

# Peter Hess® Sound Massage for those suffering from Parkinson's Disease

## A report on experiences from Rio de Janeiro

by Regina Santos and Ursula Dannemann



*Photos: PHA Brasilien*

For the past year, Peter Hess® Academy (PHA) Brazil has offered sound massage at **Associação Parkinson Carioca/ APC** (= Parkinson's Association Carioca; Cariocas is the name for residents of Rio de Janeiro).

### **APC<sup>1</sup>**

APC is an association for individuals with Parkinson's disease and has approx. 90 patients. The organization aims to provide physiotherapeutic treatment, support recreational activities, and develop self-help groups with patients,

relatives and caregivers. Furthermore, APC's mission is to engage in public relations, provide information on the rights of people with Parkinson's and to get involved with legislative matters and government agencies.

The Association occupies rooms of a former public hospital located in a working quarter of the northern zone of Rio de Janeiro. The space is spartan, funding through membership fees sparse and irregular. All activities are voluntary and free of charge. Core responsibility of the APC is group therapy with functional neurophysiotherapy, led by former



physiotherapists and practitioners. Additionally, individual occupational therapy and speech therapy sessions as well as dance and art groups are provided. Peter Hess® sound massage was added in June 2017 and was well received as integrative and complementary therapy. This year, APC celebrates its 10-year anniversary. Since its founding, it has become a meeting place and place for reciprocal assistance for patients, families, and caregivers. Despite its humble furnishings, there is an atmosphere of enthusiasm and friendship.



## Parkinson's Disease

Parkinson's disease<sup>2</sup> (also known as idiopathic Parkinson's syndrome) is a slowly progressive neurodegenerative disease of the central nervous system characterized by destruction of neurons that produce the messenger substance, dopamine. Areas of the brain with dopamine-containing nerve cells control voluntary and involuntary movements. Typical symptoms of the disease, already described in 1817 by James Parkinson, include: tremors, both postural and rest tremors, muscle stiffness (rigor), balance disorders, slowing of movements (bradykinesia) or excessive movements (dyskinesias). Other symptoms include lack of facial expressions, speech problems (dysarthria), problems swallowing (dysphagia), and shuffling gait. As the disease progresses, cognitive deficits may arise, especially in executive functions and attention. Non-motor symptoms include reduced sense of smell, GI tract and sleep disorders, anxiety, and depression.

In Brazil, Parkinson's is not a disease that must be reported. Per the Brazilian health department, it is estimated that 0.3% of the total population is affected by Parkinson's disease. Based on a local study however, the percentage of the population age 64 or higher affected by the disease is 3.3%, = thus more than 600,000 people<sup>2</sup>. In Germany, it is estimated that 200,000 people are affected by Parkinson's disease<sup>3</sup>.

Although there is no cure for the disease, most symptoms can be managed, and treatment can help many of those affected to live active and independent lives. But Parkinson's patients have to adhere to a strict and punctual medication schedule since effects of the complex and personalized dopamine therapy determine the so-called on/off phases. The patient truly is turned on or off, depending on the effect of the medication.

There is consensus among international treatment guidelines that in addition to medication therapy, patients should

also receive physiotherapy, occupational therapy, and speech therapy. First and foremost, not only the body must be supported, but also mind and spirit. Parkinson's patients often show a tendency towards isolation and depression. It is therefore important to maintain a social life and activities that bring joy and a sense of belonging.

## Peter Hess® Sound Massage

Three sound massage practitioners<sup>4</sup> of PHA Brazil are active at APC. We were very well received and today, participate on both the management and treatment teams. We provide sound massage for a half day every week; each sound massage practitioner can have up to three patients. We know there is a lot of demand not only on the part of the patients, but also their relatives. If we were to offer sound massage every day, our schedule would certainly be consistently full. We limit our sessions to basic sound massage with the goal of supporting the overall treatment process with sound. With great care and sensitivity on our part, we try to give our clients a time of comfort and rest during which they feel cared for and welcome, can express their feelings, and during which our purpose is to listen to them. The result is resonance between sound massage practitioner, client, and singing bowls – in accordance with the principles of Peter Hess® sound method (compare p. 18), whereby especially awareness, appreciation, and holism are important. Our primary goal is to establish a relationship of trust by providing our clients with relaxation and moments of inner peace, quiet, and harmony for mind, body, and spirit through the sound and vibrations of the singing bowls. And the following consistently applies: "Less is more!"

