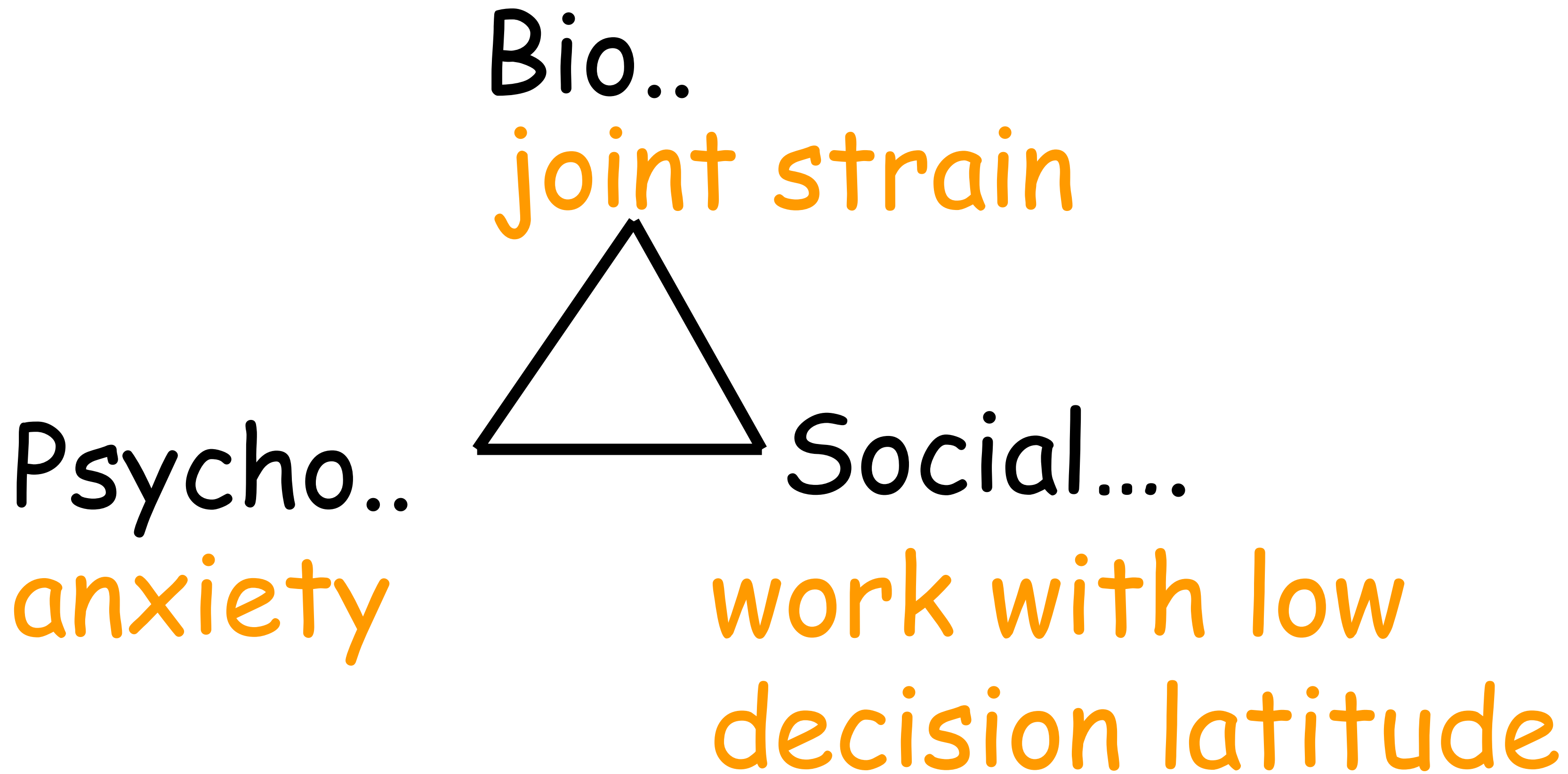
The bio-psychosocial model

- What is it?
- Why learn about it?
- How do I use it tomorrow?

