



# Annual Report 2019

## GLA:D® Back



# GLA:D® Back Annual Report 2019

GLA:D® Back is a programme for patients with persistent or recurrent low back pain. GLA:D® Back is based on recommendations from national and international clinical guidelines and consists of an individually customized, detailed 10-week programme of tests, questionnaires, patient education, exercises and systematic data collection of results in a register.

GLA:D® Back was developed in 2018 at the University of Southern Denmark in collaboration **between** researchers, patients and clinicians. The work is led by an interdisciplinary group consisting of Alice Kongsted, Jan Hartvigsen, Inge Ris, Per Kjær and Line Thomassen.

The goal of GLA:D® Back is to help patients understand why their back hurts, how they can manage their pain and exercise their back. The guiding principle is “help to help yourself”.

## GLA:D® Back

**An evidence-based approach  
for people with persistent or  
recurrent back pain**

We have now trained 619 clinicians and over 2,800 patients have started a GLA:D® Back programme.

In this report you can read about GLA:D® Back, its implementation, the patients participating in GLA:D® Back, the first results, and about our research and international collaborations.



Line Thomassen,  
Research Assistant

Jan Hartvigsen  
Professor

Per Kjær,  
Professor

Alice Kongsted,  
Professor

Inge Ris, Assistant  
Professor

# What is GLA:D® Back?



## GLA:D® Back contains

1. Patient education focusing on knowledge and self-management of low back pain
2. Group exercises for patients with low back pain
3. Tests and registration of patient data



GLA:D® Back is designed for people with persistent or recurrent low back pain. Participation in GLA:D® Back is a joint decision between the patient and clinician.

### GLA:D® Back programme covers:

- 1) An **initial consultation** with questionnaires, goalsetting, clinical tests and assessment of initial exercise level.
- 2) 2 lessons of **patient education** before exercise classes including knowledge of the spine, risk factors, possible causes of pain, recommendations for self-management and how to use your back in everyday life.
- 3) 8 weeks, twice weekly with **group-based exercises** tailored individually; learning how to exercise and attain skills to exercise on their own.
- 4) A **final consultation** with evaluation of the defined goals and tests.

5) **Registration** of data by the patient and the clinician.

**Core messages** from the patient education are integrated and reinforced during exercise classes, which is unique to GLA:D® Back. Together with the clinician, patients can explore core messages and work with them during supervised exercises.

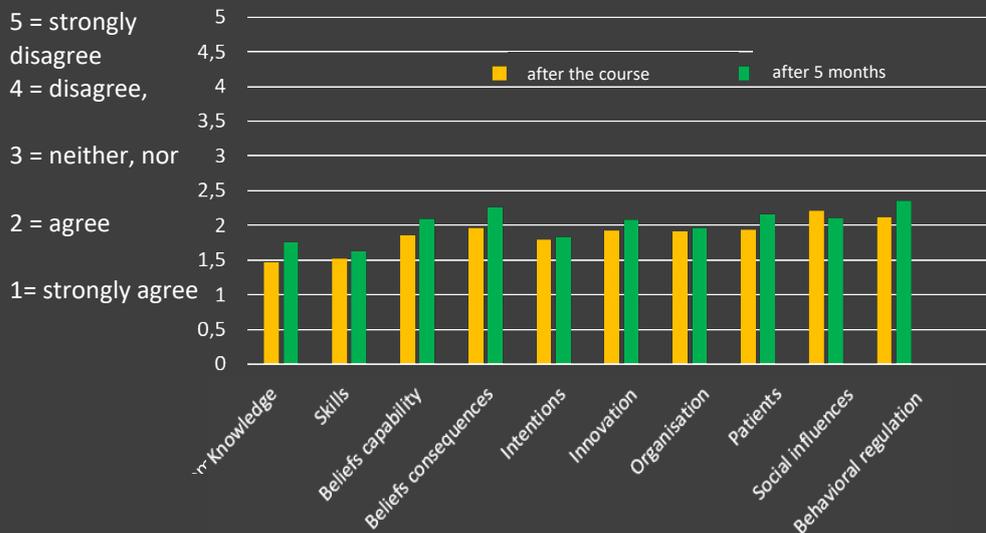
### Core messages in GLA:D® Back are:

- You can turn the pain up / down using your behavior and thoughts.
- Pain is an alarm, not an injury.
- Free movements attenuate pain.
- A "GLA:D-Back" has balance between resources and demands.
- Your back is strong, made for movement.
- A crooked back, "bad posture" is normal.
- Action comes before recovery.

