February 2020

Newsletter IPNFA® research committee

BE AWARE OF the IPNFA publication PRIZE
(see page 5)

With presenting a selection of abstracts of papers in relation to the PNF-concept, the research committee hopes to stimulate our IPNFA members in starting to publish themselves. We believe that the IPNFA members can present a broad scope of interesting topics and issues on PNF.
Furthermore we inform you about the status of the international physiotherapy world with information from the WCPT. Two main issues are addressed by this world forum on our profession. For more detailed information and updates we recommend to subscribe for the mailing list from the WCPT. https://mail-chi.mp/wcpt.org/subscribe

I wish a joyful reading. Fred.

Conference 'Physiotherapy as an art and science', Warsaw, Poland.

In mid-September 2019, the conference 'Physiotherapy as an art and science' was held in Warsaw on the occasion of the 10th anniversary of the Polish Physiotherapy Association. The conference was attended by over 450 people - physiotherapists, doctors, representatives of universities and associations as well as politicians. The program included sessions in orthopedics, neurology and pediatrics.

In addition, several workshops were organized by instructors of various physiotherapy concepts, including PNF, NDT Bobath, Vojta, a few manual therapy schools, the Feldenkrais method, and osteopathy. The "Analysis and stimulation of gait according to the PNF method - selected clinical cases" workshop was prepared by the IPNFA Poland group, which included Katarzyna Fountokidis, Monika Piwnicka, Anna Riviere, Agnieszka Stępień (instructors IPNFA), Joanna Jaczewska, Jakub Marciński, Joanna Tokarska (assistants IPNFA) and Grzegorz Gałuszka. 70 physiotherapists took part in the workshop. The organization of the conference was supported by 30 volunteers, students from five universities in Poland educating physiotherapists. During the conference, a new internet portal for patients "Find your physiotherapist" created by the Polish Chamber of Physiotherapy was promoted.

The members of the research committee search the web in an annual frequency for new materials and publications that might increase our understanding for the specific use of the PNF-Concept. Last year we criticized a paper from Areeudomwong and colleagues, even though we complemented them for the efforts on designing research on the PNF concept. We received notification of again another publication from these researchers. All together an interesting read. Addressing a component of physical therapy intervention. Modern view on CLBP is a more holistic approach. In terms of EBP and implementation of research outcomes in daily clinical practice, we think that indeed the positive results of this paper can be used. Nevertheless, we also agree that just a focus on stabilization in CLBP is not sufficient, but in case a comprehensive approach for CLBP would need stabilization as a sub-goal besides behavioral change and general activation etc. There remains the choice of approach for that sub-goal. Now one could argue to use a PNF approach for that component of the total comprehensive treatment approach.

We invite you to check the full text for yourself.

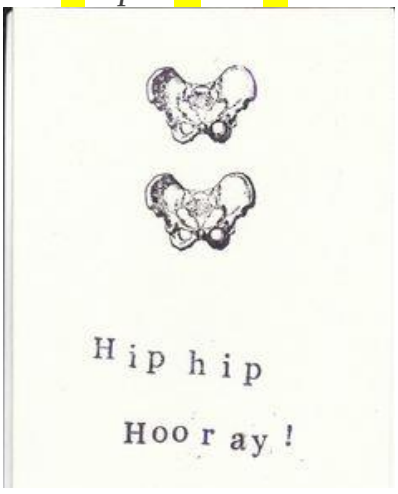
Areeudomwong P, Buttagat V.

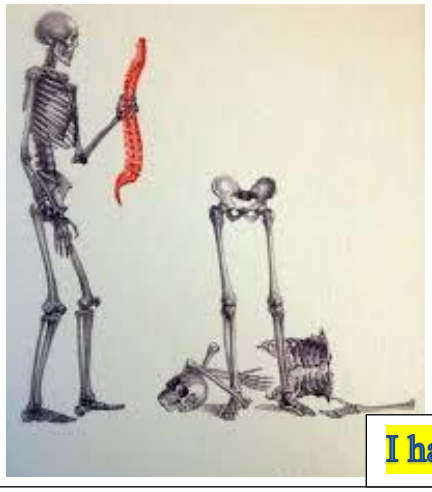
Comparison of Core Stabilisation Exercise and Proprioceptive Neuromuscular Facilitation Training on Pain-related and Neuromuscular Response Outcomes for Chronic Low Back Pain: A Randomised Controlled Trial.

