

ORIGINAL RESEARCH ORJİNAL ARAŞTIRMA

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# Publication Status and Compliance of Oral and Poster Presentations Presented at the National Physical Medicine and Rehabilitation Congress

## Bir Ulusal Fiziksel Tıp ve Rehabilitasyon Kongresi'nde Sunulan Sözlü ve Poster Bildirilerin Yayımlanma Durumları ve Uyumlarının Değerlendirilmesi

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**ABSTRACT Objective:** This study aimed to evaluate the publication rates, time to publication, and consistency between the abstracts presented at the 26th National Physical Medicine and Rehabilitation Congress in 2017 and their subsequent full-text articles. **Material and Methods:** All oral and poster presentations in the Congress Abstracts and Proceedings Book were included in the study. A PubMed search was conducted to determine whether the abstracts were published as full-text articles. The publication dates of the articles and the time elapsed from the congress presentation to the article publication was determined. The key characteristics of the abstracts and the published articles were analyzed, and the abstracts and published articles were compared to evaluate their consistency. Discrepancies between the abstracts and the published articles were classified into 2 primary categories: major and minor discrepancies. **Results:** Of the 513 abstracts, 99 (19.3%) were published as articles. Oral presentations had a higher publication rate (45%) than poster presentations (12.2%) ( $p<0.001$ ). The rate of articles with at least one minor discrepancy was 52.0% for oral presentations and 77.6% for poster presentations, with this difference being statistically significant ( $p<0.01$ ). The average publication time for articles fully consistent with their abstracts ( $15.4\pm 20.9$  months) was found to be significantly shorter than for partially consistent articles ( $31.2\pm 18.5$  months) ( $p<0.001$ ). **Conclusion:** The publication of congress abstracts as full-text articles is a crucial goal. Identifying the factors that affect this process is necessary to increase publication rates.

**ÖZET Amaç:** Bu çalışma, 2017 yılında düzenlenen 26. Ulusal Fiziksel Tıp ve Rehabilitasyon Kongresi'nde sunulan bildirilerin makale olarak yayımlanma oranlarını, yayımlanma sürelerini ve bildiriler ile tam metin makaleler arasındaki uyum düzeyini değerlendirmeyi amaçlamaktadır. **Gereç ve Yöntemler:** Çalışmaya kongrenin Konuşma Özetleri ve Bildiri Kitabı'ndaki tüm sözlü ve poster bildiriler dâhil edilmiştir. Bildirilerin makale olarak yayımlanıp yayımlanmadığını tespit etmek amacıyla PubMed taraması yapılmıştır. Makalelerin yayımlanma tarihleri ve kongre sunumundan makale yayımlanmasına kadar geçen süre belirlenmiştir. Bildirilerin ve yayımlanan makalelerin temel özellikleri analiz edilmiş ve bildiriler ile yayımlanan makaleler karşılaştırılarak aralarındaki tutarlılık değerlendirilmiştir. Bildiriler ile yayımlanan makaleler arasındaki uyumsuzluklar, majör ve minör uyumsuzluklar olmak üzere 2 ana başlık altında sınıflandırılmıştır. **Bulgular:** 513 bildirinin 99'u (%19,3) makale olarak yayımlanmıştır. Sözlü sunumların yayımlanma oranı (%45), poster sunumlarına (%12,2) kıyasla daha yüksek bulunmuştur ( $p<0,001$ ). En az bir minör uyumsuzluk içeren makalelerin oranı, sözlü sunumlar için %52,0, poster sunumlar için %77,6 olup, bu fark istatistiksel olarak anlamlıdır ( $p<0,01$ ). Bildiriyle tam uyumlu makalelerin kongreden sonra ortalama yayımlanma süresi ( $15,4\pm 20,9$  ay), kısmi uyumlu makalelere göre ( $31,2\pm 18,5$  ay) anlamlı olarak daha kısa bulunmuştur ( $p<0,001$ ). **Sonuç:** Kongre bildirilerinin tam metin makale olarak yayımlanması önemli bir hedeftir. Bu süreci etkileyen faktörlerin belirlenmesi, yayımlanma oranlarını artırmak için gereklidir.