We observe that a sound message can reach way beyond the relaxation effect. Many times, tremors decrease during a session, often this effect lasts for several hours. Clients often enter our therapy room with a cumbersome gait, their

back aches, and they are barely able to bend over and remove their shoes. After the sound massage, these movements are easier, their gait is more harmonious, and their posture more steady. Back pain subsides. At the beginning of a session, their voices are often so quiet they are barely audible. After a session, many patients speak more loudly and more clearly with better articulation.

Initially, we provided sound massage without systematically documenting results. We announced our availability and those interested scheduled a session. In 2018, however, we decided to conduct a research project to systematically record the effects of sound massages.



## Research Project and Feedback from Participants

The decision for the research project is part of PHA Brazil's ongoing effort to have sound massage recognized as a complementary and integrative method in the public healthcare system.

The goal of the study (see p. 7/8) was to examine the effect of a Peter Hess® sound massage on Parkinson's patients in the areas of anxiety, stress, and ability to perform activities of daily life (ADLs). During the study, 9 patients received one 45-minute sound massage for a period of 10 weeks. The study was supervised by Dr. Wilma Costa Souza and the data evaluated by her.

Results of the study show that sound massages had positive effects on Parkinson's patients, even if they are small. For us, the direct feedback from study participants was important and confirmed the value of our work.

Gender	Age	Profession*	Diagnosis since	Hoehn-Yahr Scale
1 F	72	Journalist and poet	2 years	1,5 · One-sided symptoms and involvement of body axis
2 F	60	Teacher	12 years	3,5 · Moderate to severe disability
3 M	59	Teacher	2 years	1 · One-sided symptoms
4 M	63	Department head	5 years	3 · Mild to moderate bilateral symptoms – mild postural instability, but patient still physically independent
5 M	64	Shipyard worker	7 years	2 · Mild bilateral symptoms
6 F	74	Teacher	10 years	4 · Severe disability – but patient still able to walk and stand without assistance
7 M	59	Driver	16 years	3,5 · Moderate to severe disability
8 F	53	Nursery Assistant	9 years	3 · Mild to moderate bilateral symptoms
9 F	63	Banker	7 years	3,5 · Moderate to severe disability

*\*All participants are retired based on work disability or age and collect a pension.*

Table 1: Overview of study participants





Regina Santos (far left) and participants of the research project to determine effects of sound massage on Parkinson's patients with regard to anxiety, stress, and ADLs.

### Feedback by Study Participants

A.M. – age: 72, poet, journalist, and retired attorney was diagnosed with Parkinson's disease approx. 2 years ago. She has no visible symptoms; her primary symptoms are anxiety, stress, and sleep disorder. A vague expression can be observed on her face. She states: *"The sound massage is very relaxing; I no longer need any anti-anxiety pills, and I used to take two per day. I feel very well and am more relaxed. When I first came to the APC, I was very tense and depressed; my self-esteem was low, I fell often. Now, I feel better in all aspects. I am more focused and believe that the sound massage relaxes me and contributes to the results of my treatment. My handwriting was small and is now normal. Parkinson's changed my life, at first, I got depressed, and this did not change until I came to a presentation by APC. I started to accept the problem. I can feel that physiotherapy and dance help me manage my physical limitations due to muscle stiffness."*

A.S.C. – age 60, retired English teacher, has daily episodes of freezing during which she is completely tense. She was diagnosed with Parkinson's 12 years ago and has been visiting the APC for 3 years. She reports that she initially felt as though she "was trapped in a sac". She is generally a happy and social person who was always the first to start dancing at social gatherings. (It is remarkable how Parkinson' pati-

ents who have severe difficulty walking can dance freely to the music as soon as they hear a rhythmic beat). In the first sessions, she was very slow and tense. Her primary symptoms include severe anxiety, abdominal pain, and digestive issues. Gradually, she arrived at the sound sessions more relaxed and with a steadier gait. With this client, the sound massage proceeded almost exclusively away from her problem areas in the aura, i.e. sphere of the body. She states: *"Sound massage relaxes and calms me."*

M.A.S. – age 64, retired shipyard worker. He has an intense tremor of the right hand and sleep disorders. Regarding sound massage, he says: *"When I enter this room, I feel very cared for. In the mornings, I am happy when I know I have a sound massage scheduled that day. With a sound massage, I feel light, as though I am floating. I can sleep better and no longer have nightmares."*

