

General aspects of scientific production on photobiomodulation for the treatment of pressure injuries



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Pressure ulcers are among the main skin lesions that affect patients with difficulty in mobilizing in bed and/or walking, especially those neurologically affected.

The **objectives** of this research were: quantify and qualify the scientific production on photobiomodulation for the treatment of PUs; evaluate patterns and trends in scientific production related to photobiomodulation for the treatment of PUs; determine the dispersion of journals in the light of the Bradford Theory and map the collaboration network of scientific production on the subject.

Method: This is a mixed-methods, descriptive and exploratory research, and as a means of investigation, bibliometric and scientometric analysis was applied using the software RStudio® and its web interface Biblioshiny.

I The **results** were obtained from 675 documents on the theme. It was found that a considerable part of the research in this field comes from the Medicine areas, and it was not possible to verify a core of journals more devoted to the subject. No elite group of authors on the subject was found. Collaboration, co-citation and co-occurrence networks were verified with bibliometric indicators that pointed to the use of scientific literature in the health area on the theme and its approach to the health area.

Conclusion: The research brings as a contribution the evidence of the inexistence of the correlation of photobiomodulation with its use for the treatment of PUs, as well as shows that there is little scientific literature indexed in Scopus that deals specifically with this theme.

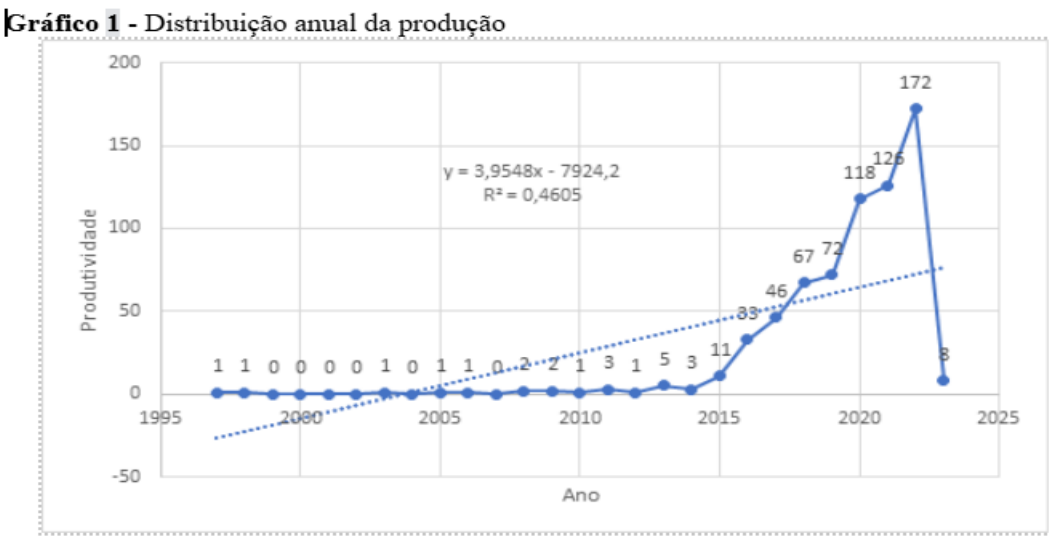
Figure 1 - Main information about the data

Tabela 1 - Principais informações sobre os dados

Descrição	Resultados
PRINCIPAIS INFORMAÇÕES SOBRE OS DADOS	
Nº de Documentos/artigos	675
Taxa de crescimento anual %	8.33
Idade média do documento/artigo	3.4
Média de citação por documento/artigo	10.56
Referências	26615
CONTEÚDO DO DOCUMENTO/ARTIGO	
Palavras-chave Plus (ID)	4810
Palavras-chave do autor (DE)	1447
AUTORES	
Autores	3232
Autores em único o documento/artigo	14
COLABORAÇÃO DE AUTORES	
Documentos/artigos de autoria única	18
Coautores por Documento	6.92
Coautoria internacional %	22.37
TIPOS DE DOCUMENTOS/ARTIGOS	
Original	590
Revisão	85

Fonte: Dados da pesquisa. Rio de Janeiro, 2023.

Figure 2 - Annual production distribution



Fonte: Dados da pesquisa. Rio de Janeiro, 2023.

