



ANNUAL REPORT 2019



GLA:DTM
AUSTRALIA

Email: GLAD.Australia@latrobe.edu.au

Website: gladaustralia.com.au



LA TROBE
UNIVERSITY

EDITORIAL

About 1 in 5 Australians over the age of 45 have osteoarthritis. The GLA:D® program aims to improve the care of people with knee and hip osteoarthritis through education and exercise therapy, as recommended by international treatment guidelines. GLA:D® was originally launched in Denmark in 2013 and its implementation began in Australia in 2017. Currently, the program is also available in Canada, China, Switzerland and New Zealand.

This 2019 Annual Report presents an overview of the GLA:D® Australia program and reports the results from the data registry. The data were collected from participant questionnaires for the period from January 2018 to December 2019.

For 2020, the goals of GLA:D® Australia are to:

- Continue to support public and private physiotherapy practice to implement and offer GLA:D® Australia to Australians with knee and hip osteoarthritis
- Improve program access to people living in regional and rural areas
- Develop telehealth delivery of the program
- Train more physiotherapists working in regional and remote areas
- Develop remote training for physiotherapists

On behalf of the interest group GLA:D® Australia



Dr Christian Barton
Project lead and tutor



Dr Joanne Kemp
Project lead and tutor



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WHAT IS GLA:D®?



The consensus of international guidelines recommends specific participant education and exercise as the first choice of treatment - combined with weight reduction, if necessary. GLA:D®, Good Life with osteoarthritis from Denmark, is an education and exercise program developed by researchers in Denmark for people with hip or knee osteoarthritis symptoms.

GLA:D® aims to accelerate implementation of the national clinical guidelines into clinical practice, and the overall objective is to ensure that:

1. All people with osteoarthritis have equal access to evidence-based treatment irrespective of place of residence or financial situation; and
2. Surgery is considered only when non-surgical treatment measures have failed

In line with the original Danish program, GLA:D® Australia consists of three core elements:

1) Physiotherapist education, training and support

GLA:D® Australia education and training workshops entail 2 days of face-to-face learning, involve:

- ✓ Pre- and post-workshop knowledge testing
- ✓ Lectures related to osteoarthritis management
- ✓ Practical sessions
- ✓ Group discussions about overcoming barriers to implementation

2) GLA:D® Australia intervention delivery

All registered participants receive a standardised but individualised program:

- ✓ 2 participant education sessions
- ✓ 12 sessions of physiotherapist supervised group exercise therapy delivered twice weekly for six weeks

3) Data collection of patient outcomes

All program participants are registered into an online participant data registry, with an 'opt out' consent process for contributing to collection of participant-reported data

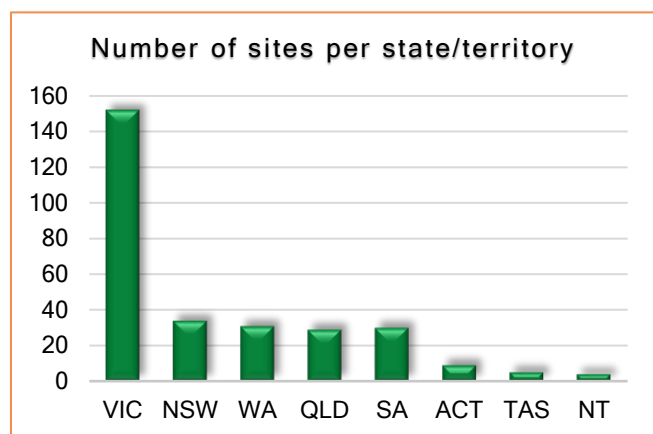
GLA:D® AUSTRALIA PHYSIOTHERAPISTS

GLA:D® is available in all states of Australia!

The first GLAD® Australia physiotherapist training course was delivered in March 2017, with **23** courses held around Australia since this time by December 2019.

1068 physiotherapists trained from all states and territories

297 sites implemented GLA:D® Australia between March 2017 and December 2019, including private (89%) and public (11%) settings. Their names are listed on the GLA:D® Australia website.



As well as teaching physiotherapists about the latest evidence, the physiotherapy training provided by the GLA:D® Australia Team is designed to improve the confidence of the physiotherapists in delivering education and exercise-therapy to people with knee and hip osteoarthritis.