The bio-psychosocial model

… a model of health based on the idea that physical, emotional and social health are inseparable……

The biopsycosocial triangle



Why learn about it??

In your INTERVENTIONS, you can use it to increase the likelihood of recovery.

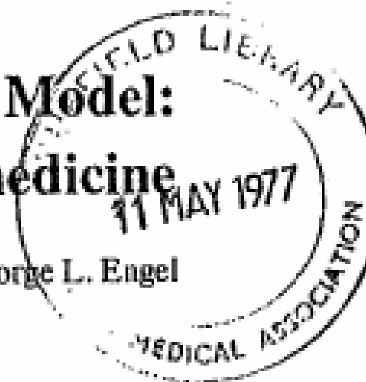
Where did it come from?

8 April 1977, Volume 196, Number 4286

SCIENCE

The Need for a New Medical Model: A Challenge for Biomedicine

George L. Engel



At a recent conference on psychiatric education, many psychiatrists seemed to be saying to medicine, "Please take us back and we will never again deviate

the physician is appropriate for their helping functions. Medicine's crisis stems from the logical inference that since "disease" is defined in terms of so-

new discipline based on behavioral science. Henceforth medicine would be responsible for the treatment and cure of disease, while the new discipline would be concerned with the reeducation of people with "problems of living." Implicit in this argument is the premise that while the medical model constitutes a sound framework within which to understand and treat disease, it is not relevant to the behavioral and psychological problems classically deemed the domain of psychiatry. Disorders directly ascribable to brain disorder would be taken care of by neurologists, while psychiatry as such would disappear as a medical discipline.

The contrasting posture of strict adherence to the medical model is carica-

The main predictors of poor outcome in common conditions…

(Waddell and Burton 2004)

Biological…

Psychological…

Social…..

Biological…

- other health conditions
  (co-morbidity – esp. musculoskeletal)
- wrong health care
  (delays, conflicting advice, negative approach)
- age (approaching retirement)
- previous significant injury
  (if neck pain)
- manual occupation
  (m/s conditions: if heavy or involving vibration)

Psychological (yellow flags)

- depression, distress, low mood
  (main predictor of poor outcome)
- catastrophising
  (negative coping)
- lack of motivation/effort
- abnormal illness behaviour
  (eg wrongly attributing whole problem to 'damage')
- fear-avoidance
  (deconditioning by avoiding harmless activities)

Social [black (system) flags]

- sick certification system
- GP difficulties
  (with biopsychosocial assessment & management)
- the NHS (barriers to use of best evidence)
- money problems/disincentives
  eg benefit system, compensation pending

And most of all….

MULTIPLE biopsychosocial factors!

The main predictors of GOOD outcome in common conditions…

(Waddell and Burton 2004)

Biological…

Psychological…

Social…..

