



ANNUAL REPORT 2020



GLA:DTM
AUSTRALIA

Email: GLAD.Australia@latrobe.edu.au

Website: gladaustralia.com.au



LA TROBE
UNIVERSITY

Sport and Exercise Medicine
Research Centre

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, Austria and New Zealand.

The 2020 Annual Report presents an overview of the GLA:D® Australia program and reports the results from our data registry. The data were obtained from GLA:D® Australia participants for the period of January 2018 to December 2020. Due to the restrictions placed as part of the COVID-19 containment strategy in Australia, we adapted rapidly by providing our physiotherapist training course through interactive online modules, and facilitating telehealth delivery of the program to Australians with knee and hip osteoarthritis.

For 2021, 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
- Train more physiotherapists working in regional and remote areas
- Continue offering remote training for physiotherapists

On behalf of the interest group GLA:D® Australia



**A/Prof
Christian Barton**
Project lead and tutor



**A/Prof
Joanne Kemp**
Project lead and tutor



**Prof
Kay Crossley**
Project lead



**Dr Danilo de
Oliveira Silva**
Post doctoral
research fellow



**Dr Marcella
Ferraz Pazzinatto**
Post doctoral
research fellow



Dr Joshua Heerey
Post doctoral
research fellow



Dr Allison Ezzat
Post doctoral
research fellow



Karen Dundules
Project manager
and clinical liaison



Matt Francis
Research officer
and tutor

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WHAT IS GLA:D®?



All major international guidelines recommend patient 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 knee or hip 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 to train patient education and exercise prescriptions skills
- ✓ Group discussions about overcoming barriers to implementation

2) GLA:D® Australia intervention delivery

All registered participants receive a standardised but individualised (based on need and goals) 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

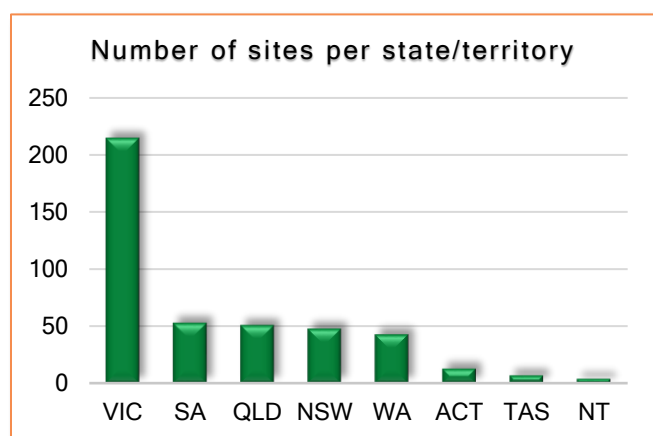
GLA:D® AUSTRALIA PHYSIOTHERAPISTS

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

The first GLA:D® Australia physiotherapist training course was delivered in March 2017, with **28** courses held around Australia since this time by December 2020.

1521 physiotherapists trained from all states and territories

437 sites implemented GLA:D® Australia between March 2017 and December 2020, including private (89%) and public (11%) settings. Their names are listed on the GLA:D® Australia website.

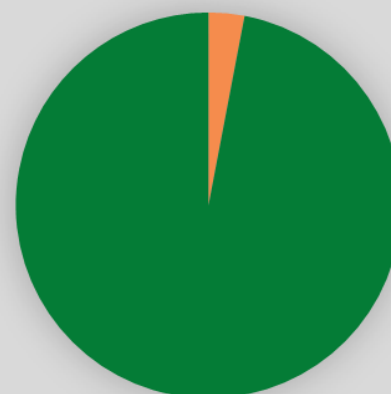


COVID-19 pandemic

The GLA:D® Australia team is based in Melbourne - Victoria, the most affected Australian state during the COVID-19 pandemic. Due to the pandemic in 2020, Melbourne faced more than 140 days of very restrictive lockdown measures. In order to keep pursuing our 2020 goals, and supply the demand of physiotherapists waiting list, we started offering online courses.

