Full-text publication of abstracts presented at meetings of a Latin American scientific society

Manuela Dicembrino, M.D.[a], *Mariana Anderson, M.D.*[a], *Ana Gabriela Vely, M.D.*[a], *María Fabiana Ossorio, M.D.*[a] *and Fernando Ferrero, M.D.*[a]

ABSTRACT

Objective. To estimate the proportion of abstracts presented at meetings of the Latin American Society for Pediatric Research that are fully-published, to describe the reasons for not publishing papers, and to assess the impact of funding on the publication rate.

Methods. Abstracts presented at meetings held between 2005 and 2009 were included. Authors were contacted and invited to take a survey on the publication of their work or the reasons not to do it.

Results. Information was collected on 232 (71.4%) of the 325 abstracts presented. Of these, 58.6% were fully-published (136/232). Funded studies (40.0%) had more chances of publication (OR: 2.2; 95% CI: 1.2-3.9). "Lack of time" was the most common reason for failure to publish (35/96).

Conclusion. 58.6% of abstracts presented at meetings of the Latin American Society for Pediatric Research, were published as full-text articles; lack of time was the most common reason for failure to publish. Funded research had more chances of being published.

Key words. *medical bibliography, periodic publications, research report.*

INTRODUCTION

Research process can be considered finished only when its results are subject to the scientific community's scrutiny. Both the relevance of publication in relation to the dissemination of knowledge and the moral obligation of publishing any and all research results that could benefit societies are beyond dispute. Moreover, not publishing results of valid investigations may contribute to sustaining or even worsening "publication bias."[1]

Scientific societies are the ideal setting for the initial presentation of research. However, not many of the abstracts presented at conferences are actually subsequently published.[2]

In general, not more than 50% of abstracts presented at medical meetings are published as a full-text article.[3]

In Latin America, the Latin American Society for Pediatric Research (Sociedad Latinoamericana de Investigación Pediátrica, SLAIP) has encouraged local scientific production for the past 50 years, but there are no data on the proportion of abstracts presented at its meetings that are subsequently fully-published.

The objective of this article is to estimate the proportion of abstracts presented at the SLAIP's annual meetings that were subsequently published in scientific journals; to describe the most common reasons for not publishing them; and to assess how funding impacts the publication rate.

MATERIAL AND METHODS

This was an observational study that included all articles presented at the SLAIP's annual meetings held between 2005 and 2009. One of the authors of each study was identified and contacted (by e-mail, telephone or in person) and invited to complete a brief survey (initially, the first listed author was contacted; if contact was unsuccessful, the author listed in the last place was contacted; and then any other author). Surveys were closed and self-administered (see *Annex*). One survey was sent for each abstract, even if one person was the author of more than one article.

A valid publication was defined as a publication in a renowned periodic scientific journal with an international standard serial number (ISSN). The accuracy of data collected on publications was verified and contrasted with the Medline and Lilacs databases or, if not possible, with each specific publication.

Analysis: Survey data were adequately registered and identifiable data were left out. Categorical outcome measures were expressed as percentages with 95% confidence intervals

a. Department of Teaching and Research, Hospital General de Niños Pedro de Elizalde, Buenos Aires.

E-mail Address:
Fernando Ferrero, M.D.: fferrero@intramed.net

Conflict of Interest: None.

Received: 6-3-2014
Accepted: 7-21-2014

(CI). The association between proportions was assessed using a chi squared test. A value of $p < 0.05$ was considered significant.

Ethical considerations: The survey included information regarding consent. Data analysis left out any personal data. Authorization was obtained from the institutional committees of Hospital General de Niños Pedro de Elizalde, institution where researchers work. The study was registered at the Research Public Registry of the Ministry of Health of the City of Buenos Aires under number 32/13.

RESULTS

In the study period (2005- 2009), 325 abstracts were presented, the authors of 263 (80.9%) were contacted, and information was obtained on 232 (71.4%) (*Table 1*).

Abstracts were from 11 countries (*Table 2*).

