Evaluating the paradigm shift towards group-based exercise programs in Osteoarthritis: Is individualised exercise prescription no longer relevant?

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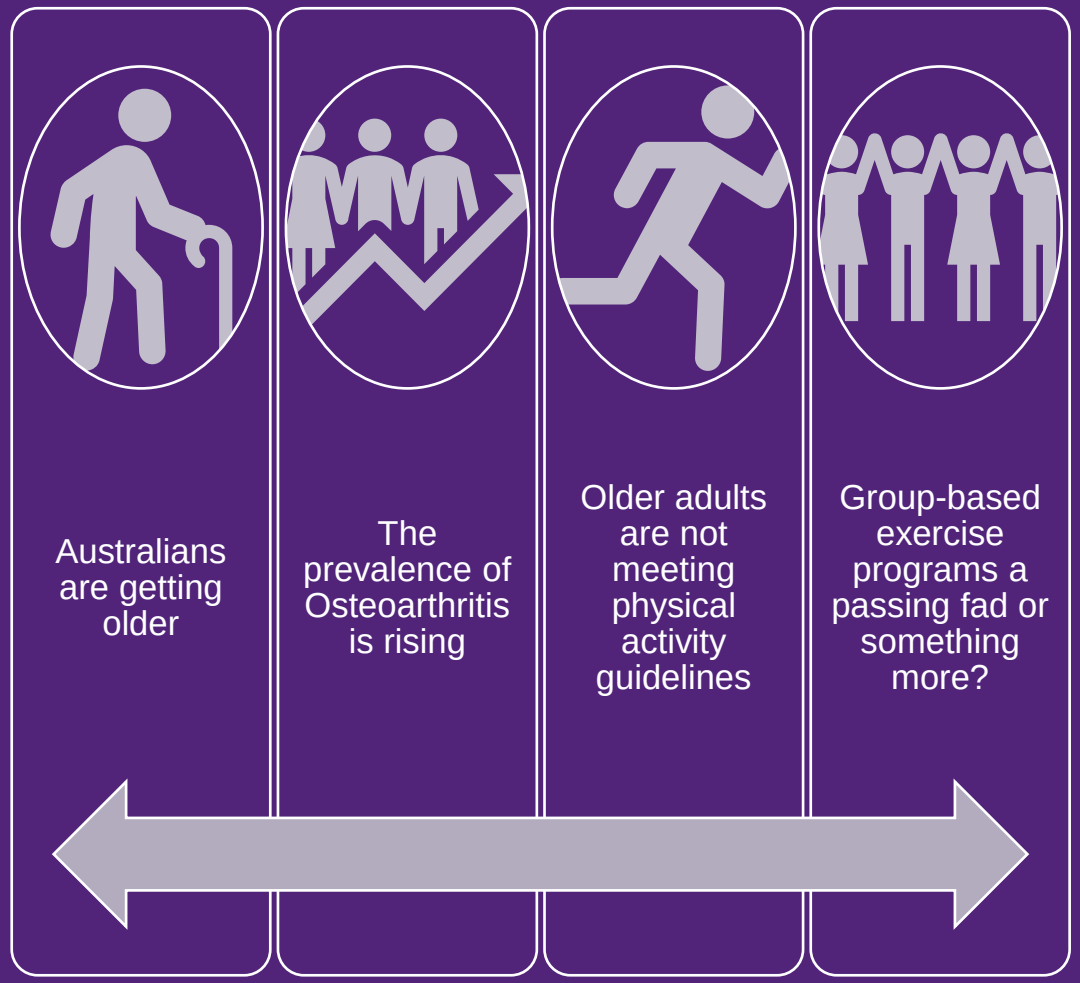
The therapeutic challenge



Literature Search

The value of individual or collective group exercise programs for knee or hip osteoarthritis. Clinical practice recommendations *(Tiffreau et al., 2007)*

- *No evidence of the superiority of one modality over the other*
- *Future RCTs are needed*

