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Editorial Open Access

Proprioceptive Neuromuscular Facilitation: A Physiotherapeutic Concept with Excellent Clinical Results but Little Explored in its Potential in Scientific Research

Victor Hugo Bastos[1*], **Silmar Teixeira**[2], **Carla Ayres**[2], **Marco Orsini**[3], **Nélio Silva de Souza**[4] **and Pedro Ribeiro**[5]

[1]*Brain Mapping and Functionality Laboratory (LAMCEF/UFPI), Federal University of Piauí, Brazil*

[2]*Brain Mapping and Plasticity Laboratory (LAMPLACE/UFPI), Federal University of Piauí, Parnaíba, Brazil*

[3]*Applied Health Sciences, USS Vassouras, Rehabilitation-UNISUAM - RJ, Brazil*

[4]*Physical Therapy of University Center Serra dos Órgãos (UNIFESO), Doctoral student in neurosciences by the Federal Fluminense University (UFF), PT, Niteroi, RJ, Brazil*

[5]*Brain Mapping and Sensory Motor Integration Laboratory, Institute of Psychiatry of the Federal University of Rio de Janeiro (IPUB/UFRJ), Brazil*

[*]**Corresponding author**: Victor Hugo Bastos, Brain Mapping and Functionality Laboratory (LAMCEF/UFPI), Federal University of Piauí, 13010, Brazil, Tel: + 308-865-8441, E-mail: victorhugobastos@ufpi.edu.br

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Editorial

The purpose of this editorial is to have fellow physiotherapists reflect on their clinical practice using the concept of proprioceptive neuromuscular facilitation (PNF) and what the same colleagues have researched about this concept. In this sense, we observe that physiotherapy has been growing in the current world in a relevant way, coming from times with few scientific explanations for a strong evidence area and excellent articles grounding their actions [1]. It involves a large number of resources, concepts, techniques to treat various diseases and functional limitations but still has to mature in its scientific bases in several areas. In neurological dysfunctions, the concepts with the most clinical results for the patients need of maturation.

The PNF concept created in the 1940s by Dr. Herman Kabat and significantly improved by the physiotherapist Maggie Knott is a typical example of this need for growth. It is enough to observe that only in the decade of the 1990s; PNF instructors founded the international PNF association (IPNFA) [2]. The instructors have always go through very rigorous training and refinements, but only after IPNFA did the general structure of training in this concept become more organized and structured. Citing names of excellent instructors throughout the world would be challenging as everyone is very well trained to pass the details of all PNF maneuvers. In their specific PNF congresses around the world add their experiences.

It is important to note that the PNF concept was initially created for neurological patients, but it serves all physiotherapy fields. When elaborating this editorial, we had the curiosity to make a simple research in the PubMed database. We investigated for Physiotherapy in finding twenty combinations with other clinical conditions and treatments, whereas when we checked with PNF, we found only three. Many may think that this is being only one among many others in physiotherapy. It may make sense, but if we think that PNF aims to treat strength, tone/strength relation, flexibility, range of motion, motor coordination, balance, radiations to weaker areas, among others, there is a great potential for improvement proposals compared to few published articles in this database.

Obviously, some research evidence the success of the concept in healthy subjects and in patients [3-5]. Some direct their goals for irradiation [6] while others target flexibility gaining standards [7]. Unfortunately, much should be investigated to be the same certainty that physiotherapists observe in the clinical aspect. We also observed studies such as Medeiros and Martini that in 2017 [8] verified the efficacy of PNF as an alternative to treat flexibility in an excellent systematic review and meta-analysis. Studies such as this should be encouraged in the scientific community because of their high degree of scientific evidence. Great studies have frequently verified the efficacy of the PNF concept in patients with stroke sequels [9].

In general, we believe that we are on a promising path with physiotherapy as a whole, including PNF studies. The possible cause of a few more elaborate publications with this concept is perhaps the cost of its formation. This statement may scare some physiotherapists but it seems understandable that when paying for training, the professional wants to put it into practice as soon as possible. In doing, so he realizes its effectiveness and continues with his treatments not having time to write about his cases or even devote himself to more complex studies. The same seems to be the case with fellow instructors who, while engaged in clinical practice and training, are unable to stop and publish their findings in scientific journals. What is relevant is that physiotherapy as a whole is in good hands around the world and has been raising its name as an area of science.

References

1. Wade BG (1949) Physical therapy, past and present. Arch Phys Med Rehabil 30: 593.
2. http://www.ipna.org.
3. Costa LC, Andrade A, Lial L, Moreira R, Lima AC, et al. (2017) Investigation of alpha band of the electroencephalogram before and after a task of proprioceptive neuromuscular facilitation. J Exerc Rehabil 13: 418-424.
4. Wanderley D, Lemos A, Moretti E, Barros MB, Valença MM, et al. (2018) Efficacy of proprioceptive neuromuscular facilitation compared to other stretching modalities in range of motion gain in young healthy adults: A systematic review. Physiother Theory Pract 23: 1-21.
5. Lial L, Moreira R, Correia L, Andrade A, Pereira, AC, et al. (2017) Proprioceptive neuromuscular facilitation increases alpha absolute power in the dorsolateral prefrontal cortex and superior parietal cortex. Somatosens Mot Res 34: 204-212.
6. Gontijo LB, Pereira PD, Neves CDC, Santos AP, Machado DD, et al. (2012) Evaluation of strength and irradiated movement pattern resulting

from trunk motions of the proprioceptive neuromuscular facilitation. Rehabilitation research and practice 2012: 281937.

7. Magalhães FX, De Mesquita Junior AR, Harnold SM, Dos Santos RM, Rodrigues EC, et al. (2015) Comparison of the effects of hamstring stretching using proprioceptive neuromuscular facilitation with prior application of cryotherapy or ultrasound therapy. J Phys Ther Sci 27: 1549-1553.

8. Medeiros DM, Martini TF (2017) Chronic effect of different types of stretching on ankle dorsiflexion range of motion: Systematic review and meta-analysis. Foot (Edinb) 34: 28-35.

9. Park SJ (2017) The immediate effects of proprioceptive neuromuscular facilitation with taping on gait parameters in patients with chronic stroke. J Phys Ther Sci 29: 2018-2021.