Only 58.6% (95% CI: 52-65) of abstracts were fully-published (136/232). In all cases, bibliographic references were checked for veracity. Of those finally published, 90 were included in journals indexed in Medline; 74, in Lilacs; and 48, in both databases (*Table 2*).

Table 1. *Abstracts presented at five meetings of the Latin American Society for Pediatric Research*

Year	Meeting	Country	City	Abstracts
2005	XLIII	Brazil	Ribeirao Preto	86
2006	XLIV	Argentina	Bariloche	57
2007	XLV	Chile	La Serena	56
2008	XLVI	Peru	Urubamba	60
2009	XLVII	Paraguay	Asuncion	66
Total				325

Of the 232 analyzed abstracts, 92 (39.6%) indicated to have received funds, 78 were state-funded while 14 were privately-funded. The highest number of funded studies was found in Chile (59.0%) (*Table 3*).

Studies with some sort of funding had more chances of being published than those that received no funds (69.5% versus 51.4%, $p = 0.006$; OR: 2.1; 95% CI: 1.2-3.7).

Of the 96 abstracts that were not published, information on the reason was obtained for 66; lack of time was the most common reason (n = 35) (*Table 4*).

DISCUSSION

Our study shows that nearly 60% of abstracts presented at the SLAIP's meetings were subsequently fully-published in scientific journals.

Although the proportion of abstracts presented at scientific meetings that are published is highly variable, a review on this subject that combined data from 79 reports (29 729 abstracts) estimated an average publication rate of 44.5%.[3]

Such rate may be higher in meetings held in the Northern Hemisphere, particularly in relation to certain specialties.

In pediatrics, publication rates range between 45% and 60%.[4,5] Although there is little information on this subject in Latin America, publication rates appear to be noticeably lower: 25.5% in Chile (gastroenterology),[6] 11.3% in Argentina (pediatrics),[7] and 26.6% in Brazil (orthopedics).[8]

Such difference with other meetings in this region is probably related to the characteristics of the SLAIP and its attendees. On one hand, no case reports, case series or reports on professional experience are accepted by the SLAIP. On the

Table 2. *Abstracts presented at five meetings of the Latin American Society for Pediatric Research and those fully-published, by country and index*

Country	Presented	%	Analyzed	%	Published	%	Medline	%	Lilacs	%	Both	%
Argentina	92	28.3	88	37.9	56	63.3	38	66.7	36	63.2	25	52.1
Bolivia	4	1.2	2	0.8	1	50.0	1	100.0	0	0.0	0	0.0
Brasil	74	22.8	36	15.5	24	66.7	19	79.2	18	75.0	14	17.6
Chile	79	24.3	56	24.1	37	66.1	30	81.1	13	35.1	8	16.7
México	10	3.1	8	3.4	4	50.0	0	0.0	0	0.0	0	0.0
Perú	43	13.2	32	13.8	9	28.1	3	33.3	6	66.7	1	2.1
Paraguay	14	4.3	8	3.4	3	37.5	0	0.0	1	33.3	0	0.0
Otros	9	2.7	2	0.9	2	100	0	0.0	0	0.0	0	0.0
	325		232		136	58.6	90	66.1	74	54.4	48	35.2

other hand, in general, meeting attendees are clearly devoted to research. It is known that the ultimate goal for professionals who work on research is to have their studies published.

Only 40% of researchers indicated to have received some sort of funding. In spite of the slight differences by country, this value reflects a regional reality: there is limited financial support for investigations. Spending on innovation and development (2000-2005) in this region's countries ranges from 0.1% (Peru) to 0.6% (Chile) of the GDP,[9] compared to 1.13% in Spain.[10] It should be noted that most of the investments are made by the government, ranging from 72% in Argentina to 53% in Brazil, versus the 31% provided by the United States government.[11]

Notwithstanding the preceding, it is clear that having received funds increases the chances of having research results fully-published.[12]

Although our study included only those abstracts presented at five of the SLAIP's meetings, we were able to have enough abstracts to reasonable estimate an accurate publication rate. In addition, the period selected for our study allowed surveyed authors to easily recall abstracts involved and a sensible time for reaching publication considering that the average time is usually not less than two years.[13]

Even though data of abstracts whose authors did not participate in our study were not analyzed, the high response rate makes a significant bias unlikely. Abstract quality was not analyzed either; we only considered publication in journals indexed in Pubmed and Lilacs as an indirect indicator of said quality.

