

Foundation for History of Physiotherapy

Physiotherapy in perspective, 50 years past - present.

Zander Institutes in the Netherlands, the latest craze in 1900!

Text: Huub Vossen PT, MMT, Dr. Anthony de Wijer.



STICHTING GESCHIEDENIS FYSIOTHERAPIE
www.sgfinfo.nl

Introduction

The word Zanderinstituut is derived from the Swedish physician Dr. J. Zander (1835-1920), who was the designer of the 'medico

mechanical Zander Institute'. 1,2 This institutes can be regarded as the forerunner of today's medical fitness center. 2



Zander Institute from Stockholm in 1900

Around 1900, these institutes blew over from Sweden to the Netherlands and became this healing gymnastic exercise method a craze in the big cities in the Netherlands. 1 The Zander Institute was once a unmistakable understanding for the doctors as well as for the remedial gymnasts who

were connected. 1 Because the word 'Sanding' is an unknown concept for most physiotherapists and doctors nowadays, which is not surprising after a span of 100 years, we would like to bring the forerunner of current medical fitness to the attention.1-5

The Foundation for History of Physiotherapy (SGF) has interesting documentation about this 'medical mechanics method', described by Dr. Thom Terlouw and presented in

2014, on the 25th anniversary of the SGF, by mr. Aad Graafland.^{1,2}

We would also like to point out an interesting video from the Boerhaave Museum. See [VIDEO Zander Institute](#)

Origin Zander Institutes

Gustav Zander taught medical gymnastics according to the method of the world famous gymnast P. Ling (1776-1839).¹

The concept behind this was derived from the then healing gymnastics in which movement, both actively and passively, became an increasingly prominent place.

began to get into medicine.¹ He elaborated on Ling's method, which consisted of active movement/practice, passive movement/practice and also repetitive movement against resistance (concentric and eccentric). Zander capitalized on this latter technique (moving against resistance).¹



Dr. Gustav Zander, Swedish doctor and world famous founder of the 'Zanderinstituten' or now medical fitness.



Pehr Ling (1776-1839), Swedish poet, writer and world famous founder of Swedish gymnastics.

He thought that manual movement against resistance was too strenuous for the remedial gymnast to do this for a long time to be able to keep up. That's how he developed the 'medico-gymnastic devices' that took shape in the Zander Institutes in consultation with an engineer.¹ According to him

it was impossible for the remedial gymnast to be able to dose properly when tired with resistance during exercise, which was a requirement to be able to properly perform Ling's method. That is why it was necessary to have medical equipment that could replace the therapist.¹ The basics

this was used for exercise equipment, but it didn't stop there. Measuring equipment was also developed and all kinds of other beautiful devices to measure, for example.



Spine redressing equipment (photos collection SGF)

to redress the spine. He found the measuring equipment necessary to be able to accurately determine the progress or decline.¹



Distribution of pikeperch institutes

In order to understand the spread in the Netherlands of such a new exercise method, you first need to know something about the zeitgeist of remedial gymnastics.

The remedial gymnasts in the Netherlands at the time were thinking about a University education. ¹ they were around 1900 very concerned with the recognition of their profession. They were also involved in a domain discussion with the doctors about the recognition of their field.

¹ That says something about the situation of remedial gymnasts on the one hand and their ambition on the other. Possibly played these two factors play a role in adopting this new method from Sweden to fetch. The doctors in the Netherlands were also interested in the 'medical'

mechanic therapy' from Sweden. In collaboration with the doctors (instead of competing over the domain), the remedial gymnasts set to work to get these institutes off the ground in the Netherlands.

Another catalyst, for the rapid spread of the Zander Institutes around the world at the end of the 19th century, was an exhibition in Philadelphia and Paris.¹

Groningen had the scoop in the Netherlands where the 'medico-mechanical method' was applied. These institutes soon spread over the major cities in the Netherlands, including Amsterdam, Rotterdam, Haarlem, Utrecht, Arnhem, Nijmegen, etc.

¹



Haarlem, Kleine Houtweg 31. Interior of the Haarlem Medico-Mechanical Zander Institute

(Image collection of the Municipality of Haarlem in 1905).



Zander Institute in the year 1900 in Utrecht



"Zander Institute" in 2020 in Utrecht.

Now privately occupied by physiotherapist.

Downfall Zanderinstituten

In addition to orthopedic

equipment, Zander developed more and more devices that could also act on the human body, such as equipment for tapping, vibrations, stroking and rubbing movements, etc.¹ All this to replace the practicing remedial gymnast/masseur. That did not go down well with the doctors. er

There was already criticism from the medical world that devices could not replace people. And this latest development (massage replaced by equipment) became the target of ridicule,

even by the doctors. ¹

Another important development that made the equipment disappear from the public eye was the emergence of surgery, which allowed conservative treatment in orthopedics, such as mechanotherapy, to

was repressed.¹

A third countercurrent was the interest in a lake

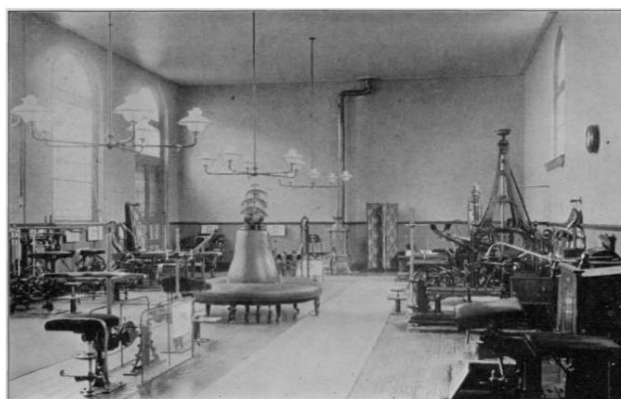
function-oriented approach in

orthopedics, which was gaining ground.

