ST VINCENT'S HOSPITAL
MELBOURNE
A FACILITY OF ST VINCENT'S HEALTH AUSTRALIA

Physical activity and older people with chronic health conditions

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Chronic Health Conditions

- Cardiovascular disease (Heart Disease, stroke)
- Type 2 diabetes
- Cancer
- Arthritis

Impact of Chronic Disease

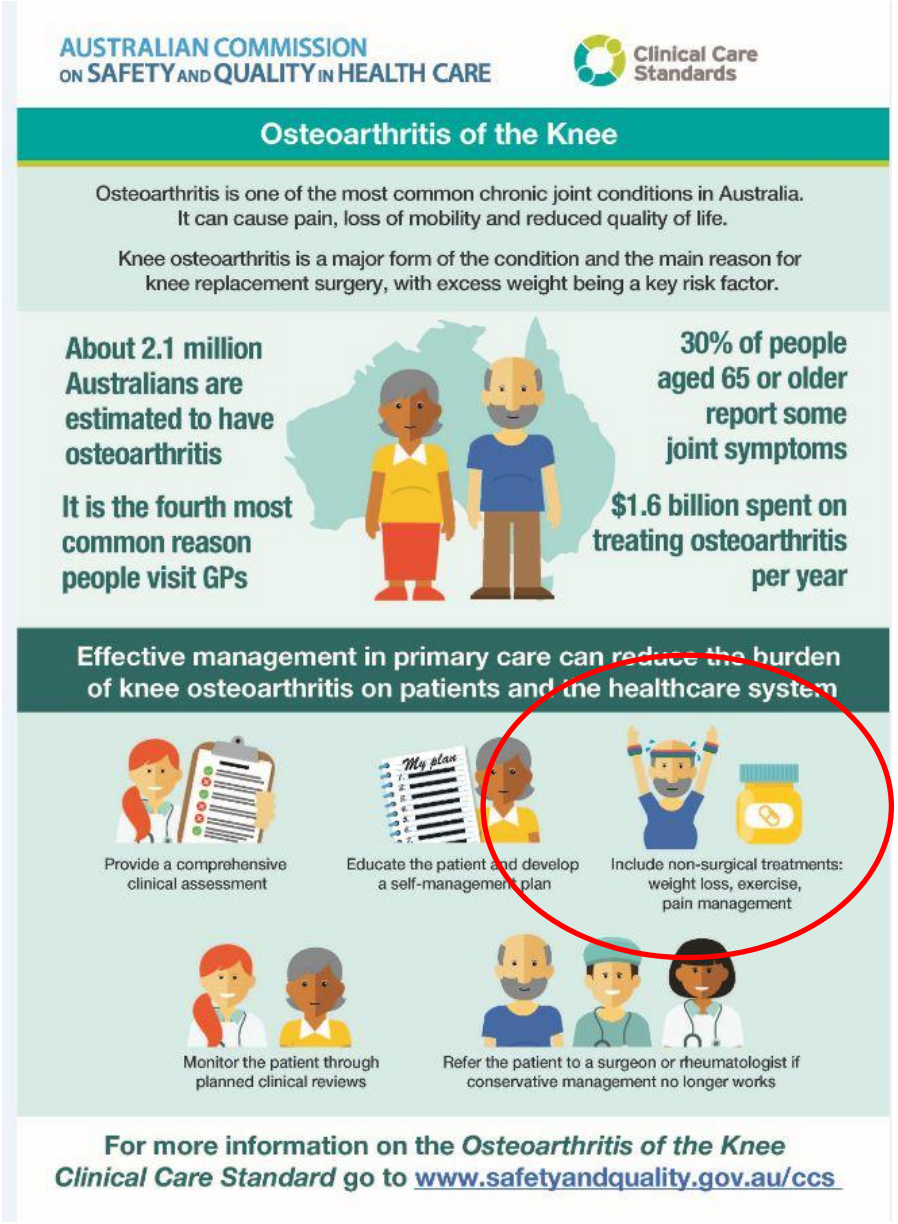
- Increased mortality and morbidity
- Increased healthcare cost
- Evidence linking chronic diseases to physical inactivity and diet