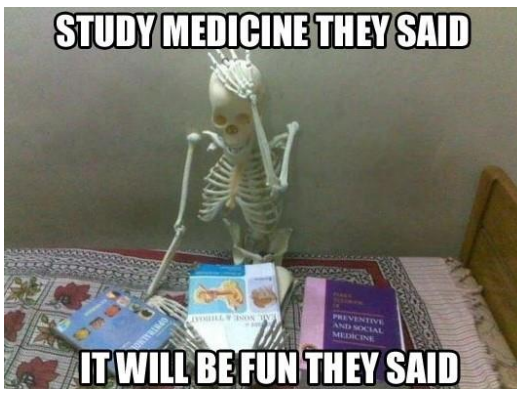
Malays J Med Sci. 2019;**26(6)**:77–89. https://doi.org/10.21315/mjms2019.26.6.8

Abstract Background: Existing literature offers little guidance for therapists who provide core stabilisation exercise (CSE) and proprioceptive neuromuscular facilitation (PNF) training to treat chronic low back pain (CLBP). Studies conducting a head-to-head comparison of CSE and PNF training for CLBP are needed. Objective: To compare the effects of CSE and PNF training on pain-related outcomes and trunk muscle activity in CLBP patients. Methods: Forty-five CLBP patients, ranging from 18 to 50 years of age, were randomly divided and assigned to either a four-week CSE, four-week PNF training, or control group. Pain related outcomes, including pain intensity, functional disability and patient satisfaction, as well as superficial and deep trunk muscle activity were assessed before and after the four-week intervention, and at a three-month follow-up. Results: Compared to the control group, those in the CSE and PNF training groups showed significant improvements in all pain-related outcomes after the four-week intervention and at three-month follow-up ($P < 0.01$). Following the four-week intervention, both CSE and PNF training groups demonstrated significant improvement in deep trunk muscle activity, including the transversus abdominis (TrA) and superficial fibres of lumbar multifidus (LM), compared to the control group ($P < 0.05$). Conclusion: Four-week CSE and PNF training provided short-term and long-term effects on pain-related outcomes, along with increased deep trunk muscle activity in CLBP patients.

*The **P**eople **N**eed **F**un corner* ☺







I have got your back

Name change for global physical therapy body

The World Confederation for Physical Therapy (WCPT) will be changing its name to World Physiotherapy later this year.

World Physiotherapy will be used for all externally-facing communications and materials. World Confederation for Physical Therapy will continue to be used for all legal and governance matters.

Background to name change

The proposed name change was raised during the General Meeting in Geneva in May 2019, when WCPT highlighted a number of reasons why it was important to consider a name change.

These reasons included:

- Brand confusion – WCPT has many examples of inaccuracies in the use of its name, both in writing and verbally – by other organisations and by its member organisations.
- The majority of our member organisations use physiotherapy and physiotherapist to describe the profession and the people who work in the profession.
- WCPT was founded in 1951 by 11 associations. WCPT now has 121 member organisations, representing more than 625,000 physiotherapists.

World Physiotherapy is a clear, simple, and effective description of the global profession.

WCPT has consulted with its member organisations on two previous occasions about a name change: in 2017 as part of the membership engagement project and in 2019 as part of the brand refresh project. The feedback received was not sufficiently clear and the proposal was raised at the General Meeting – to give member organisations the opportunity to discuss the proposal with each other, the WCPT board, and staff.

Of the representatives of member organisations who spoke with WCPT staff in Geneva about the proposal, the majority of comments were supportive and enthusiastic about the proposed name change. No member organisations have contacted WCPT since the General Meeting to discuss the proposal.