M.I. – age 74, retired teacher. She was diagnosed with Parkinson's disease 10 years ago after the death of her husband. She has an almost imperceptible tremor of the left hand and suffers from severe backpain and balance disorders. Sound massage has reportedly helped her reduce severe episodes of anxiety with gnashing of teeth. She enjoys sound massage as it helps her feel more calm and relaxed: *"I can feel that something is changing for the better, even if it is*





*„I can  
feel, that  
something  
is changing  
for the  
better ...“*

*just for one day. This gives me hope that this improvement can be continued. Conflict situations in the family have always had a profound effect on me; I went into a deplorable state, but I have noticed that I have now become more calm. I close my eyes and don't let it get to me so much."*

S.S. – age 63, retired banker. She developed Parkinson's disease approx. 7 years ago after retiring. Every morning, she suffers from episodes of freezing and feels stiffness in the left side of her body. Cramps, anxiety, and sleeplessness are among her severe symptoms. She states: *"Sound massage helps reduce my pain and relax my muscles. I sleep better, don't wake up at night as often to go to the bathroom, cramps are less frequent. I still cannot accept the disease, I am fighting against it. I try to get used to it, but I am still not quite there yet."*

R.S.P. – age 59, has been living with Parkinson's for 16 years. He suffers from involuntary excessive movements (hyperkinesia) as a result of the progressive disease. During sound massage, his movements gradually subside, and he lies still. He describes his experiences during a sound massage as follows: *"I feel a deep peace; usually, I fall asleep. Sound massage also helps me in everyday situations, I feel more relaxed. It is easier for me to accept the disease. Parkinson's is a horrible disease."*

K.K. – age 62, has been suffering from Parkinson's for 5 years. He has tremors on both sides of his body, he walks bent over and shuffles his feet. Additionally, he suffers from severe stress; nonetheless, he lives his life with independence and a sense of purpose. He says: *"I have come to realize that Parkinson's is a way of life. I discovered that I can help other Parkinson's patients. At first, I argued with God, but I learned how to manage the disease. Parkinson's opened doors that were closed. Today, I feel that I am a better person, first comes love, then reasoning. Sound massage provides me more relaxation than other therapies. I feel a greater sense of calm to address problems. I feel approx. 50% more calm. My relationship with my wife has improved. I have a better disposition, I feel that I don't have to hide the disease."*

Photo: Anna Avramidou



## Concluding Thoughts

Even though physical changes brought about by sound massage are not long-lasting due to the progressive nature of the degenerative disease, sound sessions provide valuable moments for our clients and ourselves. Having the opportunity to give these patients such a sense of wellbeing is invaluable!

To realize that our clients feel better, that their suffering is alleviated, that their self-image and self-confidence is strengthened, that they can interact more openly and easily with their surroundings and their families provides us great joy.

All nine participants reported feeling more relaxed to meet everyday challenges and recognize that they are more balanced and focused in conflict situations. These emotional, rational, and spiritual changes surely give them the strength to carry on, to deal more effectively with the challenges of the disease every day, to accept their limits, and to understand that Parkinson's syndrome can be viewed as an ally and not an enemy.

For our team, it is a wonderful opportunity to make sound massage accessible to Parkinson's sufferers and to recognize that we can improve their lives a little.



<sup>1</sup> [www.parkinsoncarioca.com.br](http://www.parkinsoncarioca.com.br)

<sup>2</sup> [www.einstein.br/doencas-sintomas/parkinson](http://www.einstein.br/doencas-sintomas/parkinson)

<sup>3</sup> [www.dgn.org/images/red\\_pressemitteilungen/](http://www.dgn.org/images/red_pressemitteilungen/)

<sup>4</sup> Regina Santos, Ursula Dannemann und Leila Rosimer



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# Effect of Peter Hess® Sound Massage (PHSM) on anxiety, stress, and ADLs of patients living with Parkinson's disease

by Dr. Wilma Costa Souza  
(translated by Ursula Dannemann)

The goal of study was to examine the effect of PHSM on patients suffering from Parkinson's disease (idiopathic Parkinson's syndrome) in terms of improvement in performance of ADLs as well as self-perception of stress and anxiety.

## Methodology

This is a Brazilian study conducted by the Peter Hess® Academy Brazil on Parkinson's patients treated at the Associação Parkinson Carioca (Parkinson's Association Carioca (APC)) (compare p. 68 ff.). Patients were treated in a separate room by one of three sound massage practitioners specializing in PHSM. Sound massages were scheduled once per week in the period of April to July 2018. Participants received a total of 10 sessions, each 45 minutes in duration.