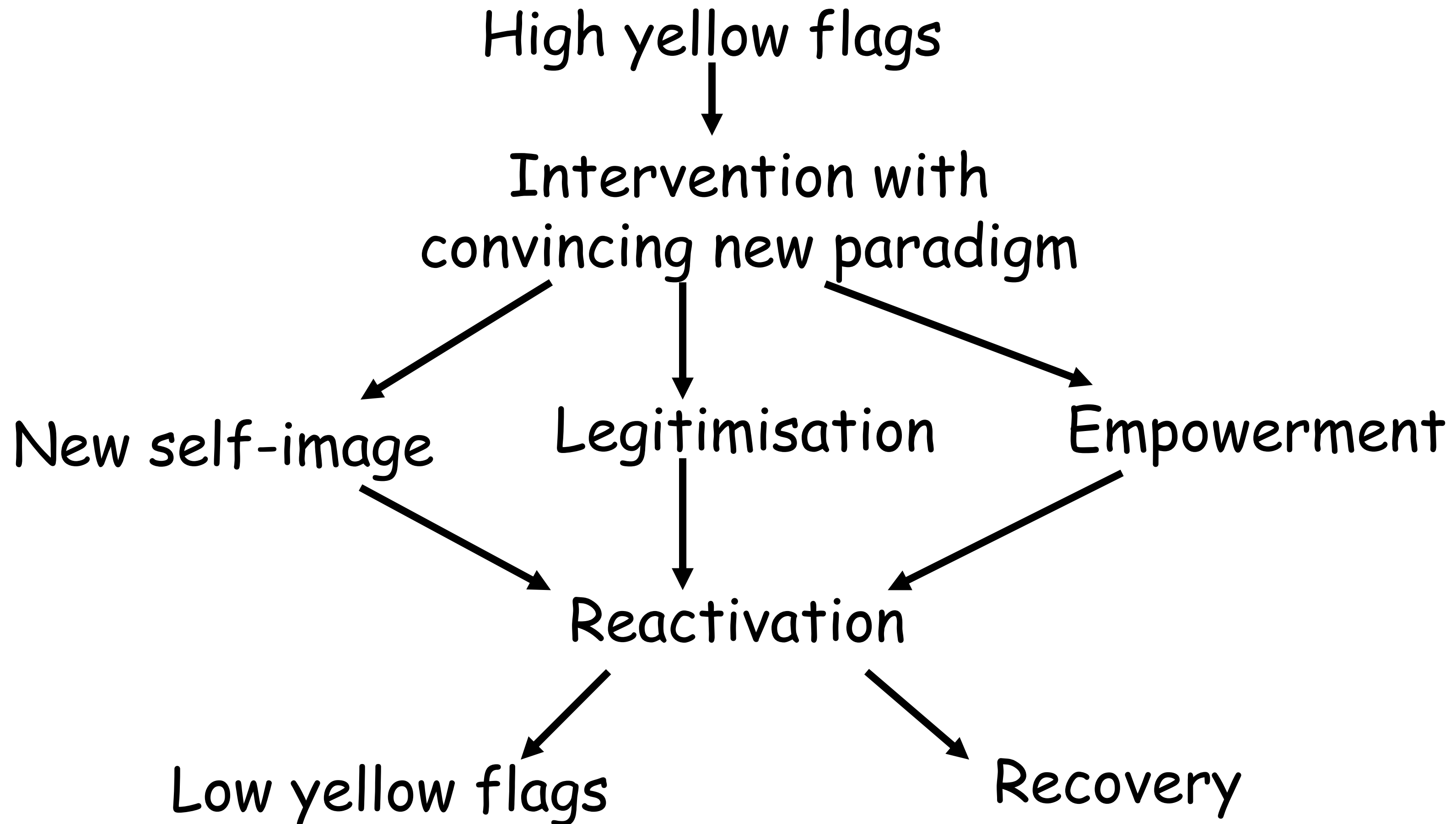
Biological interventions…

- early intervention
  (not waiting if not resolving in a week or two)
- care plan (FUNCTION-based)
  (done in stages, monitored and reviewed)
- adequate pain control
  (yes, even if it means ANALGESICS)
- facilitated recovery plan
  (advice, crisis support, advocacy)

Psychological interventions

- reassurance
- accurate information
- awareness of the importance of these factors in recovery
- problem-solving

Traditional Psychological Intervention



Social interventions

WORK

- staying at work
- encouragement at work
- re-activation linked to everyday activities
- flexibility (rest pauses, job rotation)
- collaboration with employer and patient

THE 'SYSTEM'

- mentorship and facilitation

Secondary prevention

- GENERAL (aerobic) fitness
- Increased physical endurance and strength

1.

Consider these factors in all new patients

('bio-psychosocial assessment')

3.

Tell the patient the results of the assessment in their resume

4.

Include the bio-psychosocial interventions in the treatment plan as appropriate

And finally!!!