MSK Management Plan

- Evidence based,
- Effective &
- Sustainable

MSK Management Plan: What are the problems?

Givens

1. Patients appropriately want the best outcomes
2. Clinicians want to provide best care

Problems

1. Finances are finite
2. Demand for services is increasing exponentially
3. Pressure on healthcare services is unsustainable

Effects

1. Ability to offer best clinical practice will be compromised
2. Outcomes will be poorer than what may be achievable
3. Resources are wasted

MSK Management Plan

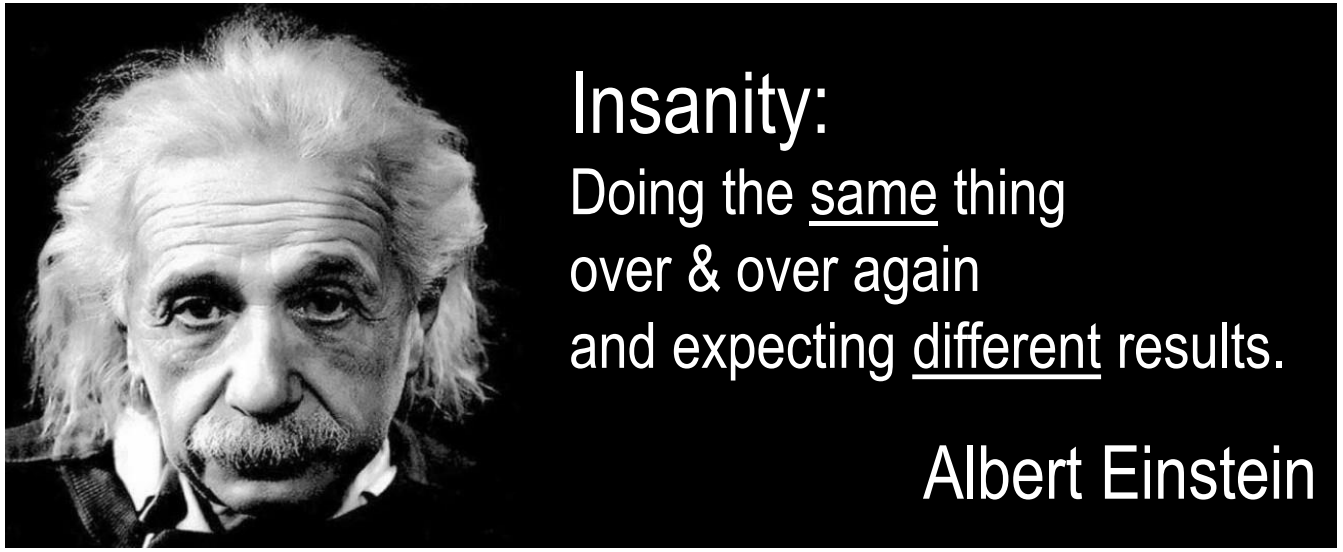
Is there a solution?

Lets start with the premise…

That it's really unhelpful to say…

'We've always done it this way'

MSK Management Plan



Let's dare…

… to be **different**

… to do something **astonishing**

… to have **better** results than anyone else

Is there a meaningful, evidence-based solution to this seemingly insurmountable problem?

MSK Management Plan

What is essential?

- ★ Education & Advice
- ★ Support & Motivation
- ★ Exercise (graduated)
- ★ Additional interventions
- ★ Adherence
- ★ Return to Function

MSK Management: **Education & Advice**

Education & Advice need be included

THE LANCET

Volume 384, No. 9938, p133–141, 12 July 2014

Comprehensive physiotherapy exercise programme or advice for chronic whiplash (PROMISE): a pragmatic randomised controlled trial

Dr Zoe A Michaleff, PhD, Prof Chris G Maher, PhD, Chung-Wei Christine Lin, PhD, Trudy Rebbeck, PhD, Prof Gwendolen Jull, PhD, Prof Jane Latimer, PhD, Prof Luke Connelly, PhD, Prof Michele Sterling, PhD

Published: 03 April 2014

Interpretation

We have shown that simple advice is equally as effective as a more intense and comprehensive physiotherapy exercise programme. The need to identify effective and affordable strategies to prevent and treat acute through to chronic whiplash associated disorders is an important health priority. Future avenues of research might include improving understanding of the mechanisms responsible for persistent pain and disability, investigating the effectiveness and timing of drugs, and study of content and delivery of education and advice.