**Keywords:** Congress; research; physical and rehabilitation medicine; publishing

**Anahtar Kelimeler:** Kongre; araştırma; fiziksel tıp ve rehabilitasyon; yayımlama

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National and international scientific congresses are essential platforms for continuous medical education, sharing new clinical research, and supporting evidence-based medicine.<sup>1</sup> These congresses allow doctors to stay updated on the latest developments in their fields, provide researchers with opportunities to present their work and exchange insights, and offer valuable experiences from colleagues. The quality of these congresses is often gauged by the number of participants and the volume of research studies presented.<sup>2</sup> Timely dissemination of information at these meetings is critical for integrating new scientific findings into clinical practice.<sup>1,2</sup> However, there remains some uncertainty about the direct impact of congress presentations on guiding clinical practices.<sup>3</sup> To maximize the dissemination and impact of scientific knowledge, it is crucial that these findings are eventually published as full-text articles.<sup>3-5</sup>

Publishing research in a peer-reviewed journal is the most effective way to communicate scientific results with broad recognition.<sup>6</sup> While full-text publication is vital for reaching a wider audience, a systematic review revealed that, on average, only 37.3% of abstracts presented at conferences are later published.<sup>7</sup> The rigorous peer review process means that only a portion of conference-presented studies make it to publication.<sup>4</sup> The publication rate of abstracts serves as an important indicator of the quality of research, reflecting not only the merit of the individual studies but also the scientific rigor of the hosting organization.<sup>1,2,5,8</sup> Therefore, assessing the scientific validity of congress presentations by examining publication rates in peer-reviewed journals and the consistency between presented abstracts and published articles is a crucial area of inquiry.<sup>8</sup>

To the best of our knowledge, no study has yet investigated these aspects concerning the National Physical Medicine and Rehabilitation Congresses, which are among the most significant congresses in the field of Physical Medicine and Rehabilitation in Türkiye. Thus, this study aims to evaluate the publication rates of abstracts presented at the 26<sup>th</sup> National Physical Medicine and Rehabilitation Congress in 2017, assess the time elapsed between the congress presentation and their subsequent publication as full-text articles, and analyze the level of consistency be-

tween the original abstracts and the final published articles to gain insights into the scientific impact and dissemination of research presented at the congress.

## MATERIAL AND METHODS

The study included all oral and poster presentations from the Abstracts and Proceedings Book of the 26<sup>th</sup> National Physical Medicine and Rehabilitation Congress, held in 2017.

A PubMed search was conducted between November-December 2024 to determine whether the abstracts had been published as articles. The key characteristics of the abstracts and the published articles were analyzed, and the abstracts and published articles were compared to evaluate their consistency. Previous publications on this topic were used as references for determining the study's methodology.<sup>3,4,8</sup> This manuscript does not contain any patient information; therefore, ethics committee approval was not deemed necessary for this study, as in other studies conducted on this topic.

Two authors of this study (FMA and BK) performed PubMed searches to verify whether a congress paper had been subsequently published as a full article. They began by searching the 1<sup>st</sup> author's name, followed by the names of all the contributing authors. If these initial searches were inconclusive, they combined keywords from the abstract with the authors' names using the Boolean operator "AND" and repeated the search. In instances where discrepancies arose in the title or authorship, the authors compared the content of the abstract with that of the article to determine whether the publication was an extension of the original abstract. If disagreements persisted, a 3<sup>rd</sup> author (EİŞ) was consulted for further evaluation.

For each abstract published as an article, the following parameters were identified: 1) title of the abstract, 2) number of authors, 3) name of the 1<sup>st</sup> author, 4) names of the other authors, 5) objective/hypothesis of the study, 6) number of cases, 7) statistical analysis (methods and significance level), 8) primary outcome measure (the main criterion affecting the result), 9) study findings for a specific outcome (numerical value, percentage or mean), 10) measure the precision of the study findings [standard deviation

(SD) and confidence interval (CI)]. In addition to these parameters, the publication dates of the articles and the time elapsed from the congress presentation to the article publication was determined. Abstracts that were published before the congress were also included in the study, and their publication times were calculated as negative (-) months. The impact factor (IF) of the journals in which the articles were published was recorded using the November 2023 data from the Clarivate Analytics Journal Citation Reports.

Discrepancies between the abstracts and the published articles were classified into 2 primary categories: major and minor discrepancies.<sup>3,4,8</sup> Minor discrepancies included: 1) article title, 2) number of authors, 3) name of the 1<sup>st</sup> author, 4) differences in the names of the other authors. Major discrepancies included: 1) objective/hypothesis of the study, 2) number of cases, 3) statistical analysis, 4) primary outcome measure, 5) study findings, 6) differences in the measure of precision of the study findings (SD and CI values).

Descriptive data were reported as the frequency (%) and mean (SD). The chi-squared and Mann-Whitney U tests were used to compare categorical variables between the 2 groups. All analyses were performed using SPSS software, version 21.0 for Windows (IBM, Chicago, IL, USA).