Physical Exercise & Chronic Disease

- Chronic diseases :most common cause of preventable death
- Physical activity and diet can reduce the risk of developing chronic disease

Solution: Implementation of long-term behaviours that encourage healthy lifestyles in the primary care setting

Clinical care Standard 2017



Why You Should Exercise

42% lower risk of esophageal cancer

26% lower risk of lung cancer

27% lower risk of liver cancer

23% lower risk of kidney cancer

22% lower risk of gastric cardia cancer

21% lower risk of endometrial cancer

20% lower risk of myeloid leukemia

16% lower risk of colon cancer

17% lower risk of myeloma

13% lower risk of rectal cancer

15% lower risk of head & neck cancer

13% lower risk of bladder cancer

10% lower risk of breast cancer

Women'sHealth

SOURCE: JAMA INTERNAL MEDICINE

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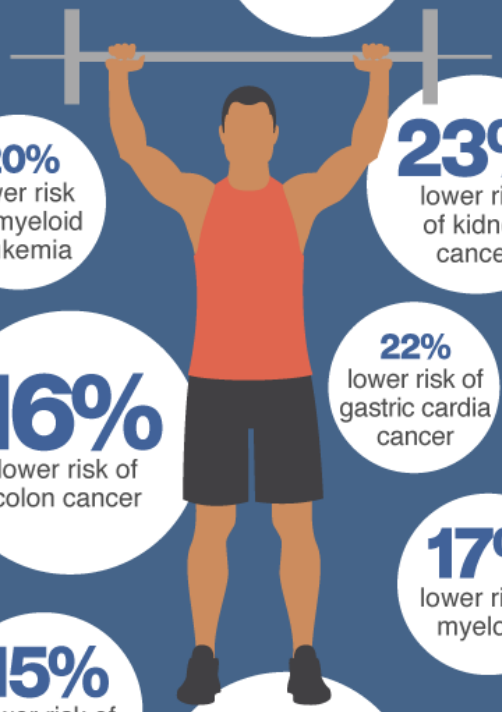

20% lower risk of myeloid leukemia

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Men'sHealth

SOURCE: JAMA INTERNAL MEDICINE

“What fits your busy schedule better, exercising one hour a day or being dead 24 hours?”

Australian Physical Activity Guidelines

- Doing any physical activity is better than doing none.
- Be active on most, preferably all, days every week.
- Accumulate 2 ½ to 5 hours of moderate intensity or 1 ¼ to 2 ½ hours of vigorous intensity
- Do muscle strengthening activities on at least 2 days each week.

Therapeutic Exercise vs physical exercise

- Strengthening

- Neuromuscular training

- Range of movement/Stretching
- Aerobic/cardiovascular

Considerations when exercising

- What comorbidities ?
- Prior exercise experience
- Prior exercise tolerance
- To consider management strategies for persistent pain.