**Applying knowledge from the patient education is integrated into exercises – that's why patients must have attended the patient education before starting the exercises.**

# Positive attitudes towards implementing GLA:D® Back

Responses (lower is better) on implementation questions right after the course (n = 514) and after 5 months (n = 327)



## Quotes from clinicians:

"GLA:D® Back is part of high-quality treatment and management of back patients."

"We were surprised that the theoretical part is not over after the first two times, but is also integrated during the exercises."

"Patients feel safer, more daring in trying out different activities"

**More than 600 clinicians**, of which 62 chiropractors, from all over Denmark have attended a GLA:D® Back course. There are 343 clinical units registered, of which 186 have enrolled patients in GLA:D® Back.

Immediately after the course, clinicians assessed the content of the course to have a **high degree of utility**.

Clinicians were positive about the implementation of GLA:D® Back (see figure). On average, they agreed / strongly agreed with statements on 10 different themes about implementation just after the course (yellow columns), and they remained positive after 5 months.

We interviewed 9 clinicians (quotes above) to identify what had an importance for implementation of GLA:D® Back:

Three **themes** were important for implementation:

1. *Practical factors*: e.g. time, planning, IT aspects, and competing training programmes at the clinic.
2. *Personal benefits*: e.g. finances, variation in working life, positive responses from patients.
3. *Buying in on the GLA:D® Back concept*: e.g. content matching clinicians' own perspectives, being an active part of research, getting new tools, offering evidence-based treatment

**Only certified clinicians are allowed to provide GLA:D® and use GLA:D® material, as GLA:D® is a registered trademark from the University of Southern Denmark.**

# Who participates in GLA:D® Back?



GLA:D® Back participants are typically patients with persistent back pain who continue to have significant problems after an initial course of treatment. 59% had had back pain for more than 1 year, 70% had received other treatment for their current back problem for more than 4 weeks prior entering GLA:D® Back.

2804 patients from 180 clinics:

<b>Sex</b>	70% women
<b>Age</b>	17 – 88 yr., average 58
<b>Duration of pain</b>	22% >3 months, 59% >1 yr.
<b>Back pain 0-10</b>	Average 5,4
<b>Function 0-100</b>	Average 25,4 Oswestry Disability Index (moderate disability)
<b>Medicine</b>	27% over the counter, 31% prescription
<b>Sick leave</b>	38% back related sick leave previous month; average 16 days
<b>Education</b>	42% medium/higher, 43% lower education
<b>Work</b>	48% working, 31% retired, 10% rehabilitation, early retirement

What did patients say after GLA:D® Back:

*“And that we started with some theory, I think that was good, also. That we all, together, learned something about what it means to have back pain and that we were shown what the spine is like.”*

*“I got a good toolbox with me that I now can use myself, without anyone having to tell me more about it.”*

*“I move and I have workouts again as part of my everyday life. That really means a lot, also just for one's self-esteem in some way, that you know you can do it, even if you have a little back pain.”*

**The most common GLA:D® Back Patient is a 58-year-old woman, working, with moderate disability, back pain of 5.4 out of 10, and takes medication for her back pain.**

# Results of GLA:D® Back

## - individual goals, tests & satisfaction



It varies greatly what patients would like to achieve with GLA:D® Back:

*"Would like to sleep without the use of painkillers"*

*"Manage a walk in the Zoo with my grandson"*

*"Play badminton for ½ hour"*

*"Would like to sit on a horse in trot for 5 minutes"*

Patients define their **personal goals** assisted by their GLA:D® Back clinician before entering the programme. After completing the programme, they indicate the degree to which the goal has been reached from 0 = not at all to 10 = fully achieved.