Group Versus Individual Physical Therapy for Veterans With Knee Osteoarthritis: Randomized Clinical Trial *(Allen et al., 2016)*

- No superiority of either modality
- Both modalities are reasonable

Clinical problem

Hip Osteoarthritis
299,101 cases
(171% increase)

3.2 million Australians estimated to have Osteoarthritis in 2019

118% increase from 1990

Knee Osteoarthritis
1,904,137 cases
(126% increase)

Ackerman et al., (2022)

An aging population

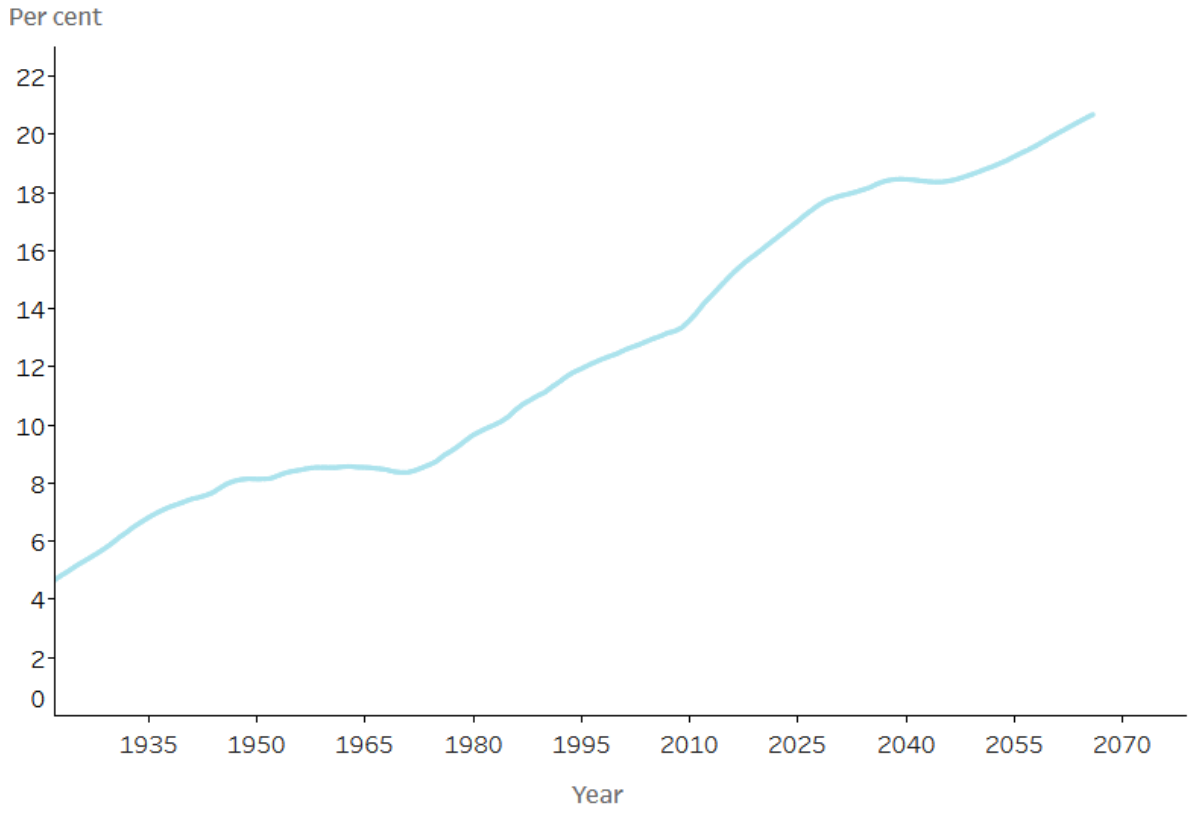
1 in 8 Australians aged 65 and over (1995)

1 in 6 Australians aged 65 and over (2020)

1 in 4 Australians aged 65 and over (Projected 2066)

ABS (2016), ABS (2020)

Figure 1.1: Percentage of the Australian population aged 65 and over, at 30 June, over time



Notes
1. Data for 1921 to 1970 are population estimates. Data from 1971 onwards are estimates of the resident population (ERP).
2. Population data from 1992 to 2011 are recast estimates following the rebasing of the 2011 Census. For more information, see the ABS explanatory notes.