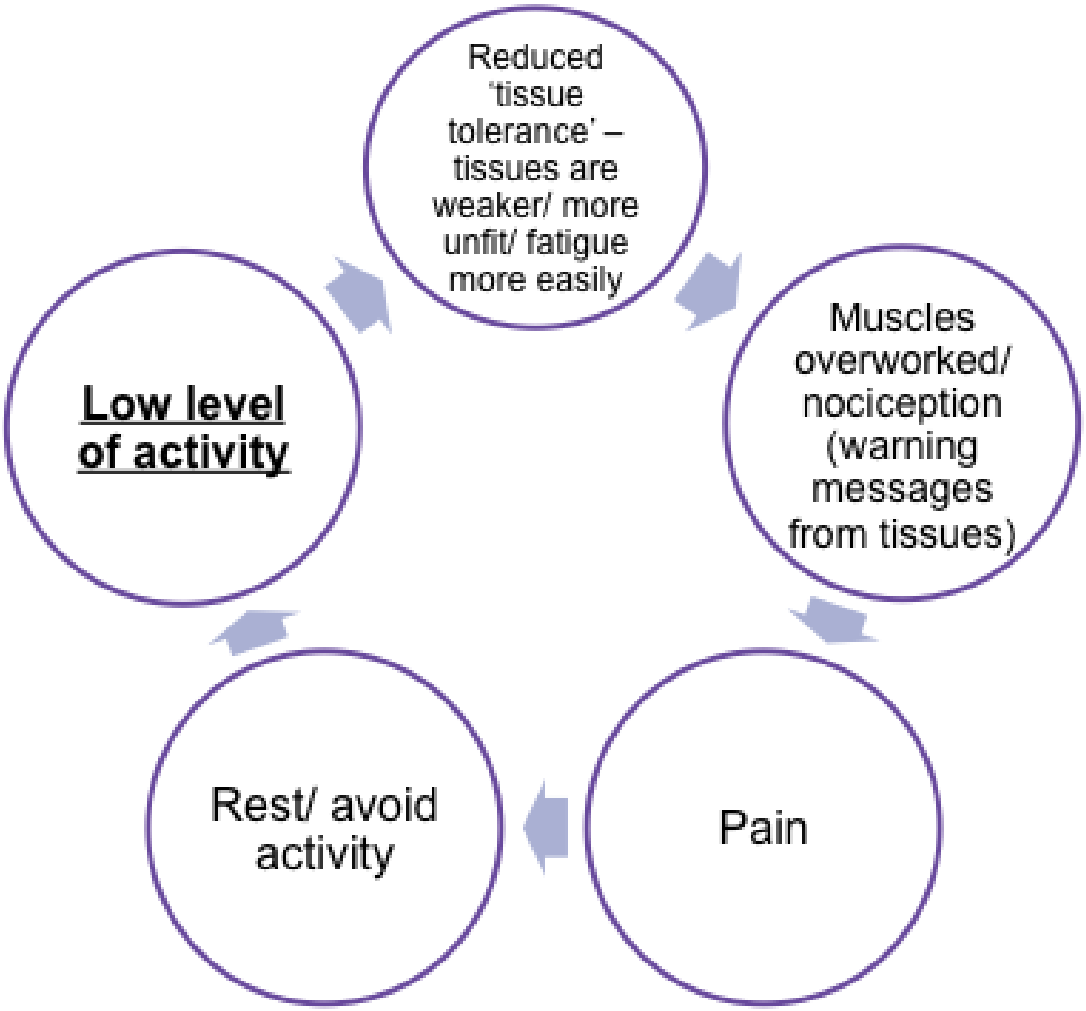
•Systolic BP >180 or <100
•HR: should be regular and resting (60-100)
•Call health professional if worried about a patient

Persistent pain (Chronic Pain)