The goals that patients defined together with their clinician were largely fulfilled, thus patients scored in average 6.7 out of 10 on reaching their goals.

Also, 78% of patients were either "a lot" or "very" satisfied with GLA:D® Back.

Progresses in physical function were, among other things, indicated by improvement of the patients' physical tests:

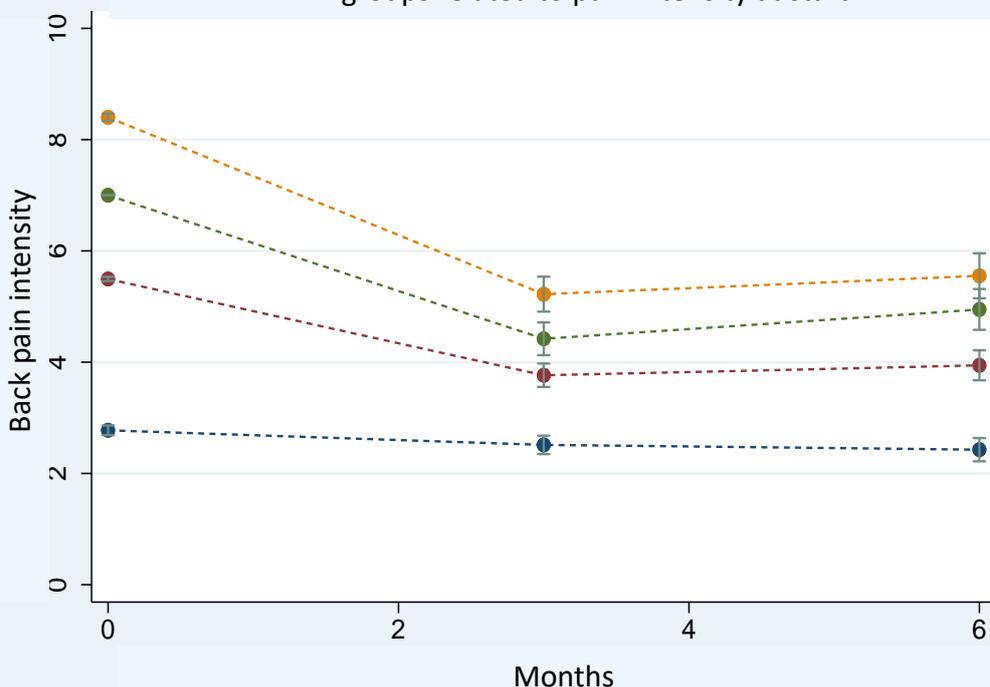
Test	Before	After	Change
sit-to-stand: repetitions/30 sec.	12	15	+ 25%
endurance abdominal muscles	56 sec.	84 sec.	+ 50%
endurance back extensors	90 sec.	128 sec.	+ 42%

Among patients who indicated a low **physical activity** level at baseline (levels 1-4 out of 10), physical activity was increased to at least level 5 for 50% after 3 months and 53% after 6 months.

After 3 months, patients had come far in achieving their personal goals for the programme, they improved on physical tests, and nearly 8 out of 10 were very satisfied with GLA:D Back®.

# Results of GLA:D<sup>®</sup> Back – pain and function

Back pain intensity at baseline and after 3 and 6 months. Divided in groups related to pain intensity at start



*"I haven't done heavy strength training for a long time. But that is something I feel I can do again, at least after this. Also having in mind the lessons we had at the beginning, in which they explained that we should not be afraid of experiencing pain when we exercise, as long as you just listen to the body." (male, 27 years)*

**Collection of data:** patients' results from the GLA:D<sup>®</sup> Back programme is monitored in a clinical register. Clinicians enter data at start and end of the programme, and patients complete questionnaires at start, after 3, 6 and 12 months.