Sources: ABS 2018, 2019.
http://www.aihw.gov.au/

Australian adults are not meeting physical activity recommendations

Adults 18–64
Over 3 in 10 (35%) are insufficiency physically active

Over 7 in 10 (72%) do not perform the recommended amounts of muscle strengthening activity

Adults 65 and over
Almost 9 in 10 (87%) are insufficiency physically active

Over 8 in 10 (81%) do not perform the recommended amounts of muscle strengthening activity

Are evidence-based guidelines being followed?

RACGP
Royal Australian College *of* General Practitioners

Guideline for the management of knee and hip osteoarthritis

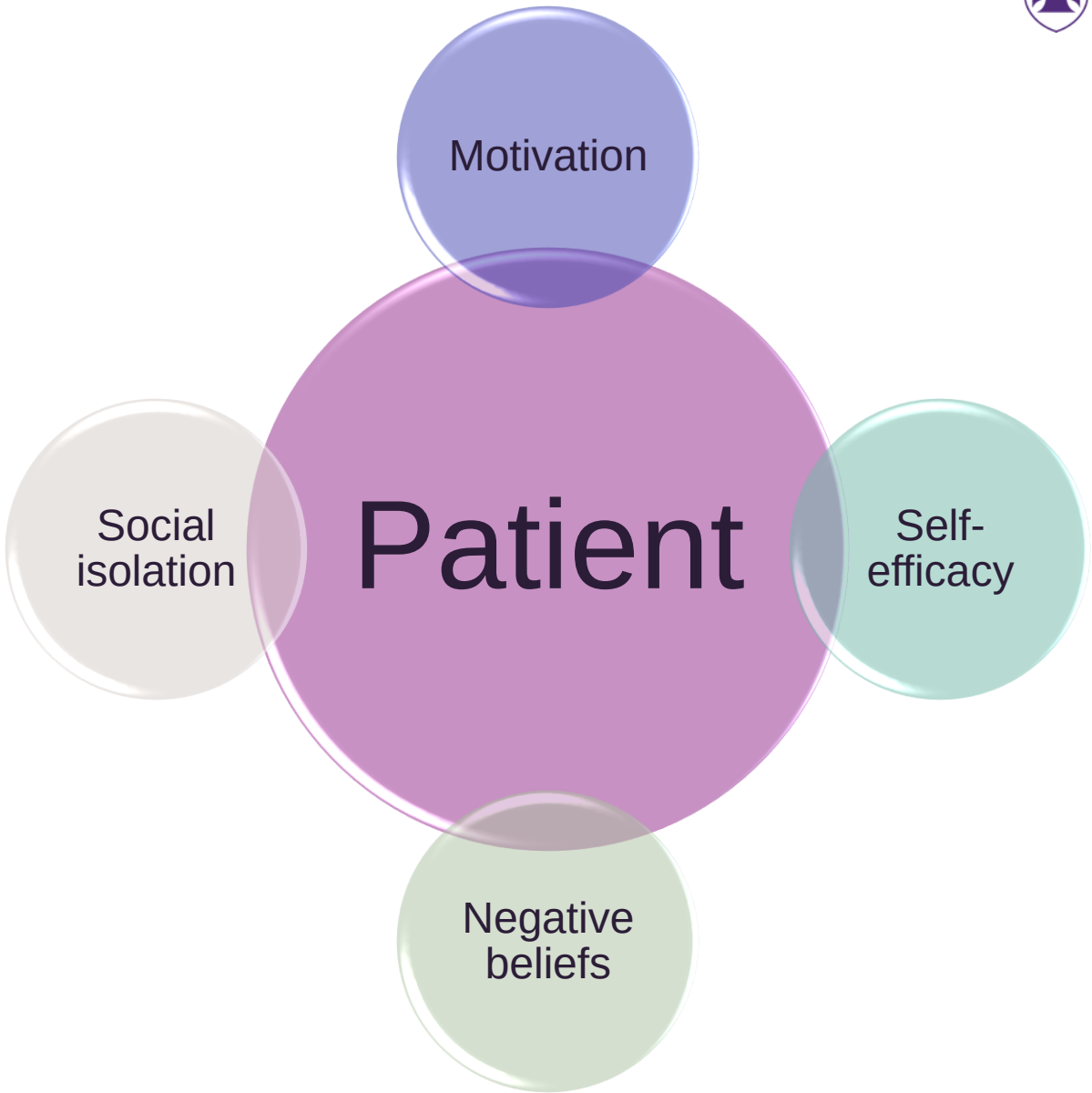
Second edition

Only 43% of primary care–based healthcare encounters provided appropriate osteoarthritis care

17% of patients who consulted their GP for hip/knee osteoarthritis were referred for lifestyle interventions

Eyles et al., (2020)

Psychosocial barriers to physical activity in Osteoarthritis



Open Access Research

BMJ Open

Barriers and facilitators of physical activity in knee and hip osteoarthritis: a systematic review of qualitative evidence

Archontissa M Kanavaki,[1,2] Alison Rushton,[1,2,3] Nikolaos Efstathiou,[4,8] Asma Alrushud,[1,5] Rainer Klocke,[6] Abhishek Abhishek,[7] Joan L Duda[1,2]

RESEARCH ARTICLE Open Access

The association between psychological characteristics and physical activity levels in people with knee osteoarthritis: a cross-sectional analysis

Daisuke Uritani[1*], Jessica Kasza[2], Penny K. Campbell[3], Ben Metcalf[3] and Thorlene Egerton[3]

RESEARCH ARTICLE Open Access

