### **ORIGINAL ARTICLES**

## Assessment of the Scientific Impact of Presentations at Spanish National Dermatology and Venereology Congresses From 2000 Through 2003

#### M.P. García-Mureta and R.M. Pujolb

<sup>a</sup>Servicio de Dermatología, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain <sup>b</sup>Servicio de Dermatología, Hospital del Mar, IMAS, Barcelona, Spain

Abstract. Introduction. The percentage of presentations at congresses that are later published is a measure of the scientific impact of these meetings. Our objective was to investigate how many studies presented in 4 Spanish national conferences (2000-2003) had been published in Spanish and international biomedical and dermatology journals, with or without an impact factor.

Material and methods. A search for publications in international indexed journals (using PubMed) or publications in unindexed Spanish journals (using Dermabase/Índice Médico Español) was undertaken by the name of first author, the first and last author, and the key words of the article.

Results. Of a total of 1471 scientific presentations, only 200 (13.5%) were published (118 in Spanish journals and 82 in international ones); that is, 1271 studies (86.5%) were not published either in a Spanish or an international journal.

*Conclusions*. We found a low impact in terms of the publication rate for abstracts presented in 4 consecutive Spanish National Dermatology and Venereology Congresses compared to the rate of publication for other dermatology meetings such as the British Association of Dermatologists Annual Meeting.

Key words: publication, presentation, investigation, quality, impact factor.

# VALORACIÓN DEL IMPACTO CIENTÍFICO DE LAS COMUNICACIONES PRESENTADAS EN EL CONGRESO NACIONAL DE DERMATOLOGÍA Y VENEREOLOGÍA (AÑOS 2000-2003)

Resumen. *Introducción*. El porcentaje de publicación de las comunicaciones presentadas en los congresos es una medida del impacto científico de estas reuniones. Nuestro objetivo fue el conocer cuántos de los trabajos presentados en cuatro congresos nacionales (2000-2003) habían sido publicados en revistas científicas médicas y dermatológicas nacionales o internacionales, con o sin factor de impacto.

*Material y métodos*. Se realizó una búsqueda como publicación internacional indexada (PubMed) o nacional no indexada (Dermabase/Índice Médico Español) incluyendo el nombre del primer autor, o del primero y el último, y las palabras clave del título.

Resultados. De un total de 1.471 comunicaciones científicas presentadas, sólo fueron publicados un total de 200 trabajos (13,5 %) (118 nacionales y 82 internacionales), lo que significa que un total de 1.271 trabajos (86,5 %) no dieron lugar a ninguna repercusión escrita nacional o internacional.

Conclusiones. Hallamos un factor de impacto bajo en cuanto al índice de publicación de los resúmenes presentados en cuatro Congresos Nacionales de Dermatología y Venereología consecutivos, en comparación con la proporción de publicación de otras reuniones dermatológicas, como la reunión anual de dermatólogos del Reino Unido.

Palabras clave: publicación, presentación, investigación, calidad, factor de impacto.

Correspondence:
M.ª Pilar García Muret.
Servicio de Dermatología
Hospital de la Santa Creu i Sant Pau
C/ Sant Antoni M.ª Claret 165
08025 Barcelona, Spain
mgarciam@santpau.es

Manuscript accepted for publication July 7, 2008.

#### Introduction

Presentations at national and international conferences and other scientific meetings are an excellent way to share the findings of medical research, and the percentage of presentations that are later published can provide a useful measure of the impact of such meetings. Researchers have

measured the rates of publication after a wide range of scientific events in various countries and specialties, <sup>1-28</sup> among them urology, pediatrics, orthopedics, ophthalmology, cardiology, and others. The only assessment following a dermatology conference we are aware of, however, was one recently published by British authors.<sup>2</sup>

Our objective was to illustrate the scientific impact of the main Spanish national conference for dermatology by determining the percentage of presentations at national meetings held from 2000 through 2003 that led to papers published in either Spanish or international journals (with or without an impact factor).

