# Publication rate of scientific papers presented during the 9th Brazilian Congress on Pain\*

Frequência de publicação de trabalhos científicos apresentados no 9º Congresso Brasileiro de Dor

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#### **SUMMARY**

BACKGROUND AND OBJECTIVES: Scientific meetings are critical for discussion and spread of knowledge arising from research and clinical practice analyses. This study aimed at establishing the publication rate of papers approved as free papers and posters during the 9th Brazilian Congress on Pain and at evaluating their characteristics.

METHOD: Retrospective cohort study using descriptive statistics, which has evaluated the abstracts presented during the above-mentioned congress. After querying Medline/Pubmed, Scielo, LILACS Academic Google databases, publication rate and characteristics of published papers were examined: journal name, publication year, language, institution of origin, paper category, authors and co-authors.

RESULTS: From 348 abstracts, 31 (8.9%) were published and most came from Brazilian institutions (90.32%). Papers were published in 21 journals being most common the "Original Article" category (83.87%). Mean time between the holding of the Congress and papers publication was  $6.7 \pm 3$  months, with median of 6.9 months.

**CONCLUSION**: The rate of published papers (8.9%) identified in this study is much lower than the international mean, indicating that participants of scientific meetings should be encouraged to publish their papers.

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Keywords: Abstracts, Abstracts and indexation as subiect. Pain. Publication.

## **RESUMO**

JUSTIFICATIVA E OBJETIVOS: científicas são de grande importância para a discussão e a disseminação de conhecimentos, oriundos de pesquisas e análises da prática clínica. O objetivo deste estudo foi determinar a taxa de publicação de trabalhos aprovados como tema livre e pôster do 9º Congresso Brasileiro de Dor, avaliando as suas características.

MÉTODO: Estudo de coorte retrospectivo, utilizando estatística descritiva, que avaliou os resumos apresentados no referido congresso. Foram examinados, após pesquisa nas bases de dados Medline/Pubmed, Scielo, LILACS e Google Acadêmico, a taxa de publicação e características dos trabalhos publicados: nome da revista, ano de publicação, língua, instituição de origem, categoria do artigo, autores e coautores.

**RESULTADOS**: Dos 348 resumos do congresso, 31 (8,9%) foram publicados, sendo a maioria oriunda de instituições nacionais (90,32%). Os artigos foram publicados em 21 revistas, sendo a categoria "Artigos Originais" de maior presença (83,87%). A média de tempo entre a realização do Congresso e a publicação de artigos foi de  $6.7 \pm 3$  meses, com mediana de 6.9 meses. CONCLUSÃO: A percentagem de trabalhos publicados (8,9%) identificados neste estudo é bem inferior à média internacional, indicando que se deva encorajar a publicação pelos participantes de encontros científicos.

Descritores: Dor, Publicação, Resumos, Resumos e Indexação como assunto.

## INTRODUCTION

The presentation of researches and studies during scientific meetings is very important because it gives participants a broad discussion space, helping the development of consensus and guidelines, in addition to the review of recent findings of research and clinical trials. It is generally accepted that the end point of a scientific process is the publication of its results in a journal which is the golden standard of accuracy in evidence-based medicine. This allows investigators to share their results with the scientific community, promoting recent discoveries and changing the clinical practice<sup>1</sup>.

This study aimed at determining the publication rate in peer-reviewed journals of abstracts presented during the 9<sup>th</sup> Brazilian Congress on Pain, analyzing key-features of published articles. There are no similar data in the literature about this area of knowledge.

#### **METHOD**

All papers accepted for the 9th Brazilian Congress on Pain, held in 2010 in the city of Fortaleza, Ceará, Brazil, were included in this study<sup>2</sup>. From 348 papers, 121 (34.77%) were presented as free papers and 227 (65.22%) as posters. A broad search via computer script was carried out using Scielo, Medline/Pubmed, LILACS and Academic Google databases, using the complete abstract title as search variable. For each article found, a manual check was performed and the published material should have at least one author. Additionally, the Lattes platform was searched using the first author, or the second author if the first was not available, as search variable. This step aimed at minimizing the chance of articles published in non-indexed journals is missed by this analysis. Search limit date was March 01, 2012. The interval between presentation and publication was calculated for each item. Search was carried out from January to March 2012.

The following information was extracted from each published paper: journal name, publication year, language, original institution, category of the article, authors and coauthors. If there were major changes, such as change of coauthors and significant title changes, papers were classifled as modified. We have also classifled in national and international papers, and peer-reviewed or not peer-reviewed journals.

Data were analyzed by Microsoft Excel 2010 (Microsoft, Redmond, WA, USA) and SPSS for Windows v.

20.00 (IBM, Armonk, NY, USA). This is a retrospective study with descriptive statistics.

Results are shown as percentages and, whenever necessary, a 95% confidence interval was adopted using Fisher Exact test

## **RESULTS**

From 348 papers presented during the 9<sup>th</sup> Brazilian Congress on Pain, 31 (8.90%) were published; 14 (45.16%) published papers were presented as free papers, and 17 (54.83%) were presented as posters.