Survey responses

After the General Meeting in Geneva, WCPT asked the presidents of all WCPT's member organisations to take part in a survey about the proposed name change.

WCPT received responses to the survey from 78 member organisations. Of the respondents:

- Almost 60% said they agreed or strongly agreed World Physiotherapy would be more easily understood by government, academic institutions, and other partners in their country as reflecting the role and activities of the global body for physiotherapists.
- 62% said they would prefer World Physiotherapy to use, where possible, in the language of their country for the name of their organisation
- 58% said they agreed or strongly agreed World Physiotherapy more accurately reflects the role and activities of the global body for physiotherapists
- 57% said they agreed or strongly agreed World Physiotherapy would help the members of their organisation understand more about the role and activities of the global body for physiotherapists.

In July 2019, after considering the survey responses, the Board endorsed the proposal to change the name to World Physiotherapy

Brand refresh and website redevelopment

With a clear mandate from its member organisations, WCPT has been working on two strategic projects: brand refresh and website redevelopment. The name change to World Physiotherapy is part of the brand refresh project and WCPT is developing materials using this name for all externally-facing communications and materials – including the website.

The brand refresh and website will be launched later this year.

How?? can we as IPNFA – members contribute to the body of knowledge and evidence for the use of the PNF-Concept??

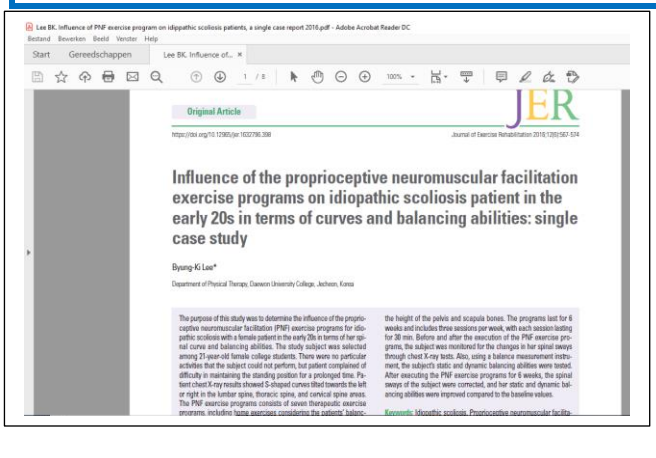
We believe that the IPNFA members can present a broad scope of interesting topics and issues on PNF.
In 2006 it was decided at the IPNF annual meeting that a prize for the best publication from IPNFA members would be issued. This was meant to encourage all IPNFA members to be involved in either local or international publications. The duty to decide on this prize fell on the research committee. To have somehow a transparent judgement tool, a guideline and regulations was set up in 2007 and was accepted. This guideline is available in the members' area under the button of the Research Committee.

We are happy to invite anyone from within the IPNFA to take up the challenge. We know how hard it is to struggle with a text, to find the appropriate wording and syntax in maybe not your native language. Also we are aware of how much time it costs to write a manuscript with sufficient relevant amount of references. Some of us (the research committee) have personal experience with writing and submitting a manuscript, and struggle with the reviewers feedback and the point to point reply required to get the manuscript through the submission process and to acceptance and finally the publication. All together that might take up a year for the publication of 6 or 7 pages.

Nevertheless it is really a good, not to say a proud, feeling when a peer reviewed journal is interested to take PNF oriented articles.
Hence we hope to stimulate all members to write about their PNF experience.
Possibly going through some case reports from our members might trigger the flame to fame. (see the literature list with the defined section on the IPNF website)

"writing is building up a legacy"

If you would not be forgotten as soon as you are gone either write things worth reading or do things worth writing. — Benjamin Franklin