#### **Material and Methods**

Abstracts of all scientific presentations at the Spanish National Dermatology and Venereology Congresses held from 2000 through 2003 were reviewed; these included oral presentations (both peer-reviewed and unreviewed), case presentations, and posters. A search for internationally indexed publications was performed in PubMed. National publications were searched for in the Dermabase database and on the Spanish medical index (Índice Médico Español [IME]). Search terms were the surname of the first author or the first and last authors, and words in the titles. If first and second surnames were linked with a hyphen, both were entered into the search box. Dermabase is a database of articles published between 1909 and 1999 in Actas Dermo-Sifiliográficas, the journal of the Spanish Academy of Dermatology and Venereology. The IME was launched in 1965 to provide a means for indexing the scientific literature in Spanish and retrieving documents. Since then the IME has been maintained by the Center for Biomedical Documentation and Information in Valencia, Spain.

The searches were undertaken during the first quarter of 2006. Information gathered included type of presentation (peer-reviewed oral presentation, unreviewed oral presentation, case presentation, or poster), journal of publication, type of article (original research article, case

report, brief case notes, or letter to the editor), and the publishing journal's impact factor for 2004. We also analyzed the hospitals where the papers originated, categorized by Spanish autonomous community.

#### Results

Only 200 papers were published in relation to a total of 1471 scientific presentations at the Spanish National Dermatology and Venereology Congresses from 2000 through 2003 (13.5% of the conference abstracts); 118 were found in national journals and 82 in international ones. That publication rate means that 1271 studies (86.5%) had no impact on either the national or international literature (Table 1).

Scientific presentations in 2000 gave rise to 27 publications in national journals (7.2% of a total of 372 presentations); 34 were generated by 2001 presentations (8.9% of a total of 379), 30 by 2002 presentations (8.4% of 356), and 27 by 2003 presentations (7.6% of 364). Of papers published in international journals, 21 were based on presentations given in 2000 (5.6%), 21 given in 2001 (5.5%), 26 given in 2002 (7.3%), and 14 given in 2003 (3.8%) (Figure 1). The mean impact factors of the publishing journals were 2.649 (for presentations at the 2000 meeting), 2.593 (for 2001 presentations), 1.633 (for 2002), and 2.202 (for 2003).

For all years (2000-2003), by type of conference presentation, publications emerged from 9 out of 28 peer-reviewed presentations (7 in national journals, 2 in international ones), 15 out of 93 non-peer-reviewed presentations (5 in national journals, 10 in international ones), 44 out of 260 case presentations (22 in national journals, 22 in international ones), and 133 out of 1090 posters (82 in national journals, 51 in international ones) (Table 2).

The national journals publishing the largest numbers of studies were, in this order, *Actas Dermo-Sifiliográficas* (with 90 papers), *Piel* (17), and *Medicina Cutánea Íbero-Latino-*

Table 1. Spanish National and International Publications Based on Presentations at Spanish National Dermatology and Venereology Congresses (2000-2003)

Year	No. of Presentations	No. of National Publications (% of Total)	No. of International Publications (% of Total)	Mean Impact Factor for 2004
2000	372	27 (7.2%)	21 (5.6%)	2.649
2001	379	34 (8.9%)	21 (5.5%)	1.593
2002	356	30 (8.4%)	26 (7.3%)	1.633
2003	364	27 (7.6%)	14 (3.8%)	2.202
Total 2000-2003	1471	118 (8.0%)	82 (5.5%)	2.019

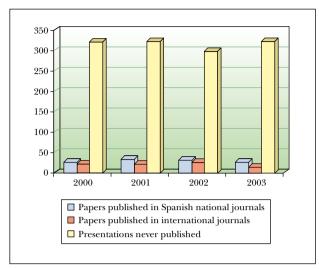


Figure 1. Bar chart showing the percentages of each year's conference presentations that led to papers published in Spanish national journals, in comparison with the percentages published in international journals or not published.

Americana (6) (Figure 2). The international journals publishing the most papers were Journal of the European Academy of Dermatology and Venereology (13), British Journal of Dermatology (10), Acta Dermato-Venereológica (8), Journal of the American Academy of Dermatology (5), and Contact Dermatitis (6) (Table 3).