The GLA:D® Australia team delivered **4 online courses** in 2020, training **317 physiotherapists**. **97%** of physiotherapists attending were satisfied with the course.

Satisfaction



We also encouraged the clinics and physiotherapists to provide the GLA:D® program via telehealth to allow physical distancing. Currently, **82 clinical settings** are providing online delivery of the GLA:D® program.

GLA:D® AUSTRALIA PARTICIPANTS: WHO ARE THEY?



Number of participants

Between January 2018 and December 2020, **7641** participants had taken part in the GLA:D® program from all Australian states and territories.

Sex and age

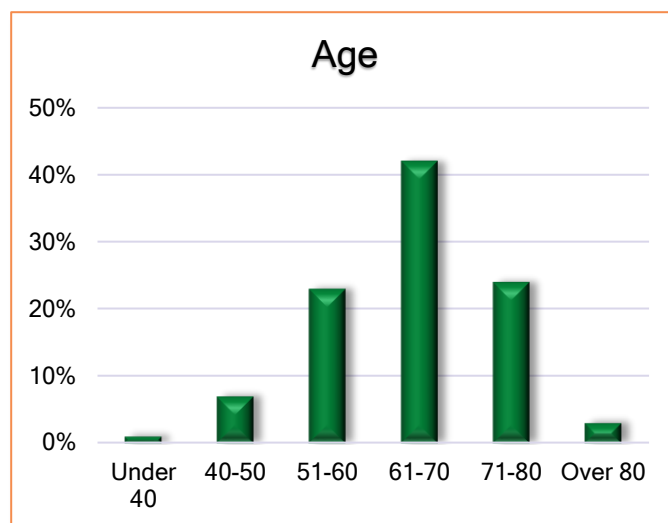
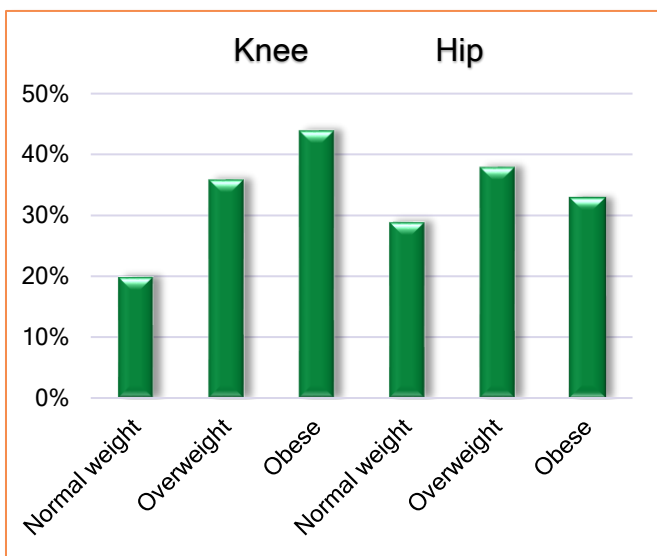
A total of **71%** of the GLA:D® participants were women. The average age for all participants was **65 years**, with the youngest being a 23 year-old man and the oldest being a 93 year-old woman. On average, the men were slightly older than the women.

Knee and Hip

81% of GLA:D® participants reported their knee as their primary problem joint and **19%** reported their hip as their primary problem joint.

Overweight

Knee participants had an average BMI of 30.1 and hip participants of 28.5. A total of **80%** of the knee participants and **71%** of the hip participants were overweight or obese.



Previous surgery

45% of the knee participants and **28%** of the hip participants had undergone previous surgery before they started the GLA:D® program.

Employment

50% of the participants are retired, 22% have full-time jobs, 18% have part-time jobs and 10% are unemployed or have home-duties.





GLA:D® AUSTRALIA PARTICIPANTS: WHAT HAPPENED?

Reduced Pain

After the GLA:D® program, the average knee/hip pain intensity decreased by **33%** (from 45 to 30 mm on VAS 0-100) for knee participants and **27%** (from 44 to 31 on VAS 0-100) for hip participants.