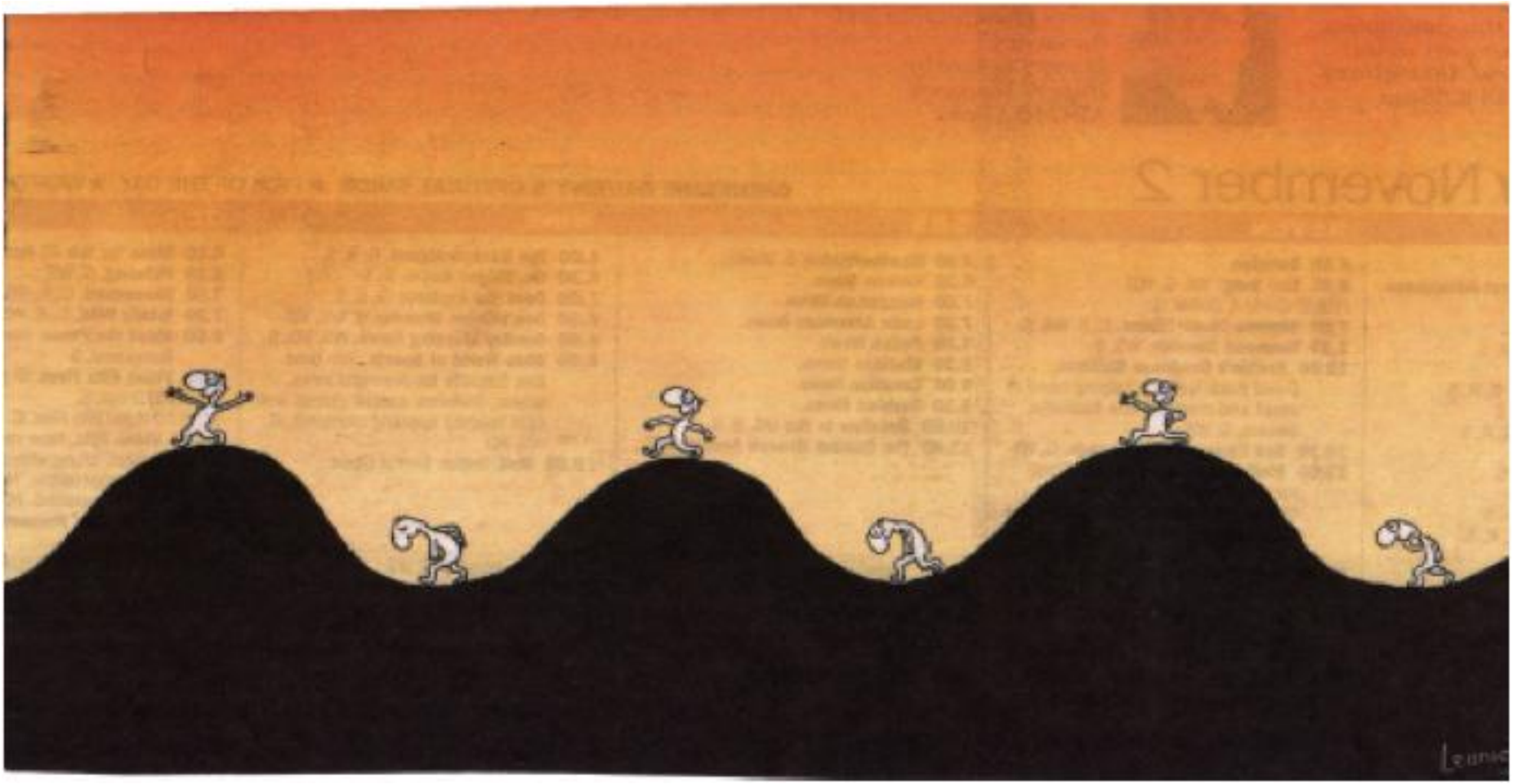
- Pain >3 months.
- Often no diagnosis.
- Can involve changes within the nerves and nervous systems