Thirty-two of the 118 articles published in Spanish journals were original research papers, 41 were case reports, and 45 were brief case notes or letters to the editor (published without abstracts).

Twenty-nine of the 82 articles published in international journals were original research papers, 17 were case reports, and 35 were brief case notes or letters to the editor (without abstracts) (Table 4).

Finally, Table 5 shows publications categorized by Spanish autonomous community and hospital affiliation. Most publishing authors worked in hospitals in Madrid (59 in total); 13 of their publications were original research papers (22%), 19 were case reports, and 27 were brief case notes or letters to the editor. The next largest regional source was Catalonia, with a total of 51 publications; 22 were original research papers (43%), 11 were case reports, and 19 were brief case notes or letters to the editor. The third most productive community was Valencia with 16 published papers. Valencia was followed by Andalusia and Galicia, with 14 papers each.

#### **Discussion**

Yearly scientific conferences allow participants to present the results of research and exchange ideas relevant to their

**Table 2.** Summary of Publications, by Year and Type of Conference Presentation

Year	2000	2001	2002	2003	Total
Peer-reviewed presentations	0	10	10	8	28
National journals	0	3	2	2	7
International journals	0	1	0	1	2
Non-peer-reviewed presentations	42	20	17	14	93
National journals	1	2	1	1	5
International journals	3	3	3	1	10
Case reports	60	71	72	57	260
National journals	5	7	6	4	22
International journals	6	6	7	3	22
Posters	270	278	257	285	1.090
National journals	21	20	21	20	82
International journals	12	14	16	9	51

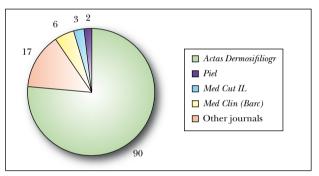


Figure 2. Distribution of papers published in Spanish national iournals.

areas of interest. Research is not formally considered part of the body of scientific knowledge, however, until it is finally published in a scientific journal, usually one that has a demanding editorial board that sends papers to qualified peer reviewers for critical appraisal. The percentage of conference presentations that generate publications is considered a measure of a meeting's quality. Most articles are published within 1 to 3 years after presentation at a scientific conference.

We found that 13.5% of the presentations at 4 consecutive Spanish National Dermatology and Venereology Congresses were published, with 8% appearing in national journals and 5.5% in English-language international journals. Similar publication rates were found for all the years covered by our study, with the exception of a lower rate of international publication detected for the 2003 conference, probably because less time had elapsed. The rates we report are low in comparison with the rate

Table 3. Papers Published in International Journals Since 2000 (Ranked According to Number of Articles Published)

Journals	2000	2001	2002	2003	Total	Impact Factor for 2004
J Eur Acad Dermatol	0	2	5	6	130	1.401
Br J Dermatol	4	1	3	2	100	2.445
Acta Derm Venereol	1	2	4	1	8	1.585
Arch Dermatol	1	2	0	2	5	3.187
Contact Dermatitis	2	0	3	0	5	1.716
JAAD	1	1	3	0	5	2.358
Clin Exp Dermatol	0	1	2	1	4	1.149
Eur J Dermatol	2	0	1	0	3	0.908
J Invest Dermatol	1	1	0	1	3	4.238
Pediatric Dermatol	2	1	0	0	3	0.783
AIDS	0	1	1	0	2	5.893
Dermatol Surg	0	1	1	0	2	2.137
Dermatology	1	1	0	0	2	1.619
Int J Dermatol	1	1	0	0	2	0.884
J Cutan Pathol	1	1	0	0	2	1.182
Allergy	0	1	0	0	1	3.496
Am J Dermatopathol	0	0	1	0	1	1,337
Anticancer Res	1	0	0	0	1	1.395
Clin Dermatol	0	1	0	0	1	0.708
Clin Microbiol Infect	1	0	0	0	1	2.361
Dermatitis	0	1	0	0	1	No
Eur J Intern Med	0	0	1	0	1	No
Exp Dermatol	0	0	1	0	1	1.707
Haematologica	0	0	0	1	1	4.192
J Dermatol	1	0	0	0	1	0.66
J Dermatol Treatment	0	1	0	0	1	No
Lupus	1	0	0	0	1	1.942
Med Res	0	1	0	0	1	1.286
Total	21	21	26	14	82	

described for another dermatology meeting (the British Association of Dermatologists Annual Meeting, for which the publication rate was 51%<sup>2</sup>). A review of the literature by means of PubMed, Dermabase, and the IME, using search terms such as *publication type*, *publication rate*, and