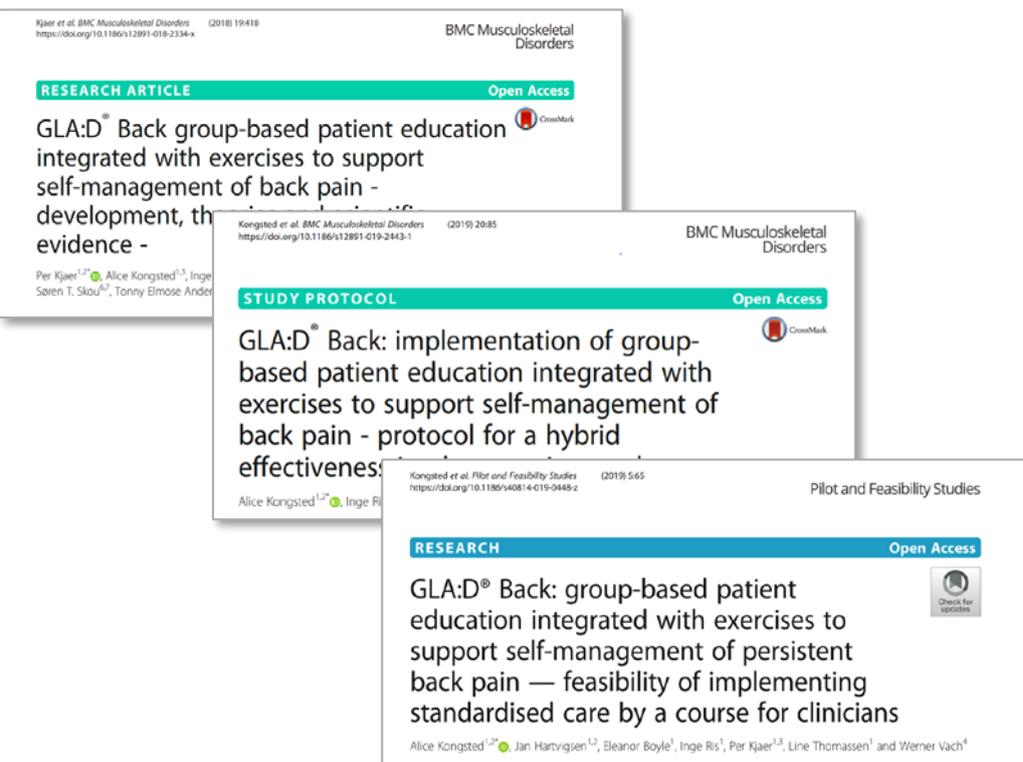
80% of patients attended the exercise sessions at least 10 out of 16 times, and 75% participated in both patient education sessions.

The majority of those participating GLA:D<sup>®</sup> Back had had back pain for more than 1 year, and all had received other treatment prior to GLA:D<sup>®</sup> Back. Still, they improved further on pain and function and some stopped taking pain medication.

- 37% of the patients had stopped taking **pain medication** after 3 months, while 10% who did not use medication at baseline had started.
- On average, **pain intensity** improved by 1.7 points after 3 months, corresponding to a moderate to large effect size (Effect Size = 0.7). Those 75% of patients with pain > 5 at baseline improved on average 2.3 points.
- The mean **change in disability** measured by the Oswestry Disability Scale was 6.3 points after 3 months, which is a small to moderate effect (Effect Size = 0.4).