High self-efficacy – a predictor of reduced pain and higher levels of physical activity among patients with osteoarthritis: an observational study

Åsa Degerstedt[1], Hassan Alinaghizadeh[2], Carina A. Thorstensson[3,4] and Christina B. Olsson[2,5,6*]

So where does group-based exercise fit into all of this?

Raising awareness in the community

ABC NEWS

Set location
For local weather

Just In | Watch Live | Voice Referendum | Politics | World | Business | Analysis | Sport | Scienc

Danish osteoarthritis program showing signs of success in Australia, with reduced need for surgery and improved quality of life

By Emma Thompson

Posted Wed 21 Sep 2022 at 6:43am

Pam Harders has seen an improvement in her pain after taking part in the GLAD program. *(ABC News: Nick Haggarty)*

"I'm feeling a lot more confident in walking and being able to get up and down off chairs easier“

"Once you get into it, and you get your muscles used to doing it, then the benefit is to keep doing it.“

ABC News (2022)

Promising results

3 MONTHS RESULTS

	KNEE	HIP
Pain	- 33%	- 27%
Medication	- 47%	- 42%
Quality of life	+ 31%	+ 22%
Walking speed	+ 14%	+ 10%

12 MONTHS RESULTS

	KNEE	HIP
Pain	- 31%	- 27%
Medication	- 50%	- 48%
Quality of life	+ 38%	+ 24%
Physical activity participation	+ 9%	+ 6%

GLA:D Australia. (2021)

Group Exercise:

Is there something in the water?

Social Psychology and the power of group dynamics

Social comparison theory
(Festinger, 1954)

Social facilitation effect
(Allport, 1920)

Are group-based exercise programs a replacement for individualised 1:1 exercise prescription?