Table 4. Summary of Papers in Spanish National and International Journals by Type of Publication (Letters/Brief Case Notes/Short Reports vs Case Reports and Original Research Articles) in the Years Studied

	2000 2001 2002 2003
Papers appearing in Spanish national journals, by publication type	
Letters/Brief Case Notes/ Short Reports	19/27 7/34 11/30 9/27
Case reports	5/27 17/34 9/30 9/27
Original research articles	3/27 10/34 10/30 9/27
Papers appearing annually in international journals, by publication type	
Letters/Brief Case Notes/Short Reports	9/21 7/21 13/26 7/14
Case reports	7/21 5/21 3/26 2/14
Original research articles	5/21 9/21 10/26 5/14

scientific impact, found no other studies of the impact of dermatology meetings.

Although there are limitations to comparisons that can be made between different settings and specialties, we have noted that the figures from our study are lower than the rate of 17% reported for the 1992 Congress of the Spanish Association of Anesthesia and Recovery Care (SEDAR).<sup>3</sup> Clearly higher rates have been found for international conferences, such as the annual meetings of the American Urological Association (37%),<sup>1</sup> the American Academy of Pediatric Orthopedics (45%),<sup>4</sup> the European Society of Anaesthesiologists (42.2%),<sup>5</sup> and other American meetings in specialties such as cardiology (50%),<sup>6</sup> and ophthalmology (66%)<sup>7</sup> (Figure 3).

It is important to note that the scope of a meeting (regional, national, or international) and its characteristics (reflecting a medical specialty or particular diseases) bear a clear relationship to the percentage of presentations that generate scientific papers. The publication rate of 2.3% reported by Cuellar and coworkers<sup>8</sup> after the Castile-La Mancha Primary Care Congress of 2003 is well below the one reported for the aforementioned conference of SEDAR<sup>3</sup> and also lower than the ones we report. Similarly, more papers are published after European conferences than national meetings. We might speculate that the criteria for acceptance for local conferences are more lenient and that many reports of single cases never give rise to published papers. It is also evident that publication rates are clearly higher after conferences conducted in English. <sup>9-23</sup>

Table 5. Papers Published, by Authors' Hospital Affiliation and Spanish Autonomous Community

Autonomous Community Hospital	2000		2001			2002	2003	
Total Number of Published Papers	National	International	National	International	National	International	National	Internationa
Andalusia								
Cadiz	-	-	-	-	-	-	OR	-
Granada	2 N	-	N	-	N	-	OR	_
Malaga	_	-	_	-	OR	-	С	_
Seville	-	-	-	С	C, OR	С	N	С
Total: 14; 4 OR, 5 C, 5 N								
Aragon								
Saragossa	С	-	С	-	3 N, C	-	-	-
Total: 6:3 C, 3 N								
Asturias								
Oviedo	C, OR	-	-	N	-	-	-	-
Total: 3; 1 OR, 1 C, 1 N								
Balearic Islands	N	-	-	-	_	N	-	-
Total: 2 N								
Canary Islands								
Lanzarote	_	_	С	_	_	-	С	_
Las Palmas	_	_	_	_	_	OR	-	_
Tenerife	OR	-	_	-	_	OR	-	-
Total: 5; 3 OR, 2 C								
Castile-La Mancha								
Ciudad Real	-	-	_	-	_	-	OR	_
Toledo	-	-	_	-	_	-	С	_
Total: 2; 1 OR, 1 C								
Castile and Leon								
Salamanca	-	-	2 C	-	_	-	-	_
Valladolid	2 N	-	_	-	C, N	-	OR, N	_
Total: 8; 1 OR, 3 C, 4 N								
Catalonia								
Bellvitge	-	N	N	-	OR	-	2 OR, C	OR, N
Clínico	-	2 N, C	С	3 OR, C, N	_	OR, 2 N, C –	OR, N	
Del Mar	-	-	_	OR, N	_	_	_	OR, 2 N
Germans Trias i Pujol	-	-	OR	OR	_	2 OR	_	_
Mutua de Tarrasa	-	N	С	_	_	-	_	_
Sabadell	_	-	_	-	_	_	_	N
Santa Creu i Sant Pau	N	N, C	C, OR	N	_	2 OR, N	С	OR
Sagrat Cor	OR		C, OR	_	_	OR	_	_
Trueta (in Girona)	_	_	N	-	_		_	_
Vall d'Hebron		С						