Archives of
Physical Medicine and Rehabilitation

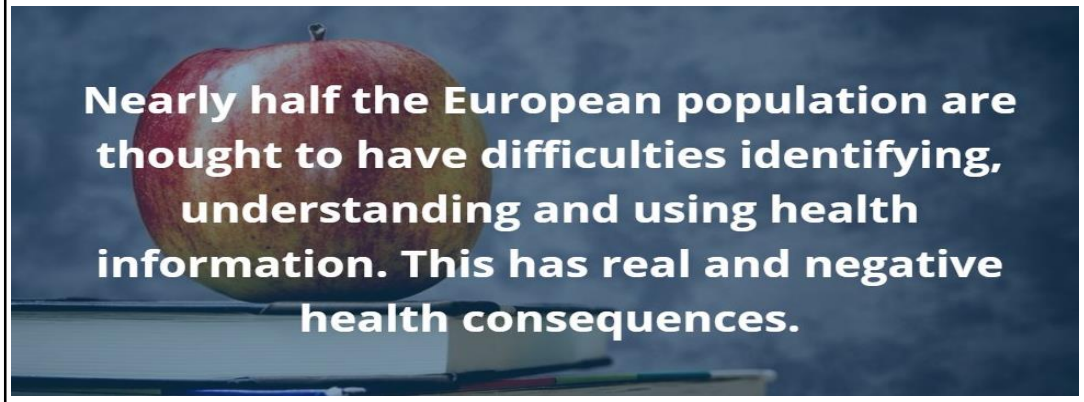
December 2011 Volume 92, Issue 12, Pages 2041–2056

The Effect of Neuroscience Education on Pain, Disability, Anxiety, and Stress in Chronic Musculoskeletal Pain

Adriaan Louw, PT, MAppSc, Ina Diener, PT, PhD, David S. Butler, PT, EdD, Emilio J. Puentedura, PT, DPT

Conclusions

For chronic MSK pain disorders, there is compelling evidence that an educational strategy addressing neurophysiology and neurobiology of pain can have a positive effect on pain, disability, catastrophization, and physical performance.



Investing in health literacy
POLICY BRIEF 19 (D. McDaid)
http://www.euro.who.int/__data/assets/pdf_file/0006/315852/Policy-Brief-19-Investing-health-literacy.pdf?ua=1

50% of our patients don't understand: What their diagnosis is, why they need a specific treatment, the purpose of the treatment, how to do their exercises, why they are important, what are the risks and benefits of their treatments

Physical activity required each week: 3000-4000 METs

Aim: 3000-4000 METs per week 1 MET = O_2 consumed at rest

MET = Metabolic Equivalent of a Task (energy cost of a task)

How to achieve 3000 - 4000 METs per week (Daily requirement)

Climbing stairs
10 minutes

Vacuuming
15 minutes

Running
20 minutes

Gardening
20 minutes

Walking or **Cycling**
25 minutes

Kyu et al (2016) Physical activity & risk of breast cancer, colon cancer, diabetes, IHD & ischaemic stroke events: SR & dose response MA for the clinical burden of disease study 2013. ***BMJ***