1 in 5 Australians live with persistent pain

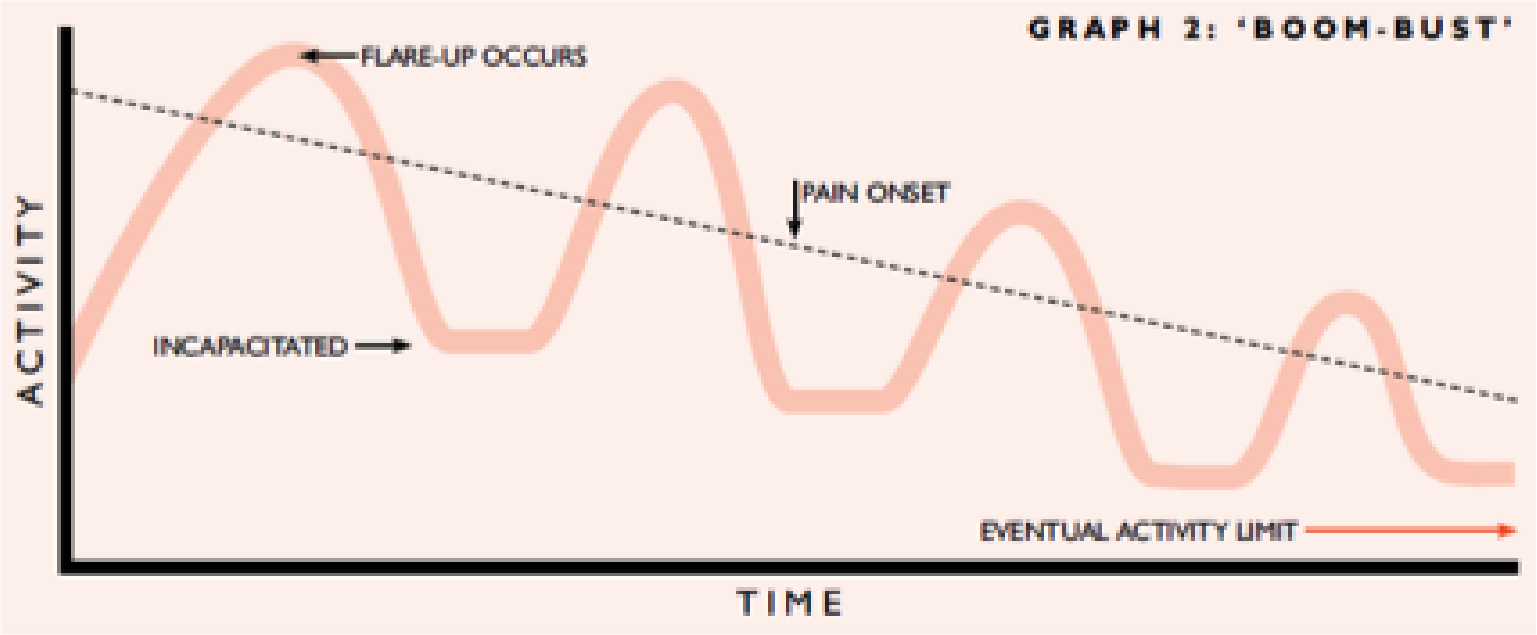
FEAR AVOIDANCE CYCLE



Over Activity/Boom-Bust etc.



Over time activity levels……



Exercise and persistent pain

- Pain does not = harm
- Establish a baseline
- Goals: small, patient focused
- Regular contact
- PACING

On the first day only do the number of repetitions you can do before you feel a change

From the baseline you need to increase the time, reps or weight on a gradual basis

	Exercise 1	Exercise 2	Exercise3	Exercise 4	Exercise 5
Diagram					
Baseline Sets/Reps					
Day	Target Increase	Target Increase	Target Increase	Target Increase	Target Increase

Before you do your exercises, have a target set out in how many you would like to complete
Do not do more than this to avoid over-activity

Pain Resources

- http://painhealth.csse.uwa.edu.au/
- http://www.paintoolkit.org
- http://www.painaustralia.org.au
- http://knowpain.co.uk

Osteoarthritis (OA)

- OA is a painful condition that affects
  - synovial joints
  - subchondral bone
  - cartilage
  - ligaments
  - muscle

- Not a **wear and tear** disease

- Complex condition that is influenced by an interaction between **genetic, biomechanical, metabolic** and **biochemical**

Clinical Guidelines
(Recommendations based on evidence)

	EULAR	NICE	ACR	AAOS	OARSI
Exercise	✖	✖	✖	✖	✖
Strength/ resistance	✖		✖	✖	✖
Aerobic	✖	✖	✖	✖	✖
Stretching /ROM	✖				✖
Neuromus cular	✖			✖	✖

Note: Overall recommendations of pacing, initial instruction with emphasis on independent programs. No clear evidence on delivery mode/structure

Compliance

- Evidence in many areas of Chronic disease (diabetes, cardiopulmonary, osteoarthritis)
- Improvements in outcomes with exercise-short term
- Compliance after 12 months poor
- Strategies may include: education, home exercise programs, maintenance classes, health coaching

Summary

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- Chronic disease is common
- Chronic disease can be improved with exercise
- Consider co-morbidities and persistent pain symptoms
- Use of Pacing strategies
- On going compliance with exercise