**Table 5.** Papers Published, by Authors' Hospital Affiliation and Spanish Autonomous Community (*Continued from previous page*)

Autonomous Community Hospital	2000			2001		2002		2003
Total Number of Published Papers	National	International	National	International	National	International	National	Internationa
Extremadura								
Badajoz	2 N	-	-	-	N, OR	-	-	-
Total: 4; 1 OR, 3 N								
Galicia								
Orense	-	-	С	-	-	_	-	-
Pontevedra	N	-	-	-	-	-	N	-
Santiago de Compostela	С	N	С	2 C	С	OR, C	N	С
Vigo	_	-	_	_	С	-	_	_
Total: 14; 1 OR, 9 C, 4 N								
Madrid								
Clínica Ruber	N	-	-	-	-	-	-	-
Clínico San Carlos	_	-	C, N	_	OR	-	N	-
12 de Octubre	С	OR	OR, 3 C	С	2 OR, N	3 N	OR	_
Fundación Jiménez Díaz	_	-	С	С	_	-	_	_
Fundación Alcorcón	_	-	OR	_	_	-	OR, C	_
Gregorio Marañón	N	-	C, N	N	_	С	_	
La Paz	2 N	N	2 C, 2 N	-	OR, N, C	C, N	_	
La Princesa	N	OR, C	OR	С	С	3 N	_	N
Puerta de Hierro	_	N	-	-	_	-	_	_
Ramón y Cajal	-	OR, C	-	OR, 2 N	N	-	N	_
Total: 59; 13 OR, 19 C, 27	N							
Murcia	2 N	-	OR	_	_	-	_	_
Total: 3; 1 OR, 2 N								
Navarra								
Pamplona	-	OR	-	OR	-	2 N	OR, N	OR
Total: 7; 4 OR, 3 N								
Basque Country								
Bilbao	-	-	OR	C, N	С	-	-	С
Total: 5; 1 OR, 3 C, 1 N								
Valencia								
Alicante	N	2 N	-	-	2 E	-	N	-
Valencia Clínic	N, C	С	OR	-	_	N	-	-
Valencia General	_	_	_	-	OR	OR	С	-
Dr. Peset	N				N	N		

 $Abbreviations: C, case \ report; \ N, \ brief \ case \ note \ or \ letter; OR: original \ research \ article; -: \ no \ published \ papers.$ 

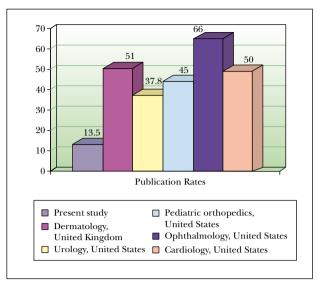


Figure 3. Bar chart comparing the rate of publication detected in our study to those reported for annual dermatology meetings in the United Kingdom, and meetings in urology, pediatric orthopedics, ophthalmology and cardiology in the United States.