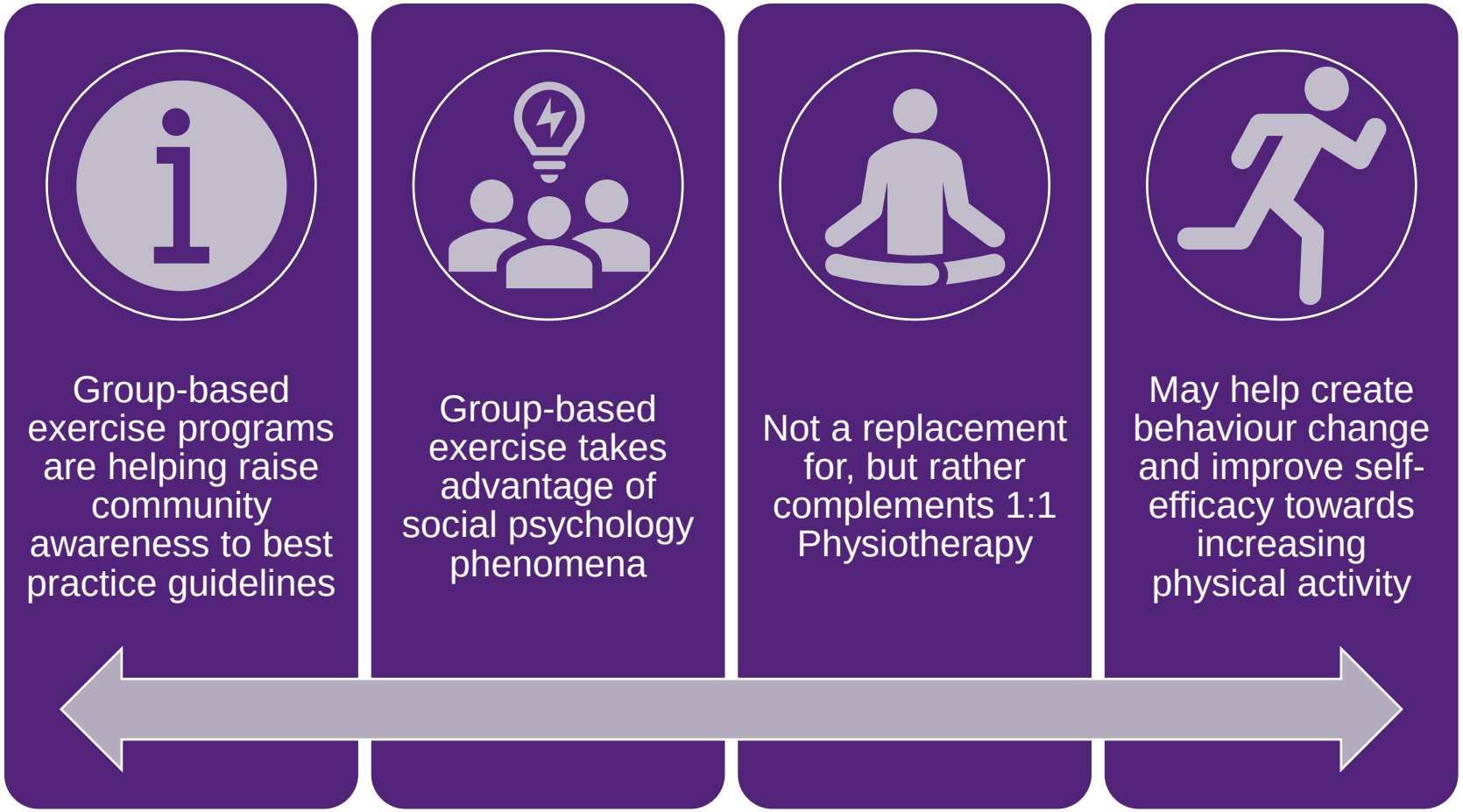
We’re asking the wrong question

How do we improve physical activity?

Individualised exercise may be necessary for improving function and building patient confidence

Aim to enhance self-management strategies and incorporate lifestyle interventions

Take home messages…



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Thank you to my wonderful wife Louise. Without your love and support I would not be here presenting today.