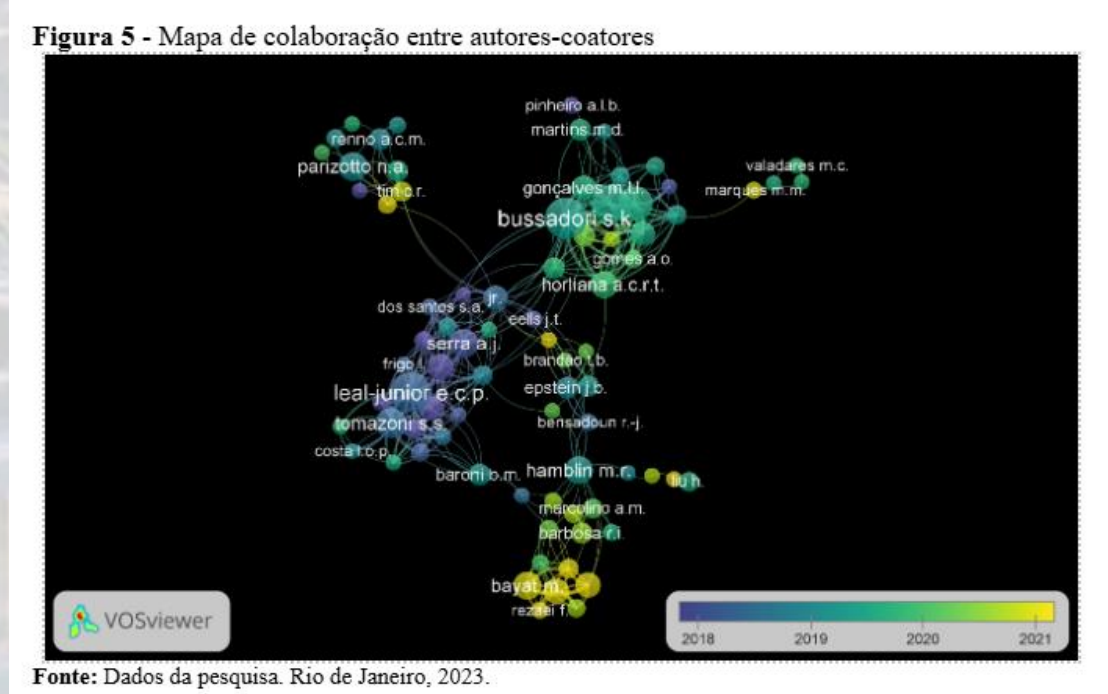
Figure 3 - Journals that obtained an h index above 1

Tabela 4 - Periódicos que obtiveram h index acima de 1

Periódico	h_index	TC	NP	PY_start
Lasers in Medical Science	25	280	291	2008
Lasers in Surgery and Medicine	14	495	38	1997
Scientific Reports	13	549	27	2016
Supportive Care in Cancer	10	595	34	2016
Medicine (United States)	6	76	16	2018
Plos One	6	132	13	2013
Trials	5	61	6	2015
Aesthetic Plastic Surgery	3	25	3	2019
BMC Sports Science, Medicine and Rehabilitation	3	25	4	2020
BMJ Open	3	35	7	2017
Journal of Clinical Medicine	3	133	4	2020
Journal of Cosmetic and Laser Therapy	3	19	4	2017
Journal of Strength and Conditioning Research	3	103	5	2016
Acta Cirúrgica Brasileira	2	12	2	2016
American Journal of Physical Medicine and Rehabilitation	2	9	2	2019
Cells	2	20	2	2018
Clinical Rehabilitation	2	13	2	2020
Critical Reviews in Oncology/Hematology	2	10	2	2020
Current Dermatology Reports	2	23	2	2016
Current Stem Cell Research and Therapy	2	21	2	2020
European journal of Physical and Rehabilitation Medicine	2	12	2	2020
Frontiers in Psychiatry	2	7	2	2020
Journal of Clinical Orthodontics: JCO	2	19	6	2016
Journal of Sports Sciences	2	20	2	2018
Medicine	2	12	4	2019
Molecular Vision	2	120	2	2010
Wound Repair and Regeneration	2	16	4	2018

Fonte: Dados da pesquisa. Rio de Janeiro, 2023.
Os nomes completos das abreviaturas nesta tabela são: TC = Número total de citações; NP = Número total de publicações; PY_start = Ano da primeira publicação

Figure 4 - Author-co-author collaboration map



Fonte: Dados da pesquisa. Rio de Janeiro, 2023.

I have no conflict of interest

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