Various factors can account for a low rate of publication. The first would be authors' lack of time for publishing results if clinical practice takes priority over publication (the balance of clinical practice, teaching, and research). Dickersin and coworkers<sup>24</sup> concluded that lack of time for manuscript preparation is the main reason why presentations do not lead to articles. Another important factor is language difficulty and the fact that there is still no dermatology journal in the Spanish language that is included in the *Journal Citation Reports* (based on the Science Citation Index); therefore, none has an impact factor. This situation may lead to a loss of potential authors for national journals.

Sprague et al<sup>25</sup> and Von Elm et al<sup>26</sup> analyzed the reasons why conference presentations do not become published papers, finding that most authors cite lack of time; other reasons are that the study is still in progress (31%), that publication has low priority (21%), that another author is responsible for the manuscript (19.7%), that problems developed with coauthors (16.9%), and that results were negative (3%). Von Elm and coworkers pointed out that in most cases failure to publish is the result of authors never sending manuscripts rather than journals rejecting them. The usual reasons for not accepting a paper are that it does not offer new knowledge, the methods and results are unclear, or the statistical methods used are inappropriate. 18 Another factor would be that while authors might receive funding to attend conferences, especially while in training, this incentive is not available to support the writing of a paper.<sup>24</sup>

Although the fundamental purpose of the national meeting on dermatology is to provide continuing

professional development opportunities during a specialist's years in training and afterwards, it must be recognized that subsequent publication of presentations represents an important indicator of conference quality. Given that most presentations (up to 90%) at the Spanish national dermatology conferences are reports of single cases or small series, and that multicenter studies, or those organized or coordinated by groups are few, even rare, it would be difficult for the authors to publish them in journals with high impact factors. The studies with the highest rates of acceptance are those with positive results, with large numbers of patients, involving several centers, or from university teaching hospitals.<sup>26</sup>

Our study supports that pattern, given that most publications are generated in the communities of Madrid and Catalonia, where most university hospitals are located.

We did not contact each author personally to ask about the future publication of the presentation, and this is a limitation of our study. Additionally, the data were obtained from online databases and, therefore, only include papers that had already been published.

We are not aware of reports, prior to this paper, that have evaluated the scientific impact of presentations at Spanish National Dermatology and Venereology Congresses. We believe that the data we report may be useful for future scientific committees. Members of such committees may wish to adopt stricter screening criteria and encourage the presentation of series of several patients and multicenter studies in order to achieve greater impact on the international scientific literature.

#### **Conflict of Interest**

The authors declare they have no conflicts of interest.

#### References

- Ng L, Hersey K, Fleshner N. Publication rate of abstracts presented at the annual meeting of the American Urological Association. BJU Int. 2004;94:79-81.
- Morgan CJ, Cooper AJ, Dyer JP, Friedmann PS. The publication rate of abstracts presented at the British Association of Dermatologists Annual Meeting. Br J Dermatol. 2005;153:855-7.
- Castillo J, García-Guasch R, Cifuentes I. Publications derived from free communications at the XX Congress of the Anesthesiology and Resuscitation Spanish Association (Anestesia 92). Rev Esp Anestesiol Reanim. 2000;47: 53-6.
- Murrey DB, Wright RW, Seiler JG 3rd, Day TE, Schwartz HS. Publication rates of abstracts presented at the 1993 annual Academy meeting. Clin Orthop Relat Res. 1999;359:247-53.
- Castillo J, García-Guasch R, Cifuentes I. Fate of abstracts from the Paris 1995 European Society of Anaesthesiologists meeting. Eur J Anaesthesiol. 2002;19:888-93.

