

# JPR

Journal of  
Physiotherapy  
Research

V9 N3 AUGUST 2019  
ISSN: 2238-2704



Journals  
**BAHIANA**  
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Catalog Card

N963 Journal of Physiotherapy Research [electronic resource] /  
Scientific Communications Unit of BAHIANA – School of Medicine and  
Public Health, 2019; 9(3). Salvador: BAHIANA – School of Medicine and  
Public Health, 2019. [On-line].

Quarterly

Editorial  
ISSN 2238-2704

Access Mode: <https://journals.bahiana.edu.br/>

1. Research. 2. Physiotherapy I. Scientific Communications Unit. II.  
BAHIANA – School of Medicine and Public Health. III. Title: Journal of  
Physiotherapy Research.

CDU: 615.82

# Masthead

**Journal of Physiotherapy Research. 2019;9(3)**

## **Editorial Board**

### **Editors-in-chief**

Cristiane Maria Carvalho Costa Dias, BAHIANA - School of Medicine and Public Health (Salvador), Brazil  
Katia Nunes Sá, BAHIANA - School of Medicine and Public Health (Salvador), Brazil

### **Basic Research Editors**

Ana Francisca Ferreira, Catholic University of Salvador (Salvador), Brazil  
Wilton Remigio, Misericordia University (Dallas), United States of America

### **Public Health Editors**

Helena Fraga-Maia, State University of Bahia (Salvador), Brazil  
Katia Suely Queiróz Silva Ribeiro, Federal University of Paraíba (João Pessoa), Brazil

### **Neuropediatric Physiotherapy Editors**

Asir John Samuel, Maharishi Markandeshwar University (Mullana), India  
Hercules Ribeiro Leite, Universidade Federal dos Vales do Jequitinhonha e Mucuri (Teófilo Otoni), Brazil  
Sumaia Midlej, State University of Bahia (Salvador), Brazil

### **Physiotherapy in Pain Management Editors**

Abrahão Fontes Baptista, Federal University of the ABC (Santo André), Brazil  
Joyce Gomes-Osman, University of Miami (Coral Gables), United States of America

### **Sports Physiotherapy Editors**

Ardalan Shariat, University Putra Malaysia (Serdang), Malaysia  
Mehdi Kargarfard, Universidade de Isfahan (Isfahan), Iran  
Ulysses Fernandes Ervilha, State University of São Paulo (São Paulo), Brazil

### **Orthopedic Trauma Physiotherapy Editors**

Beatriz Rodríguez-Romero, The Coruña University (Coruña), Spain  
Clarice Tanaka, Universidade de São Paulo (São Paulo), Brazil

### **Neurofunctional Approach in Adults Editors**

Elen Beatriz Carneiro Pinto, BAHIANA - School of Medicine and Public Health (Salvador), State University of Bahia (Salvador), Brazil  
Jamilé Vivas Costa, The Coruña University (Coruña), Spain  
Valeska Fabiola Gatica Rojas, Talca University (Talca), Chile

### **Gerontology Physiotherapy Editors**

Clynton Lourenço Correa, Federal University of Rio de Janeiro (Rio de Janeiro), Brazil  
Victor Hugo Bastos, Federal University of Piauí (Parnaíba), Brazil

### **Respiratory Physiotherapy Editor**

Fernanda Warken Rosa Camelier, State University of Bahia (Salvador), Brazil

### **Cardiovascular Physiotherapy Editor**

Giulliano Gardenghi, Center for Advanced Studies and Integrated Training (Goiânia), Pontifical Catholic University of Goiás (Goiânia), Encore Hospital (Aparecida de Goiânia), Brazil  
Maria Ignes Zanetti Feltrim, Instituto do Coração do Hospital das Clínicas, Universidade de São Paulo (São Paulo), Brazil

### **Dermatofunctional Physiotherapy Editors**

Carina Oliveira dos Santos, BAHIANA - School of Medicine and Public Health (Salvador), State University of Bahia (Salvador), Brazil  
Patricia Froes Meyer, Universidade Potiguar (Natal), Brazil

### **Physiotherapy in Occupational Health Editor**

Maria Cláudia Gatto Cardia, Federal University of Paraíba (João Pessoa), Brazil

### **Physiotherapy in Acupuncture Editor**

Rafael Vercelino, Health Sciences Federal University of Porto Alegre (Porto Alegre), Brazil

### **Pelvic Floor Physiotherapy Editors**

Adriana Saraiva, Federal University of Bahia (Salvador), Brazil

### **Executive Editors**

João de Deus Barreto Segundo, BAHIANA - School of Medicine and Public Health (Salvador), Federal University of Bahia, Brazil  
Carolina Barreto de Andrade, BAHIANA - School of Medicine and Public Health (Salvador)

### **Copydesk Editor / Art Director**

Edileno Capistrano, BAHIANA - School of Medicine and Public Health (Salvador), Brazil

### **Scientific Publishing Intern**

Gabriela Montenegro Sampaio, BAHIANA - School of Medicine and Public Health (Salvador), Brazil

The Journal of Physiotherapy Research (JPR) is an Open Access Journal published to serve the international scientific community by providing high quality scientifically accurate original research reports, therefore it applies no article processing charge of any kind.

It is assumed that by submitting an article, the author is recognized as having the copyright to it and allows its free use by readers, and it can, in addition to being read, be downloaded, copied, distributed and printed.

The authors are responsible for content, spelling, grammar and punctuation.