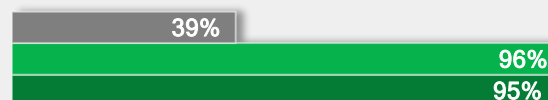
After the physiotherapist training

100% of the physiotherapists considered themselves confident enough and capable to deliver exercise and education to people with knee and hip osteoarthritis following current clinical practice guidelines

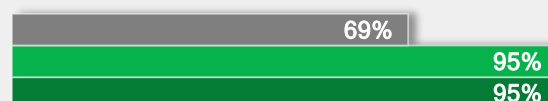
Confidence level of physiotherapist to:

■ Before course ■ After course ■ 1 year after course

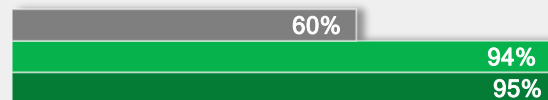
Prescribe neuromuscular exercise



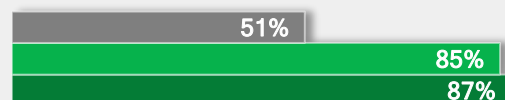
Provide education related to self-management



Provide education related to physical activity participation



Discuss the importance of weight management



GLA:D® AUSTRALIA PARTICIPANTS: WHO ARE THEY?



Number of participants

Between January 2017 and December 2019, **3162** participants had taken part in the GLA:D® program from all Australian states and territories.

Sex and age

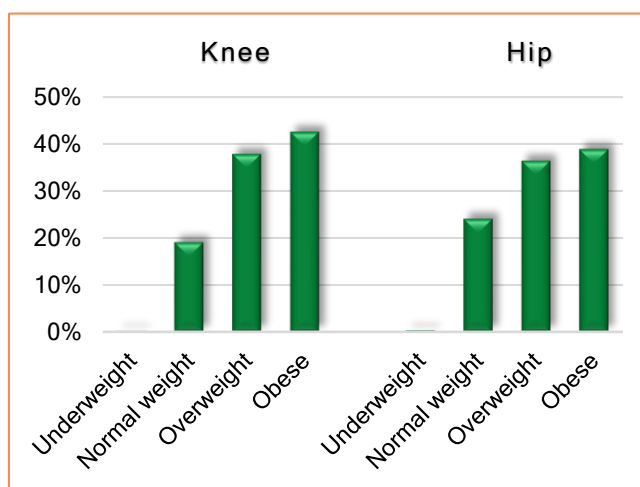
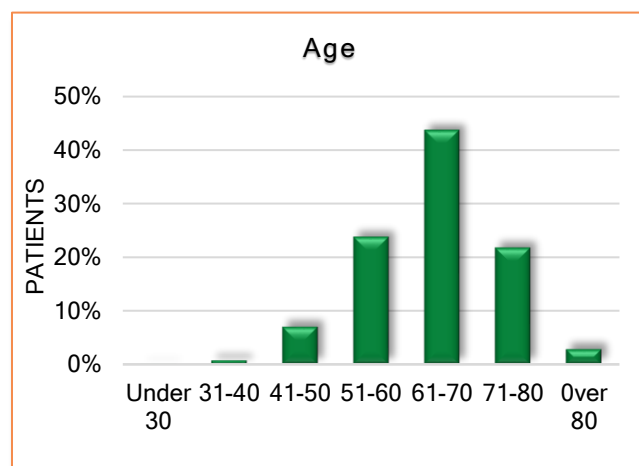
A total of **72%** of the GLA:D® participants were women. The average age for all participants was **64 years**, with the youngest being a 28 year-old man and the oldest being a 93 year-old woman. On average, the men were slightly older than the women.

Knee and Hip

78% of GLA:D® participants reported their knee as their primary problem joint and **21%** reported their hip as their primary problem joint.

Overweight

Knee participants had an average BMI of 30.1 and hip participants of 29.3. A total of **80%** of the knee participants and **75%** of the hip participants were overweight.



Previous surgery

39% of the knee participants and **20%** of the hip participants had undergone previous surgery before they started the GLA:D® program.

Other diseases

Other diseases are common. Almost 40% of participants reported other health conditions. More than 20% of participants reported having at least one of the following health conditions: high blood pressure, high level of cholesterol or diabetes.





GLA:D® AUSTRALIA PARTICIPANTS: WHAT HAPPENED?

Reduced Pain

After GLA:D® program, the average knee/hip pain intensity decreased by **37%** (from 42.7 to 26.9 mm on VAS 0-100) for knee participants and **30%** (from 42.4 to 29.5 on VAS 0-100) for hip participants.