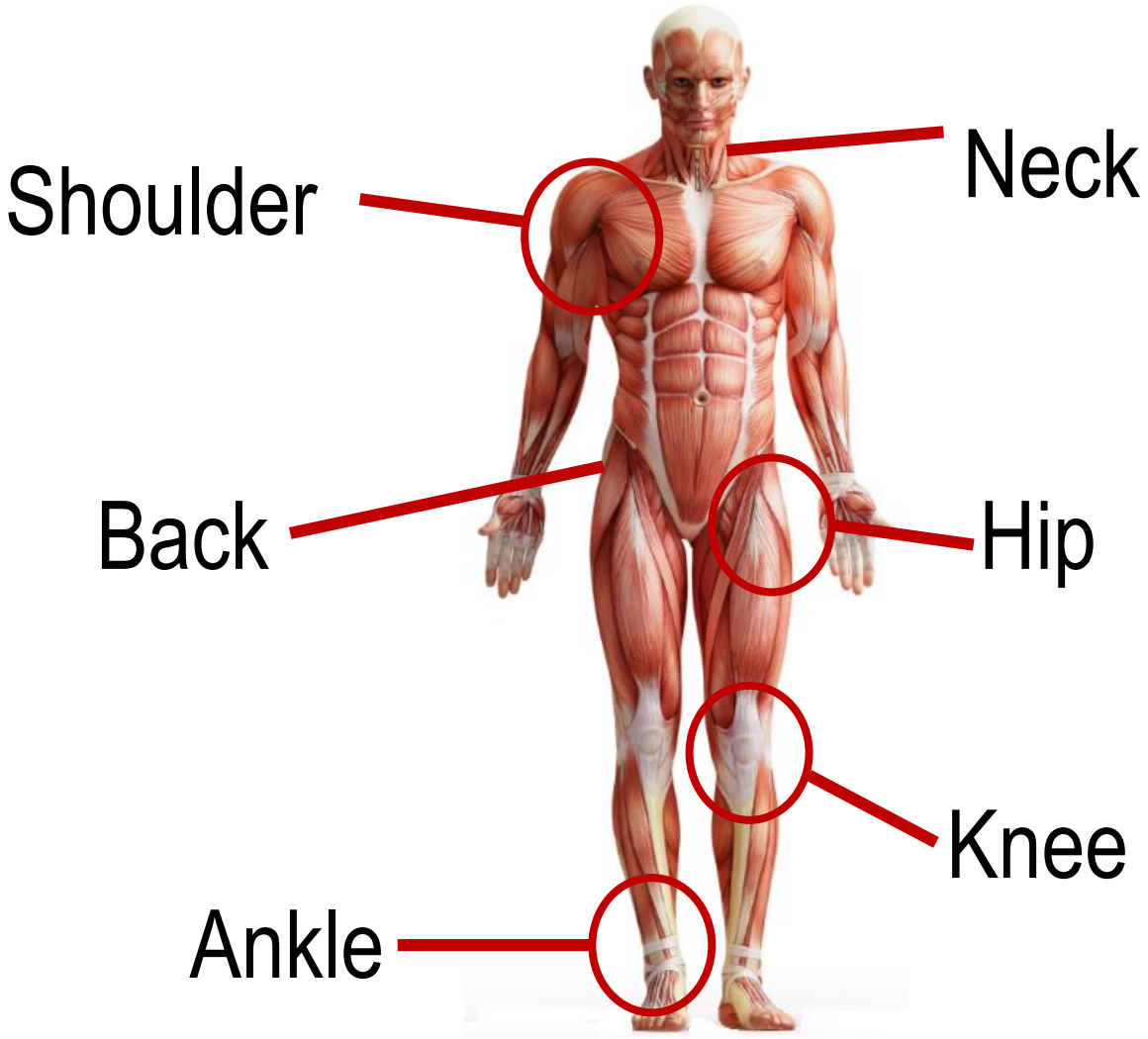
Relevance:

Outcomes are improved in people who participate in regular physical activity.

Dean and Söderlund (2015a, 2015b) **Grieve's Modern Musculoskeletal Physiotherapy**

MSK Management: **Exercise**

Specificity of the exercise may not be important



MSK Management: **Exercise**

Specificity of the exercise may not be important

REVIEWS
PHYSIOLOGY 28: 330–358, 2013; doi:10.1152/physiol.00019.2013

Exercise is the Real Polypill

Carmen Fiuza-Luces,[1,2] Nuria Garatachea,[3] Nathan A. Berger,[4] and Alejandro Lucia[1,2]

[1]Universidad Europea Madrid, Madrid, Spain; [2]Instituto de Investigación, Hospital 12 de Octubre, Madrid, Spain; [3]Facultad de Ciencias de la Salud y del Deporte, Universidad de Zaragoza, Huesca, Spain; and [4]Center for Science, Health and Society, Case Western Reserve University, School of Medicine, Cleveland, Ohio
alejandro.lucia@uem.es

The concept of a "polypill" is receiving growing attention to prevent cardiovascular disease. Yet similar if not overall higher benefits are achievable with regular exercise, a drug-free intervention for which our genome has been haped over evolution. Compared with drugs, exercise is available at low cost and relatively free of adverse effects. We summarize epidemiological evidence on the preventive/therapeutic benefits of exercise and on the main biological mediators involved.