Evaluations were carried out before and after treatment sessions using the following tools: Barthel Index<sup>1</sup> (BI), Perceived Stress Scale<sup>2</sup> (PSS), and Beck Anxiety Inventory<sup>3</sup> (BAI). First, the Barthel Index (BI) was applied. The index uses an ordinal scale to measure performance in activities of daily life (ADLs). These include personal hygiene, ambulation and mobility, and toileting.

The maximum number of points is 100, which indicates independence in ADLs.

Subsequently, the Cohen Perceived Stress Scale (PSS) was used. This scale represents 14 elements with answers ranging from 0 (never) to 4 (always). PSS is a question-

naire that aims to assess to which extent situations in the patient's life are deemed stressful. Maximum points are between 0 and 56, and answers were to refer to the prior month.

Lastly, stress level was measured using the Beck Anxiety Inventory (BAI). It consists of 21 questions that indicate how the patient felt in the last week. Both cognitive and physical aspects of anxiety are questioned. Answers range from 0 (not at all) to 3 (severely, it bothered me a lot); maximum score is 63 points.

## Results and Reflections

The study included nine patients: four men and five women. Age ranged from 52 to 74 years, average age:  $63.67 \pm 6.65$  years. The number of years patients had suffered from the disease ranged from 2 to 16 years; average duration:  $7.7 \pm 4.5$  years. All participants were between stage 1 (one-sided symptoms) and stage 3 (mild to moderate bilateral symptoms) on the Hoehn-Yahr Scale<sup>4</sup> (compare p. 70). Data was analyzed using paired sample t-test; a significance level of  $p \leq 0.05$  was assumed. There was only one significant difference in the total score of the before and after BI ( $p = 0.02$ ), which shows improvement in the performance of ADLs.

The before and after evaluations of PSS and BAI are represented in figure 1.