Other studies on this topic were also based on Pubmed searches for abstracts presented at scientific meetings, so it was possible to underestimate their publication rate for considering only one source of data. We decided to contact authors and then check the different databases for information accuracy.

In spite of the evidence indicating that biomedical research has significantly improved over the past 15 years,[9] our study does not allow for a regional extrapolation because it is limited to a particular specialty, with a majority participation in the SLAIP by Argentina, Brazil and Chile.

In our study, lack of time was indicated as the main reason for failure to publish (53%). Even in a sensitive subject matter as that of large, controlled clinical trials in oncology, lack of time was referred as the main reason for not publishing the study.[14] This underscores

the importance of considering this aspect during research planning, including a schedule for writing the manuscript and for publishing management. Not publishing results is a continuous concern in the academic field, where strategies have even been developed to attempt to increase the publication rate, but there is no substitute for personal drive and commitment.[15]

To um up, 58.6% of abstracts presented at meetings of the Latin American Society for Pediatric Research were fully-published. Studies that had received some sort of funding had more chances of being published. Lack of time was the most commonly referred reason for not publishing them.■

TABLE 3. *Funding of research whose abstracts were presented at meetings of the Latin American Society for Pediatric Research (2005-2009), by country and source of funding*

	Total	Funded	%	Public	Private
Argentina	88	35	39.3	28	7
Bolivia	2	1	50.0	0	1
Brasil	36	13	36.2	12	1
Chile	56	33	59.0	31	2
México	8	1	12.5	0	1
Paraguay	8	2	25.0	1	1
Perú	32	7	21.9	6	1
Venezuela	2	0	0.0	0	0
Total	232	92	39.6	78	14

Table 4. Reasons for not publishing abstracts presented at scientific meetings as full-text articles

Reason	n
Lack of time	35
Insufficient sample size	5
Disagreement among authors	4
Pessimism regarding publication	3
Rejection	3
Results considered not significant	2
Lack of interest	1
Other articles showing similar results	1
Others	12
Total	66

Acknowledgments

To Carlos Castillo Durán, M.D., for making a critical review of the manuscript and for his continuous devotion to the advancement of pediatric research.

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ANEXX. *Survey used to assess the publication of abstracts presented at the meetings of the Latin American Society for Pediatric Research*

Survey

Assessment of scientific publication of abstracts presented at the SLAIP

Dear Colleague,

You are hereby invited to participate in a study on the publication of scientific abstracts presented at the meetings of the Latin American Society for Pediatric Research. As you might know, although desirable, the number of scientific papers presented at conferences that are subsequently actually published in full is limited. To estimate our scientific output and eventually identify factors that may hinder publication will help us design strategies to overcome such hurdles. You are being contacted because you presented an abstract at one of the SLAIP's meetings. Your participation in this survey is voluntary. Your personal data will be conveniently left out from the information required for the study so that your identity is kept confidential. By completing this survey you are giving your consent to participate in the study.

Thank you!

Abstract title:

Year of presentation at the SLAIP:

Please, mark with an "X" the corresponding answer.

1) Was your project funded?
   Public funds:
   Private funds:
   No:

2) Was your project published in a scientific journal?
   Yes (including press):
   No:

   If "Yes," provide the authors' names, the study title, the journal, volume, page, year (as if quoting a bibliographic) :.....
   .....
   .....

   If "No," what do you think is the most important reason why your research was not published? (select only one answer).
   ☐ Lack of interest
   ☐ Lack of time
   ☐ Disagreement among authors
   ☐ Other studies with similar or contradictory results
   ☐ You considered that results were not significant
   ☐ Insufficient sample size
   ☐ Problems with the statistical analysis
   ☐ Pessimism among authors regarding acceptance for publication
   ☐ Problems with funding
   ☐ Not accepted for publication
   ☐ Other reasons