**In general, positive effects on pain are obtained despite of pain being persistent, and the patient having received other treatment. There is also small to moderate effect on function.**

# GLA:D® Back® activities 2019



All articles as well as a brief explanatory podcast in Danish and English for each are available at:

<https://gladryg.sdu.dk>

## In 2019, in Denmark we have:

- Written 2 large applications for research funding
- Made new websites for GLA:D® Back and GLA:D® Denmark: <https://gladryg.sdu.dk> and [www.gladdanmark.dk](http://www.gladdanmark.dk)
- Distributed 2 newsletters and 1 annual report
- Got 2 safety reports ratified
- Contributed to establishing GLA:D® International Network website, GIN: <https://gladinternational.org>
- Established collaboration with local municipalities and national regions
- Conducted 3 GLA:D® Back courses
- Established GLA:D® Denmark so that GLA:D® for knee / hip and back now are covered by the same umbrella organisation

## Internationally we have:

Published the articles shown above

In *Canada* we have completed the GLA:D® Back Pilot. We are working with researchers at the University of Alberta and GLA:D® Canada towards funding for more research.

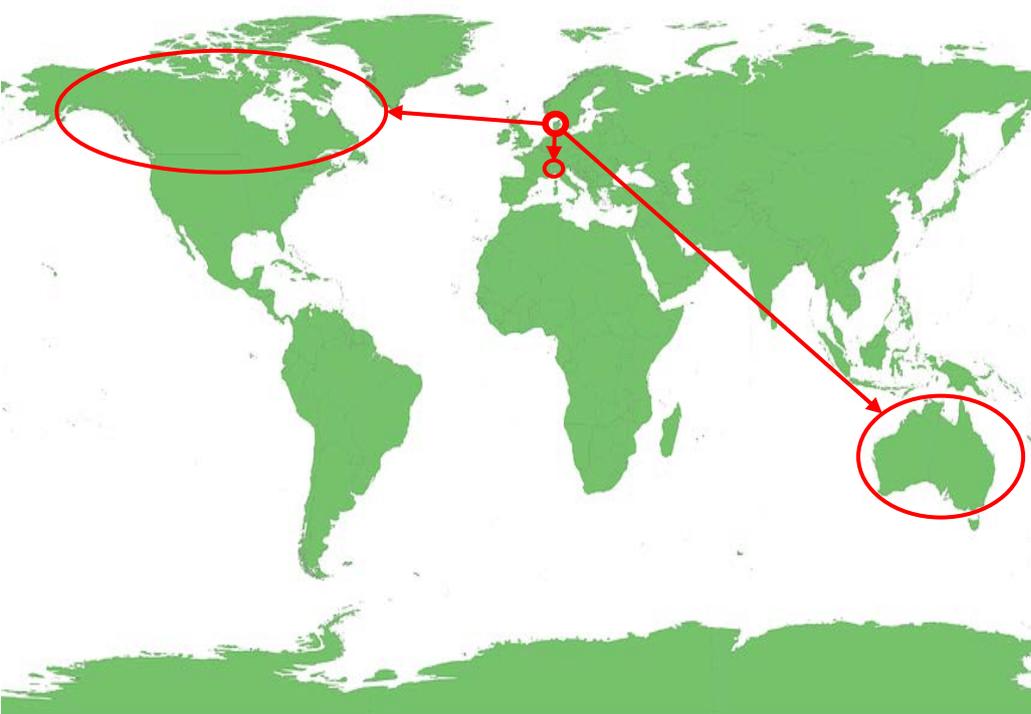
In *Australia* we have started a pilot project and held the first course at Macquarie University in Sydney.

Finally we have **presented** GLA:D® Back at:

- WCPT Congress 2019
- World Congress on Low Back and Pelvic Pain
- International Forum on Back and Neck Pain Research in Primary Care
- OARSI World Congress
- World Federation of Chiropractic

**In 2019, in addition to 3 courses in Denmark, we have presented GLA:D® Back in 5 different countries, either as courses or as presentations at a congress.**

# GLA:D Back<sup>®</sup> 2020



## Contact

Information:

<https://gladryg.sdu.dk>

E-mail:

[gladryg@sdu.dk](mailto:gladryg@sdu.dk)

## Research projects

Ongoing studies on the implementation of GLA:D<sup>®</sup> Back, development of a fidelity checklist for the clinics (quantitative and qualitative studies). Furthermore, continue to write applications for research funding.

**In Denmark:** Conducting at least 2 courses and updating of patient education material.

**International:** Implementation of GLAD<sup>®</sup> Back in Switzerland, including collaboration in a research programme.