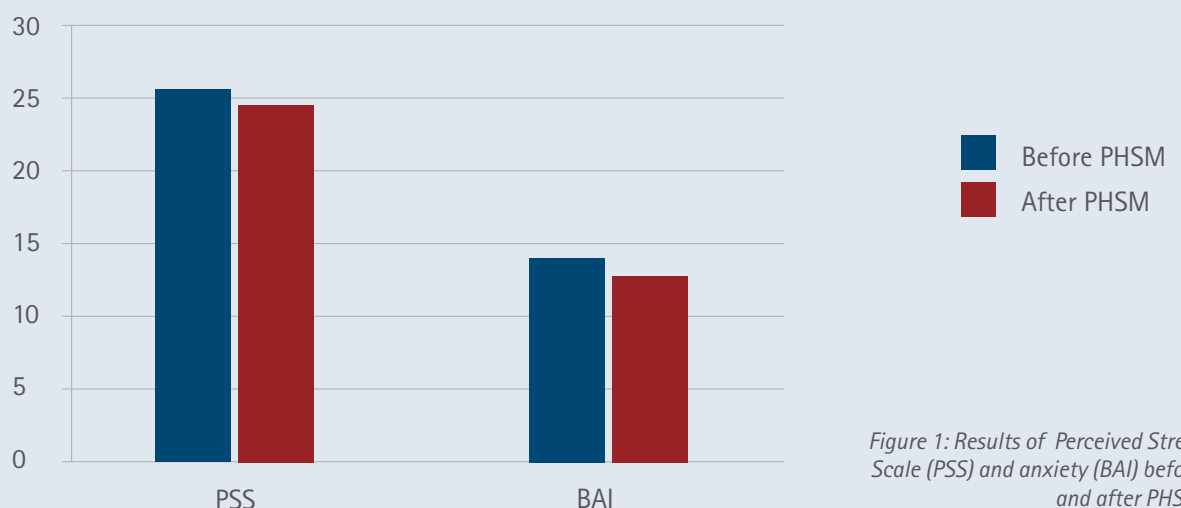
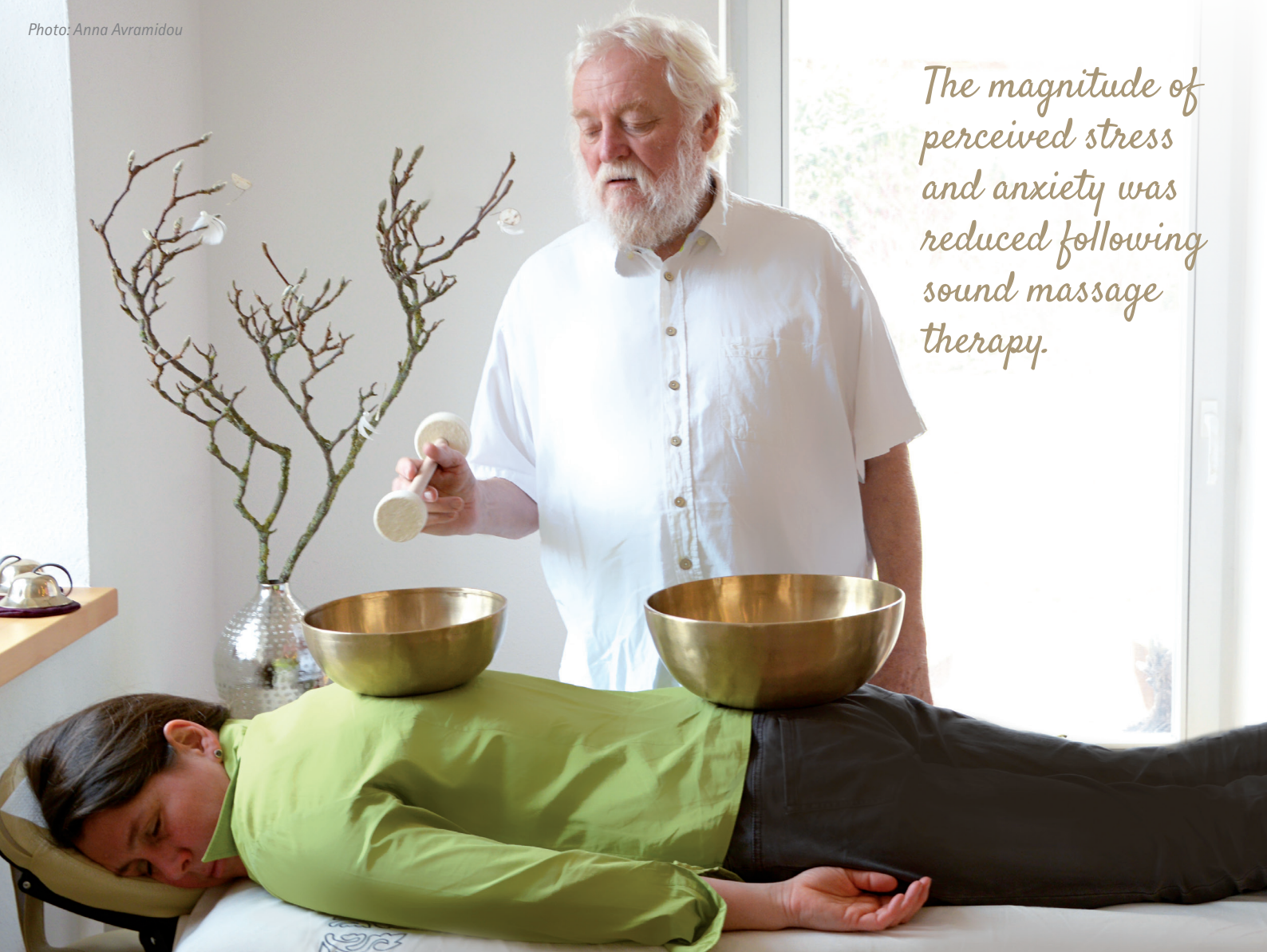


Figure 1: Results of Perceived Stress Scale (PSS) and anxiety (BAI) before and after PHSM





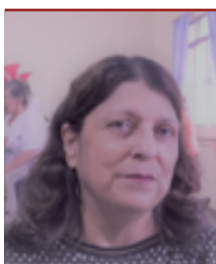
*The magnitude of perceived stress and anxiety was reduced following sound massage therapy.*

As can be seen in figure 1, the magnitude of perceived stress and anxiety was reduced following therapy. Parkinson's disease is a chronic, degenerative disease, and it therefore likely that a greater number of PHSM sessions would provide statistically significant results. This small sample is also a factor that should be considered.

In the scientific literature, we did not find any studies that applied PHSM to this patient group. It is recommended that further studies be conducted in this arena.

#### **Bibliography:**

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