### **Corresponding address:**

BAHIANA - School of Medicine and Public Health  
Scientific Communications Unit - SCU  
Dom João VI Av., 275, Brotas  
ZIP Code: 40290-000  
(55 71) 3276-8246

This publication is sponsored by



**BAHIANA**  
ESCOLA DE MEDICINA E SAÚDE PÚBLICA

# Table of Contents

## Editorial

<b>Predatory and unscientific practices in scientific publication.....</b>	<b>298</b>
João de Deus Barreto Segundo	

## Original articles

<b>Impact of functional capacity in mortality six months after high elderly in ICU.....</b>	<b>301</b>
Julio David Nascimento da Rocha, Ludmilla Campos Gaspar, Yasmin Silva Gomes, Marilúcia Reis dos Santos, Gilmara Santos, Jorge Luis Motta dos Anjos	

<b>Lombalgia and functional alterations in market traders: a cross-sectional study.....</b>	<b>307</b>
Roquenei da Purificação Rodrigues, Kionna Oliveira Bernardes Santos	

<b>Neuropsychomotor development of children with congenital heart diseases.....</b>	<b>316</b>
Bruna Rodrigues Moraes, Daniela Bassi, Paula Hérica Magalhães dos Santos, Aldair Darlan Santos-de-Araújo, Priscila Helena Vanin Alves de Souza Matias, Ana Carolina do Nascimento Calles	

<b>Effects of peripheral and cerebral electrical stimulation on maximal isometric strength of knee extensors: a randomized clinical trial.....</b>	<b>321</b>
Gabriel Alysson Costa dos Santos, Polyanna Gomes Lacerda Cavalcante, Tayná Barros da Silva Sousa, Ruan Victor Rodrigues Benício, Ben-Hur James Maciel de Araujo, Francisco Irisvan Coelho de Resende Dias, Allana Rhamayana Bonifácio Fontenele, Fuad Ahmad Hazime	

<b>Correlation of dynamic valgus with knee injuries in corridors.....</b>	<b>331</b>
Cassio Araújo Paiva, Karlla Kelly Soares Silva, João Antonio Mesquita Costa, Riccardo Samuel Albano Lima, Francisco Valmor Macedo Cunha	

<b>Evaluation of osteomuscular symptoms in handball practicans of a college.....</b>	<b>339</b>
Ebson Silva Braga, Francisco Valmor Macedo Cunha	

<b>Comparison of disability between risk classifications for poor prognosis in chronic lumbago: observational study.....</b>	<b>347</b>
André Franco Ludwig, Fernanda Peron Hubner, Andrea Rafaela Caovilla, Carolina Weizemann, Taise Vieira Barbosa, Katriane Endiel Pereira, Renata Andressa Stachelski, Alberito Rodrigo de Carvalho	

<b>Heart rate variability in Crossfit® practitioners: pilot study.....</b>	<b>353</b>
Francisco Tiago Oliveira de Oliveira, Ana Carolina Conceição Ramos, Celso Nascimento Almeida, Clarilson Plácido Conceição dos Santos, Igor Alonso Andrade de Oliveira, Mônica Diniz Rocha Mendel, Edson Carlos Leite Santos, Cristiane Maria Carvalho Costa Dias	

<b>Effectiveness of preoperative inspiratory muscle training using the Threshold IMT in patients undergoing esophageal surgery: a randomized clinical trial.....</b>	<b>361</b>
Fernanda Maria Rodrigues da Cunha, Marisa de Carvalho Borges, Fabiana Alves Carvalho, Márcia Souza Volpe, Virmondes Rodrigues Júnior, Eduardo Crema	

<b>Physical performance and quality of life of hypertensive patients in an educational guidance program.....</b>	<b>369</b>
Fábio Ferreira Giachini, Erika Tiemi Ikeda, Iana Verena Santana Albuquerque, Luiz Aparecido Bortolotto, Heno Ferreira Lopes, Maria Ignez Zanetti Feltrim	

<b>Urinary leakage is frequent in outpatient chronic obstructive pulmonary disease (COPD) patients.....</b>	<b>378</b>
Carolina Correia da Silva, Júlia Ribeiro Santana, Vinícius Oliveira da Silva, Priscila Godoy Januário, Humberto França Ferraz de Oliveira, Aquiles Assunção Camelier, Fernanda Warken Rosa Camelier	

## **Literature reviews**

<b>Manual therapy in the functional recovery after the tornozelo side entry: systematic review.....</b>	<b>386</b>
Igor Macedo de Oliveira, Marvyn de Santana do Sacramento, Alice Miranda de Oliveira, Yasmin Pimenta Cadid�,	
Mariana Pereira Gottschalk Morais, Eul�lia Silva dos Santos Pinheiro Barros	
<b>Use of non-invasive ventilation in ARDS and secondary pneumonia H1N1: systematic review.....</b>	<b>396</b>
Luiz Henrique Barauna, Fleury Ferreira Neto	
<b>Methods of equilibrium assessment and use in non-healthy individuals: a systematic review.....</b>	<b>409</b>
John Victor Da Costa Rocha, Darlison Radley Barros de Ara�jo, Rebeca Barbosa da Rocha, Vinicius Saura Cardoso	
<b>Application of early mobilization in the prevention of venous thrombosis in a hospital setting: A Systematic Review.....</b>	<b>421</b>
Alessandra Gasparello Viviani, Matheus Pereira Nunes da Silva, Andr�a Oliver Gomes, Carolina Araujo Molina	
<b>Rapid upper limb assessment (RULA) in ergonomic assessment: A comprehensive review.....</b>	<b>429</b>
Ajay Kumar, Surendra Kamath	