RESEARCH ARTICLE
BMC Musculoskeletal Disorders
Open Access

Specific or general exercise strategy for subacromial impingement syndrome–does it matter? A systematic literature review and meta analysis

Alison R. Shire[1*†], Thor A. B. Stæhr[1†], Jesper B. Overby[1], Mathias Bastholm Dahl[1†], Julie Sandell Jacobsen[1] and David Høyrup Christiansen[2]

Shire *et al. BMC Musculoskeletal Disorders* (2017) 18:158
DOI 10.1186/s12891-017-1518-0

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MSK Management Plan

Is it possible to ?

Educate
Improve health literacy
Enhance outcomes
Reduce waiting list times
Empower patients
Motivate staff

MSK Management Plan

A plan for…

Enhanced Exercise Classes

MSK Enhanced Exercises Class

Clinical entry

1:1 Assessment

Advice and Discharge

Aim: 80-90% Enhanced Exercise Class

1:1 Treatment:
Burns
Frozen shoulder
Cultural reasons

For those needing treatment

MSK Enhanced Exercises Class

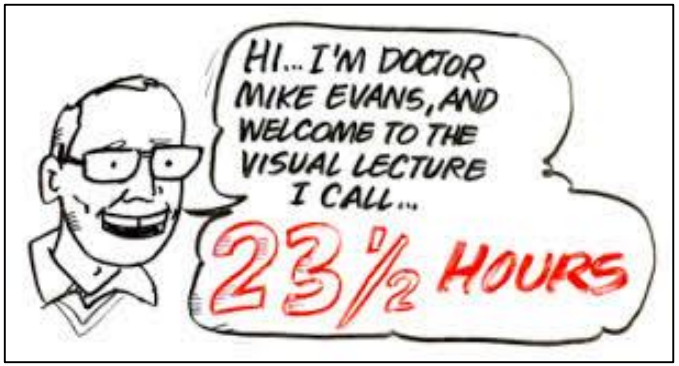
Class format

Rolling program: 1 out → 1 in
8 classes (+/-)

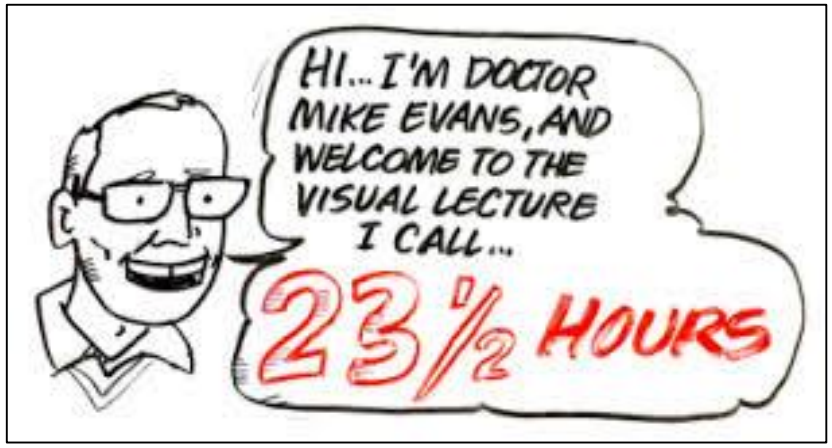
Format

- Educational Video & Discussion
- 10 exercise stations (rolling)
  - Each station 5 levels (basic to advanced)
  - Whole of body
  - Body region / recovery ie varied
- Patient portfolio (education and exercise program)