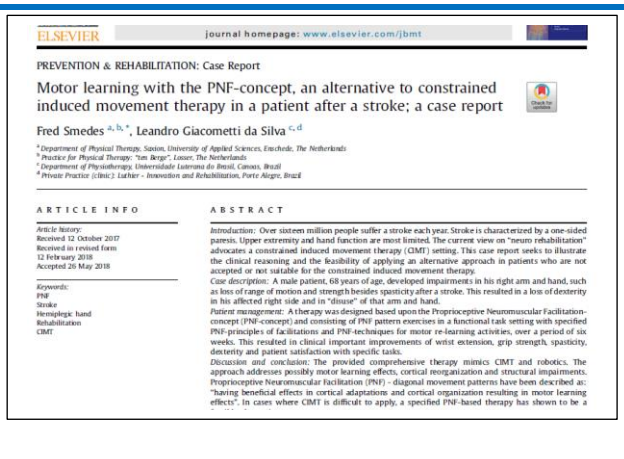

Original Article

JER

Influence of the proprioceptive neuromuscular facilitation exercise programs on idiopathic scoliosis patient in the early 20s in terms of curves and balancing abilities: single case study

Byung-Ki Lee*

Department of Physical Therapy, Daewon University College, Jecheon, Korea


ELSEVIER

journal homepage: www.elsevier.com/jbmt

PREVENTION & REHABILITATION: Case Report

Motor learning with the PNF-concept, an alternative to constrained induced movement therapy in a patient after a stroke; a case report

Fred Smedes [a, b, *], Leandro Giacometti da Silva [c, d]

ARTICLE INFO

ABSTRACT

*The **P**eople **N**eed **F**un corner ☺ /*

- *The Psychiatrists thought it was madness.*
- *The Radiologists could see right through it.*
- *The Gastro-enterologists had a gut feeling about it.*
- *The Neurologists thought the administration had a lot of nerve.*
- *The Paediatricians said, "Grow up!"*
- *The Plastic Surgeon said, 'This puts a whole new face on the matter.'*
- *The Podiatrists thought it was a step forward.*

WCPT membership votes to admit three new member organisations (*Congratulations to Poland from us, the Research Committee* ☺)

Three new member organisations have been admitted to the World Confederation for Physical Therapy by electronic vote of the membership.

The new member organisations are:

- French National Council of Physiotherapists (Conseil national de l'ordre des masseurs-kinésithérapeutes)
- Polish Chamber of Physiotherapists (Krajowa Izba Fizjoterapeutów)
- Order of Physiotherapists in Romania (Colegiul Fizioterapeuților din România)

At the General Meeting held in Geneva in May 2019 the WCPT membership approved a new Constitution for WCPT. The Constitution states electronic voting may be used outside a General Meeting to vote on resolutions that relate to the approval of an organisation's application for membership of WCPT. This is the first time an electronic vote has been used to admit new member organisations.

The WCPT membership also discussed at the General Meeting a proposal to allow more than one national physical therapy member organisation in each country. The membership rejected this proposal and approved the new Constitution. Therefore there can only be one member organisation per country and, as set out in the Constitution, it will ordinarily be the organisation that represents the highest number of physical therapists in that country.

Following the General Meeting, a number of applications were received and assessed by the Membership Committee as being eligible for membership.

On the advice of the Membership Committee, the Executive Board recommended WCPT member organisations pass separate resolutions to approve applications for admission to membership of WCPT from French National Council of Physiotherapists (in excess of 88,000 members), Polish Chamber of Physiotherapists (in excess of 63,000 members), Order of Physiotherapists in Romania (in excess of 4,500 members).

WCPT has 120 member organisations, of which 104 took part in the electronic vote. A simple majority of the number of WCPT member organisations is required to approve applications for admission to membership of WCPT. The electronic vote was conducted using the online voting platform Election Buddy.

Membership of WCPT for the three new member organisations will take effect from 1 January 2020

Lial L, Moreira R, Coreira L et al.