Most papers were developed by Brazilian institutions (90.32%) and 64.51% were published in Portuguese. The others were published in English.

Articles were published in 21 scientific journals, however 32.25% were published by *Revista Dor.* Journals are listed in table 1. All analyzed journals are peer-reviewed as editorial definition.

Table 1 – Scientific journals which have published the studies presented during the 9th Brazilian Congress on Pain.

Journals	Number of Published Articles
Revista Dor	11
The Journal of Pain	2
Revista Ciência & Saúde	1
Current Drug Therapy	1
Arquivo Neuro-Psiquiatria	1
Fitoterapia	1
Journal of Clinical Nursing	1
Journal of Clinical Oncology	1
Journal of Pain and Symptom Management	1
Neurochemistry International	1
Pain	1
Pharmacology Biochemistry and Behavior	1
Revista Brasileira de Reumatologia	1
Revista de Odontologia Clínico-Científica	1
Revista Paulista de Odontologia	1
Revista Brasileira de Anestesiologia	1
Revista Brasileira de Atividade Física e Saúde	1
Revista Brasileira em Promoção da Saúde	1
Revista Cubana de Estomatologia	1
Revista da Escola de Enfermagem da USP	1
Revista Latino-Americana de Enfermagem	1

Most common category was original article (83.87%), followed by case reports (9.67%) and literature review (6.45%).

From all published articles, 13 (41.9%) had some change with regard to the abstract submitted to the congress. Most common change was coauthors change, adding or removing participations. Next, in frequency order, was more significant title change.

Mean time between Congress date and publication was  $6.7 \pm 3$  months with median of 6.9 months; however 11 papers had already been published before the congress.

#### DISCUSSION

Scientific meetings are critical to spread researches and studies and to update professionals. They are also important for career progression and evaluation in the Brazilian academic scenario. Some papers indicate that the level of publications related to a scientific event is a good indicator of its quality<sup>3</sup>, although there are reservations regarding the use of a single indicator. Several other studies have already investigated the percentage of publications related to scientific meetings in other areas<sup>4,5</sup>.

Our study has determined the rate of published articles as from abstracts of the 9<sup>th</sup> Brazilian Congress on Pain, which was 8.9%. A similar percentage, 6.32%, was found<sup>6</sup> by a recent Brazilian study. These rates are well below the mean of international papers, which have reached publication rates of up to 62.3%<sup>7</sup>.

Most papers were published in the year following the scientific event, similar to other events already evaluated by the literature. However, our sample has identified relatively old papers from 2006, still being presented in the 2010 Congress, which is unusual in other similar searches. In addition, a relatively high rate of 35.48% was found for the presentation of already published scientific papers.

In spite of the common sense that the best abstracts sent to congresses are considered for oral presentation<sup>8</sup>, our study has not found statistically significant publication differences between one or another presentation method (p = 0.069) since 11.57% of free papers and 7.48% of posters were published.

A study has interviewed authors attending the Annual Meeting of the American Academy of Orthopaedic Surgeons about the publication of papers presented at the meeting. From all respondents, 39.7% had published their articles, 7% had their articles being reviewed, 35.7% had never submitted their articles for evaluation

and 16.1% had their articles rejected for publication. Some of the reasons for the non-publication were: lack of time to prepare the text, study in progress, coauthor in charge of preparing the article, non-cooperative coauthor and publication is not a priority, among others. Other studies<sup>10,11</sup> have mentioned additional reasons, such as low confldence in the quality of the article, study design inadequate for publication and the existence of already published articles with similar results. We have not interviewed authors who had not published because these data are well consolidated in the literature<sup>12</sup>.

Although the presentation of a paper during a scientific meeting is well accepted, has a good timing profile and represents well the conclusions of the study, the publication of such data in scientific journals represents a permanent and accessible way to reward a scientific process.

There are several limitations for a study such as this<sup>13</sup>. We have identified the short term between the event and the research. However, studies have shown that two years later, the publication rate is dramatically decreased<sup>14</sup>. It is important to highlight that only accepted papers were analyzed since papers being reviewed were not considered.

We have also assumed that every published article is related to one abstract of the scientific event. However, many studies may have been published as just one article or, as opposed, many articles may have been produced as from a single research. Last but not least, an additional limitation is the lack of updates or the absence of resumes in the Lattes platform. Some resumes are not updated for more than two years, which may have impaired the identification of articles not indexed in the searched databases.

In spite of the limitations inherent to the proposed study design, we hope that this study contributes to the awareness efforts and encourage authors and participants of future events to publish their studies.

# CONCLUSION

We have found 8.9% publication rate of papers presented during the 9<sup>th</sup> Brazilian Congress on Pain, being 83.87% original articles, of which 64.5% were published in Brazilian journals, with a mean publication time of 6.7 months after the scientific meeting. This percentage is well below the international mean and this shows that one should encourage the community to publish their papers, since this is the best way to expose their studies and opinions to the scientific world.

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