Reduced intake of painkillers

After GLA:D® program, the proportion of participants reporting having used either paracetamol, NSAID or opioids medication fell from 59% to **45%** for knee participants and from 62% to **52%** for hip participants.

	KNEE	HIP
Pain 	-37%	-30%
Medication 	-14%	-10%
Walking speed 	+4%	+5%
Quality of life 	+31%	+19%

Reduced pain and intake of painkillers, improved physical function and quality of life

Improved physical function

For both knee and hip participants, the number of sit to stands in 30 seconds increased by **30%** from 10 repetitions before GLA:D® to 13 repetitions after GLA:D® program.

After GLA:D® program, the average walking speed increased by **4%** (from 1.75 m/sec to 1.82 m/sec) for knee participants and **5%** (from 1.82 m/sec to 1.92 m/sec) for hip participants.

Higher quality of life

After GLA:D®, average joint-related quality of life increased by **31%** for knee participants (KOOS QoL from 41.9 to 54.7) and **19%** for hip participants (HOOS QoL from 45.1 to 53.8).

Compliance in GLA:D® Australia program

9 out of 10 patients attended at least one education session, and 8 out of 10 completed at least 10 exercise-therapy sessions



GLA:D® AUSTRALIA PARTICIPANTS: 12 MONTHS ON

Reduced Pain





The reduction in pain was maintained one year after starting the GLA:D® program. The knee participants experienced an average pain reduction of **35%** (from 42.7 to 27.6 mm on VAS 0-100) and the hip participants an average pain reduction of **42%** (from 42.4 to 24.8 on VAS 0-100) compared with before GLA:D® program.

Higher quality of life

One year of commencing the GLA:D® program, participants reported a further improvement in average joint-related quality of life. Knee participants reported a **38%** improvement (KOOS QoL from 41.9 to 57.7) and hip participants a **39%** improvement (HOOS QoL from 45.1 to 62.9) compared with before GLA:D® program.

Reduced intake of painkillers

One year after starting GLA:D® program, the proportion of participants reporting having used either paracetamol, NSAID or opioids medication fell from 59% to **42%** for knee participants and from 62% to **33%** for hip participants.

		KNEE	HIP
Pain		-35%	-42%
Medication		-17%	-29%
Quality of life		+38%	+39%
Physical activity participation		+10%	+16%



Physical activity participation

One year after commencing the GLA:D® program, the number of knee participants undertaking regular physical activity of at least moderate intensity increased **10%** (UCLA physical activity scale from 57% to 67%) and the number of hip participants increased **16%** (UCLA physical activity scale from 54% to 70%).

Joint replacement surgery

17% of the knee participants desired surgery before commencing GLA:D. 74% of these participants had not received surgery and no longer desired surgery one year after starting the GLA:D® program. 20% of the hip participants desired surgery before commencing GLA:D. 33% of these participants had not received surgery and no longer desired surgery one year after starting the GLA:D® program.

FINAL WORDS

Interpretation of results

The analyses included in this Annual Report are entirely descriptive and the results should be interpreted with caution. The data are based on validated questionnaires, objective functional tests and other questions whose validity has not yet been examined. We have strived to achieve the highest degree of validity in data collection in a real world clinical practice setting.

The analyses do not involve a control group, and therefore it is possible that factors other than the GLA:D® program may have affected the results.

The majority of GLA:D® participants are people who are able and willing to pay at least some of the cost for the program in a private clinic, and who are able to attend appointments at a physiotherapy service. Consequently, it cannot be ruled out that the composition of the participant population may have affected the results. Overall, the generalisability of the results seems acceptable in relation to knee and hip osteoarthritis participants who are able and motivated to participate in GLA:D® Australian. However, the above limitations must be considered.

International collaboration in GLA:D®

GLA:D® has been implemented in Australia, Canada, China, New Zealand and Switzerland and implementation is currently ongoing in Austria. Teams from all countries are a part of the GLA:D® International Network (GIN) and in 2019 a meeting was held in Toronto, Canada. The aims of the network are to share experiences and to ensure standardization and homogeneity in delivering GLA:D® in the different countries. A common website was established in 2019: www.gladinternational.org

GLA:D® International Network

2013: GLA:D® Denmark

2015: GLA:D® Canada

2016: GLA:D® Australia

2017: GLA:D® China

2019: GLA:D® Switzerland

2019: GLA:D® New Zealand

CONTACT DETAILS

Email:

GLAD.Australia@latrobe.edu.au

Address:

C/o La Trobe University

Plenty Road & Kingsbury Drive,
Melbourne VIC 3086