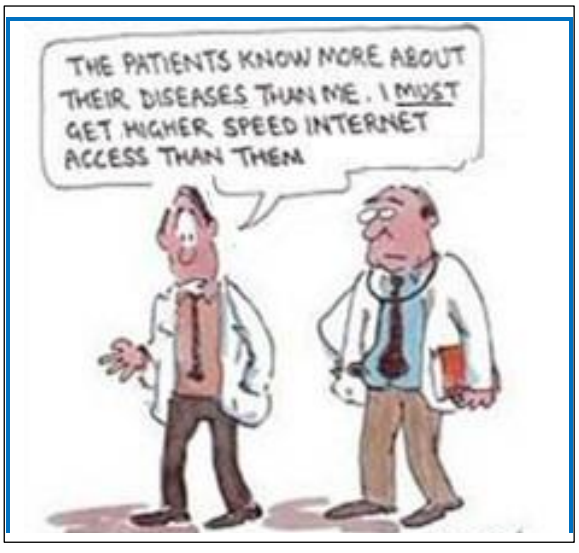
Proprioceptive neuromuscular facilitation increases alpha absolute power in the dorsolateral prefrontal cortex and superior parietal cortex SOMATOSENSORY & MOTOR RESEARCH, 2017:.34; (3), 204–212
https://doi.org/10.1080/08990220.2017.1392298

ABSTRACT

The physiotherapist's clinical practice includes proprioceptive neuromuscular facilitation (PNF), which is a treatment concept that accelerates the response of neuromuscular mechanisms through spiral and diagonal movements. The adaptations that occur in the nervous system following PNF are still poorly described in the literature. Thus, this study had a goal to investigate the electrophysiological changes in the fronto-parietal circuit during PNF and movement in sagittal and diagonal patterns. This study included 30 female participants, who were divided into three groups (control, PNF, and flexion groups).

Electroencephalogram measurements were determined before and after tasks were performed by each group. For the statistical analysis, a two-way ANOVA was performed for the factors group and time.

Interactions between the two factors were investigated using a one-way ANOVA. A value of $p<0.004$ was considered significant. The results showed an increase in alpha absolute power in the left dorsolateral prefrontal cortex and upper left parietal cortex of the PNF group, suggesting these areas work together to execute a motor action. The PNF group showed a greater alpha absolute power compared with the other groups, indicating a specific cortical demand for planning and attention, reinforcing its use for the rehabilitation of individuals.



Both cartoons from: https://www.funny-jokes.com/funny/doctor_cartoon.htm

de Oliveira KCR, Sande de Souza LAP, Emilio MM, Franco da Cunha L, Menezes Lorena D, Bertoncello D.

Overflow using proprioceptive neuromuscular facilitation in post-stroke hemiplegics: A preliminary study

Journal of Bodywork & Movement Therapies 23 (2019) 399 -404

a b s t r a c t

Hemiplegia is the classic condition resulting from a stroke. To assist in recovery, the overflow method can be employed to stimulate the affected limb, using the healthy contralateral lower limb (LL) to activate the plegic upper limb (UL) musculature. The aim of this study was to evaluate the immediate effect of overflow using the PNF method on the plegic upper limb muscles of post-stroke individuals in the acute and chronic stages, as well as on the muscles of healthy individuals. A total of 22 individuals participated in the work, comprising 8 healthy individuals (control group), 6 post-stroke acute stage individuals (acute group), and 8 post-stroke chronic stage individuals (chronic group). The participants were assessed using a questionnaire with sections for personal and disease data and application of the ICF scale and the Fugl-Meyer index. The three groups were submitted to electromyographic evaluation, using the posterior deltoid (PD), anterior deltoid (AD), pectoralis major (PM), and external oblique (EO) muscles in four different positions: P1 (resting the UL, with the LL contralateral to the affected limb positioned in diagonal); P2 (resting the UL, with manual resistance in the contralateral LL); P3 (affected UL positioned in diagonal, with manual resistance in the contralateral LL) e P4 (affected UL positioned in diagonal, with fixed point and manual resistance in the contralateral LL). The electromyography results revealed no significant differences between most of the positions for the four muscles evaluated ($p > 0.05$). However, high clinical relevance ($d > 0.8$) was found for muscle activation in positions 2 and 4. It could be concluded that for post-stroke individuals in the acute and chronic stages, overflow using PNF effectively increased activation of the PD, AD, PM, and EO muscles in the P2, as well as position 4.

https://doi.org/10.1016/j.jbmt.2018.02.011