The orthopedic surgeons at the time expected more results (particularly in the field of employability with work) with the function-oriented approach and less on a pathology-oriented approach such as with the 'medical mechanics method'. ¹

Yet another opposition was the increasing appearance of 'advertising brochures' about these institutes, while advertising was not common in that time. This may have been a consequence of the fact that more and more institutes ran into problems due to the high operating costs. The purchase of the equipment turned out to be very expensive namely. ^{1,3} For example, the Haarlems Dagblad reports that the Zander Institute in Haarlem disappeared in 1919 because it proved to be unprofitable, even though good results were achieved and hospital admissions were shortened due to the successful treatments.⁵

On the other hand, we can read in the prospectus that the Zander Institutes were hospitable and sociable.³ For example, they offered their patients a 'free pension' when following an exercise course and the institutes claimed that they could treat more people at the same time with this equipment, and therefore able to provide cheaper care.³ The latter was increasingly opposed by many remedial gymnasts



ironing hair. How recognizable is this market mechanism in this day and age? All in all it became quiet after a few decades around the flamboyant Zander method in the Netherlands and we actually see no further development of this method into another concept. In the late 1990s, fitness centers rose from the ground with modernized exercise equipment using the same mechanical approach.



Old and new.....Zanderinstituut on the left versus medical fitness room now in Heliomare Rehabilitation Center on the right.

What can we learn from it?

If we compare the Zander Institutes with this time, we see a remarkable resemblance with the emergence of fitness equipment in physiotherapy (farewell speech Prof. Rob Oostendorp 2004).² It must first be said that the Zander Institutes

looked beautiful with ample seating options to rest from practicing with a lot of space around the devices absolutely 'corona-proof'.

But can today's fitness centers replace physiotherapy? According to Prof. dr. R. de Bie, professor of physiotherapy, not. An example: the fitness equipment on display at the 'physio stands' of the KNGF Congress in 2012 in Maastricht, had according to Prof. de Bie nothing with it field of physiotherapy, partly because the exhibited

equipment in Maastricht had not developed a good rationale, according to de Bie. What do we want with this in physiotherapy? Are we going to replace practicing with training on equipment? The Zander Institutes thought they could do the same and in 1900 were criticized by doctors and colleagues. What have we learned from that? Who knows its history....

There were of course also very positive sides to the Zander devices, such as the Zander measuring equipment that could determine progress and decline. measure that has certainly been a forerunner of current evidence-based thinking and working in physiotherapy. That remedial gymnasts in 1990 progress in muscle strength with using a measuring instrument were determined by the doctors



Old versus new... Any random cross-trainer from a current fitness center in 2020 would be comparable to the Zander cross-trainer from 1900.

appreciated. In 2020, the use of measuring instruments must still be given priority in physiotherapy training. Otherwise we run the risk of falling into alleged quackery (not being able to objectify it) and going back 100 years in time.

The field of physiotherapy can benefit from it if it takes the knowledge from history into account in new developments. Sets

exercise equipment (fitness) not as a replacement but as a supplement to paramedical action. Also add a

measurement application to the fitness equipment to evaluate improvement (or just use that option).

Then we have really learned something from the past, in this case from the disappeared Zander Institutes.

In the September and October issue of FysioPraxis we discuss the collection Foundation exercise equipment History Physiotherapy in a triptych where we will discuss a number of devices from our own collection. We now know that behind all those exercise machines there is a story.

References

1. Terlouw TJA The rise and fall of the Zander Institutes in the Netherlands around 1900 Gewina 27 (2004) 135-158
2. Graafland A. Powerpoint. 25th anniversary SGF, Urk, 1989-2014.
3. Physical therapy. Zanderinstituut Rotterdam, van Vollenhovenstraat 21. Prospectus
4. Daniels. Arnhem Medico-Mechanical-Zander Institute. Ned. timetable V Medicine. News.18-2-1900.
5. "Sanding". A young department of the St Elisabeth Hospital. Haarlem Dagblad, October 10, 1922.

Sources

- History of Physiotherapy Foundation (SGF). • Wim Schoemans, MSc, MA. Physiotherapist, philosopher. SGF, 2020.
- Boerhave Museum Leiden. Video Zander Institute.
- Image collection Municipality of Haarlem.

The History of Physiotherapy Foundation (SGF) has an ANBI status and is completely dependent on support. You can support us as a sponsor (€ 25 p/y) or as a patron (€ 100 p/y).

Info SGF: website: <http://www.sgfinfo.nl/>