**Communication-strategy:** Targeted communication towards clinicians, the public and generally on media platforms.

## Data for this annual report

Data presented in the annual report are based on the GLA:D<sup>®</sup> Back register from 11<sup>th</sup> April 2018 to 18<sup>th</sup> December 2019. In total, 82% of patients who have been on their first consultation with their clinician completed the questionnaire before entering. After 3, 6 and 12 months the response rates were 73%, 60% and 54% respectively. The clinicians filled out follow-up data after GLA:D<sup>®</sup> Back in 76% of patients.

The analyses in the annual report are descriptive and the results should be interpreted with caution.

**In 2020, focus will be on research activities in Denmark, international collaboration, dissemination of results and continuous development of GLA:D<sup>®</sup> Back.**

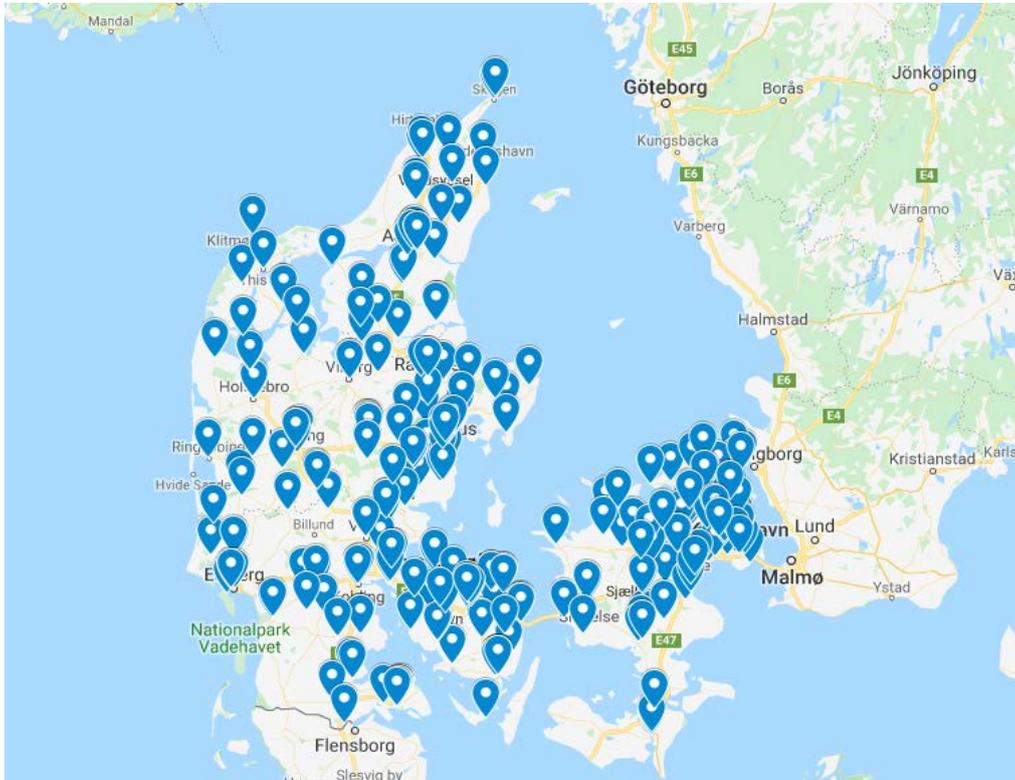


Figure text: Clinics with certified GLA:D® Back clinicians



<https://gladryg.sdu.dk>

[www.gladdanmark.dk](http://www.gladdanmark.dk)

<https://gladinternational.org>



## Annual Report GLA:D® Back 2019

Published by GLA:D® Back team: Inge Ris, Alice Kongsted, Jan Hartvigsen, Per Kjær, Line Thomassen

University of Southern Denmark, Odense, February 2020

Contact: [gladryg@sdu.dk](mailto:gladryg@sdu.dk)