- Godman L, Loscalzo A. Fate of cardiology research originally published in abstract form. N Engl J Med. 1980;303:255-9.
- Scherer RW, Dickersin K, Langenberg P. Full publication of results initially presented in abstracts: a meta-analysis. JAMA. 1994;272:158-62.
- 8. Cuéllar AJ, Ruiz V, Cuadrado JL. ¿Qué impacto tuvieron las comunicaciones del último Congreso de Átención Primaria de Castilla-La Mancha? Aten Primaria. 2005;36:51-2.
- 9. Marx WF, Cloft HJ, Do HM, Kallmes DF. The fate of neuroradiologic abstracts presented at national meetings in 1993: rate of subsequent publication in peer-reviewed, indexed journals. Am J Neuroradiol. 1999;20:1173-7.
- 10. Jackson KR, Daluiski A, Kay RM. Publication of abstracts submitted to the annual meeting of the Pediatric Orthopaedic Society of North America. J Pediatr Orthop. 2000;20:2-6.
- Jasko JJ, Wood JH, Schwartz HS. Publication rates of abstracts presented at annual musculoskeletal tumor society meetings. Clin Orthop Relat Res. 2003;415:98-103.
- 12. Hashkes PJ, Uziel Y. The publication rate of abstracts from the 4th park city pediatric rheumatology meeting in peer-reviewed journals: what factors influenced publication? J Rheumatol. 2003;30:597-602.
- Rao AR, Beatty JD, Laniado M, Motiwala HG, Karim OM. Publication rate of abstracts presented at the British Association of Urological Surgeons Annual Meeting. BJU Int. 2006;97:306-9.
- 14. Guryel E, Durrant AW, Alakeson R, Ricketts DM. From presentation to publication: the natural history of orthopaedic abstracts in the United Kingdom. Postgrad Med J. 2006;82:70-2.
- Toma M, McAlister FA, Bialy L, Adams D, Vandermeer B, Armstrong PW. Transition from meeting abstract to fulllength journal article for randomized controlled trials. JAMA. 2006;295:1281-7.
- 16. Preston CF, Bhandari M, Fulkerson E, Ginat D, Egol KA, Koval KJ. The consistency between scientific papers presented at the orthopaedic trauma association and their subsequent full-text publication. J Orthop Trauma. 2006;20:129-33.
- Li SF, Umemoto T, Crosley P, Cassidy C. SAEM abstracts to articles: 1997 and 1999-2001. Acad Emerg Med. 2004;11: 985-7.

- 18. Bydder SA, Joseph DJ, Spry NA. Publication rates of abstracts presented at annual scientific meetings: how does the Royal Australian and New Zealand College of Radiologists compare? Australas Radiol. 2004;48:25-8.
- 19. Scholey JM, Harrison JE. Delay and failure to publish dental research. Evid Based Dent. 2005;6:58-61.
- Eck JC. Publication rates of abstracts presented at Biennial Meetings of the International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine. Knee Surg Sports Traumatol Arthrosc. 2005;13:426-9.
- 21. Barker FG 2nd, McDermott MW. Prizes, lectures, and awards of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Section on Tumors. Neurosurg Focus. 2005;18:e11.
- Miguel-Dasit A, Marti-Bonmati L, Aleixandre R, Sanfeliu P, Bautista D. Publication of material presented at radiologic meetings: authors' country and international collaboration. Radiology. 2006;239:521-8.
- 23. Miguel-Dasit A, Marti-Bonmati L, Sanfeliu P, Aleixandre R. Scientific papers presented at the European Congress of Radiology 2000: publication rates and characteristics during the period 2000-2004. Eur Radiol. 2006;16:445-50.
- 24. Dickersin K, Min YL, Meinert CL. Factors influencing publication of research results. Follow-up of applications, submitted to two institutional review boards. JAMA. 1992;267:374-8.
- 25. Sprague S, Bhandari M, Devereaux PJ, Swiontkowski MF, Tornetta P 3rd, Cook DJ, et al. Barriers to full-text publication following presentation of abstracts at annual orthopaedic meetings. J Bone Joint Surg Am. 2003;85–A:158-63.
- Von Elm E, Costanza MC, Walder B, Tramer MR. More insight into the fate of biomedical meeting abstracts: a systematic review. BMC Medical Research Methodology. 2003;3:1-11.
- Glick N, MacDonald I, Knoll G, Brabant A, Gourishankar S. Factors associated with publication following presentation at a transplantation meeting. Am J Transplant. 2006;6:552-6.
- 28. Krzyzanowska MK, Pintilie M, Tannock IF. Factors associated with failure to publish large randomized trials presented at an oncology meeting. JAMA. 2003;290:495-501.