MSK Management Plan: **Education**



MSK Management Plan: **Education**



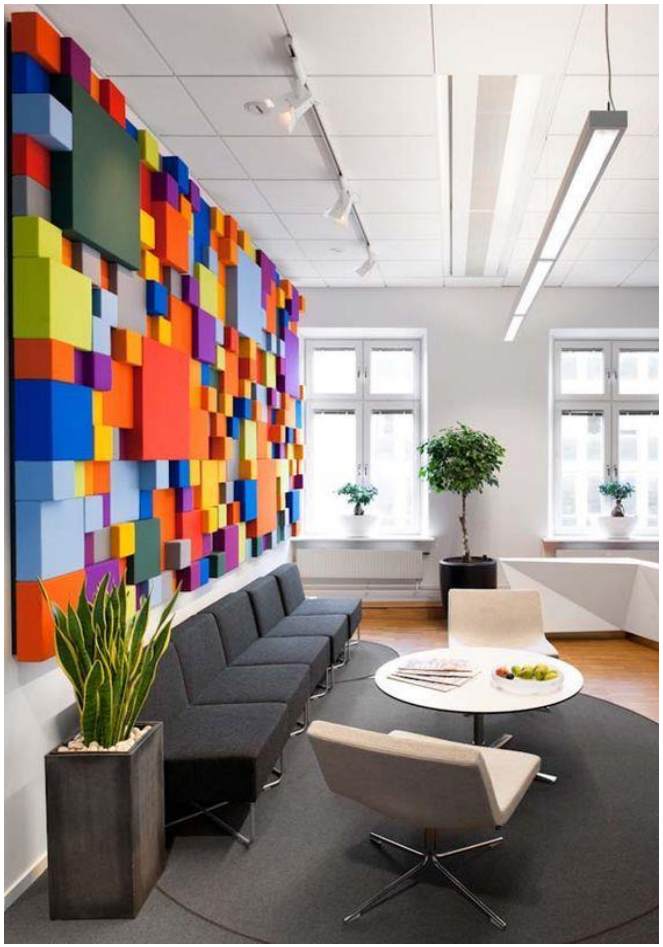
What was the most important message in this video?

What didn't you understand?

- Basis to Class Discussion
- Facilitate Improvement in Health Literacy

MSK Management Plan: **Waiting Room**

Education We can extend education into the waiting area



MSK Enhanced Exercises Class

Knee station

Arm station

Abdomen

Lower limb

Arm station

'Lawn mower'

Arm station

Lower limb

Abdomen

UL Weight bearing

MSK Enhanced Exercises Class

Purpose of Curtained off treatment section:

- Part of class circuit

but not for each session (maybe 1 in 2 classes)

- Discuss problems
- To receive 1:1 MWM
- Refer to other services: eg UL/ LL / Spinal ESP
- Refer to routine 1:1

SPINE Volume 30, Number 7, pp 711–721
©2005, Lippincott Williams & Wilkins, Inc.

A Randomized Clinical Trial Comparing Two Physiotherapy Interventions for Chronic Low Back Pain

Jeremy S. Lewis, PhD, PT, Jane S. Hewitt, MSc, PT, Lisa Billington, BSc, PT, Sally Cole, MSc, PT, Jenny Byng, MSc, PT, and Sandra Karayiannis, BSc, PT

MSK Enhanced Exercises Class

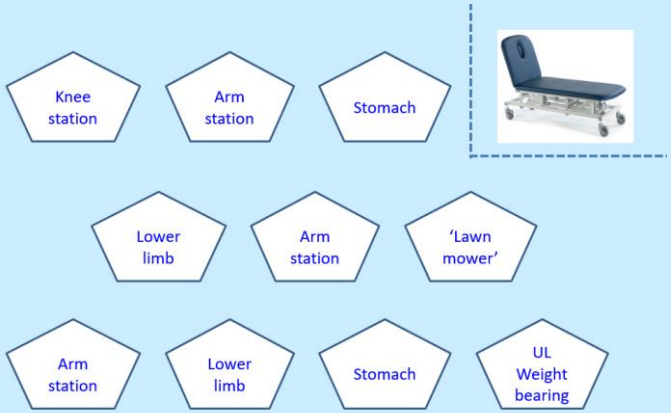
Infographic with pictures and explanations of the levels by each station

Possible to download for patients to add to their portfolios

Bridging
5 levels

- Bilateral low
- Bilateral high
- Alternating single leg
- Bilateral on platform
- Single on platform

MSK Enhanced Exercises Class



Groups

Generic

Specific (eg knee / shoulder / low back / lower limb, etc)

Mixed

Combinations of strengthening / endurance / fucntion

MSK Enhanced Exercises Class

Further innovation

- Rich, broad and relevant BioPsychoSocial Data
- Outcome measures
- Contact at 3 and 6 months after discharge
  - Safety net
  - Adherence (Fiona Sandford PhD)
- Final data at 6/12 post discharge