Reduced intake of painkillers

After the GLA:D® program, **49%** of the knee participants and **45%** of the hip participants reported that they are using **less or much less** medication, such as paracetamol, NSAID or opioids.

	KNEE	HIP
Pain 	- 33%	- 27%
Medication 	- 49%	- 45%
Walking speed 	+ 14%	+ 12%
Quality of life 	+ 29%	+ 20%

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 **27%** from 11 repetitions before GLA:D® to 14 repetitions after GLA:D® program.

After the GLA:D® program, the average walking speed increased by **14%** (from 1.54 m/sec to 1.74 m/sec) for knee participants and **12%** (from 1.54 m/sec to 1.73 m/sec) for hip participants.

Higher quality of life

After the GLA:D® program, average joint-related quality of life increased by **29%** for knee participants (KOOS QoL from 41.7 to 54.5) and **20%** for hip participants (HOOS QoL from 45.7 to 55.7).

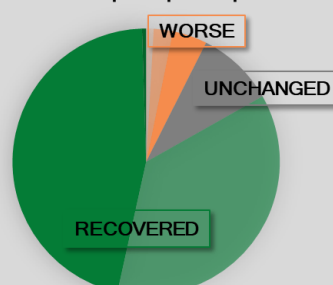
Compliance in GLA:D® Australia program

8 out of 10 patients attended at least 1 education session and 10 exercise-therapy sessions

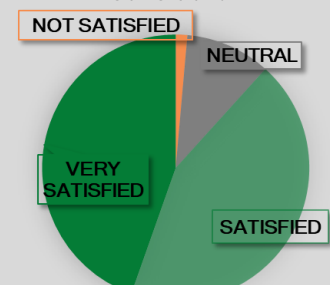
COVID-19 pandemic

In 2020, more than **200** participants had at least **1 online session** due to COVID-19 restrictions. **83%** of the participants who attended the GLA:D® program online considered themselves recovered, and **88%** were satisfied or very satisfied with the program.

Participant perception



Satisfaction



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 **31%** (from 45 to 29 mm on VAS 0-100) and the hip participants an average pain reduction of **30%** (from 44 to 29 on VAS 0-100) compared with before GLA:D® program.

Higher quality of life

One year after starting the GLA:D® program, participants reported a further improvement in average joint-related quality of life. Knee participants reported a **36%** improvement (KOOS QoL from 41.7 to 57.3) and hip participants a **30%** improvement (HOOS QoL from 45.7 to 59.6) compared with before GLA:D® program.

Reduced intake of painkillers

One year after starting the GLA:D® program, **50%** of the knee participants and **53%** of the hip participants reported that they are using **less or much less** medication, such as paracetamol, NSAID or opioids.







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 **8%** (UCLA physical activity scale from 54% to 62%) and the number of hip participants increased **6%** (UCLA physical activity scale from 54% to 60%).

Joint replacement surgery

26% of the knee participants desired surgery before commencing GLA:D®. **65%** of these participants had not received surgery and **no longer desired surgery** one year after starting the GLA:D® program. 25% of the hip participants desired surgery before commencing GLA:D. **67%** of these participants had not received surgery and **no longer desired surgery** one year after starting the GLA:D® program.

		KNEE	HIP
Pain		- 31%	- 30%
Medication		- 50%	- 53%
Quality of life		+ 36%	+ 30%
Physical activity participation		+ 8%	+ 6%

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.

To rule out competing causal factors, the analyses have been done excluding patients who have had joint replacement surgery during the follow-up period. Consequently, the most obvious competing causal factor has been taken into account. 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
2020: GLA:D® Austria

CONTACT DETAILS

Email:

GLAD.Australia@latrobe.edu.au

Address:

C/o La Trobe University
Plenty Road & Kingsbury Drive,
Melbourne VIC 3086



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UNIVERSITY

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Research Centre