## RESULTS

The congress book included 513 abstracts, consisting of 111 (21.6%) oral presentations and 402 (78.4%) poster presentations. The PubMed search retrieved 99 abstracts (19.3%). It was found that 50 of 111 oral

presentations (45%) and 49 of 402 poster presentations (12.2%) were published as articles. Oral presentations were published as articles at a significantly higher rate than poster presentations ( $p<0.001$ ).

The average publication time for all articles was  $27.92\pm 20.03$  months. The publication times for oral presentations ranged from -5 months to 77 months, while the publication times for posters ranged from -2 months to 74 months. When examining the distribution by years, it was found that 37.4% of the abstracts were published after the first 3 years, although no statistical difference was observed between the years ( $p=0.650$ ) (Figure 1).

The average IF of the journals in which the articles were published was  $2.052\pm 0.961$  (0.60-4.60). Although no statistical difference was found among the quartile (Q) distributions of the articles ( $p=0.825$ ), 39 articles (40.2%) were published in Q4 journals (Figure 2).

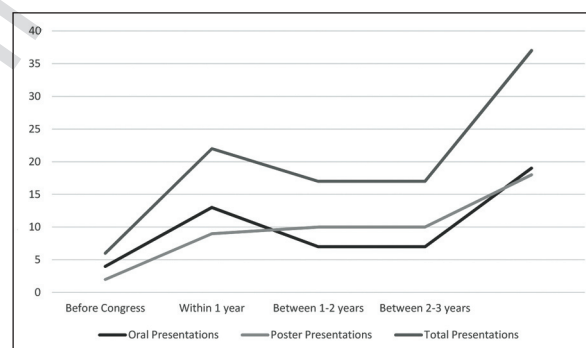


FIGURE 1: Publication times of abstracts

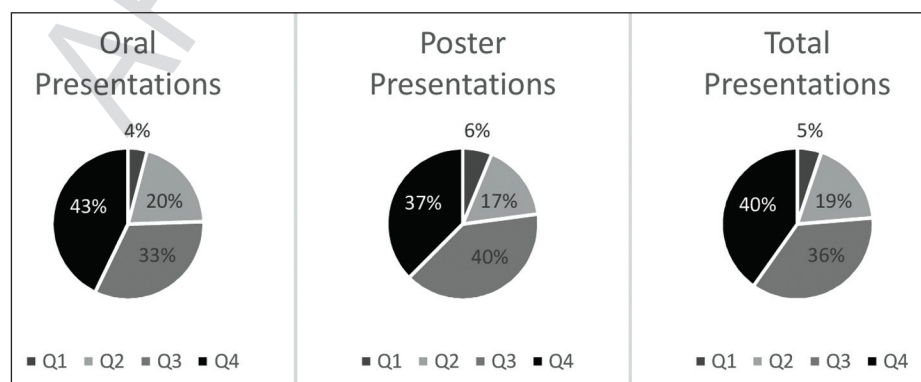


FIGURE 2: Quartile distribution of journals in which the articles were published

The articles were published in 62 different journals. The distribution of the journals in which the articles were published showed that the highest numbers of articles were published in the following journals: Turkish Journal of Physical Medicine and Rehabilitation, Journal of Back and Musculoskeletal Rehabilitation, Northern Clinics of Istanbul, Turkish Journal of Medical Sciences, and Agri-The Journal of the Turkish Society of Algology (Table 1).

A total of 21.2% of all articles were fully consistent with their abstracts; this rate was 24.0% for oral presentations and 18.4% for poster presentations. No statistically significant difference was found between them ( $p=0.493$ ). The number of articles with at least one major discrepancy compared to their abstracts was 62 (62.6%) for all articles, 31 (62.0%) for

oral presentations, and 31 (63.3%) for poster presentations. No significant difference was found between them ( $p=0.896$ ). The number of articles with at least one minor discrepancy compared to their abstracts was 64 (64.6%) for all articles, 26 (52.0%) for oral presentations, and 38 (77.6%) for poster presentations. This difference between the articles of oral and poster presentations was found to be significant ( $p<0.01$ ) (Figure 3).

Minor discrepancies were found in 21 articles (21.2%) regarding the title, in 10 articles (10.1%) regarding the name of the first author, in 60 articles (60.6%) regarding the names of the other authors, and in 43 articles (43.4%) regarding the number of authors. Major discrepancies were identified in 16 articles (16.2%) regarding the objective/hypothesis of

TABLE 1: Publication rates per journal

Ranking	Journal Name	IF for 2022	Q for 2022	IF source	n	Index name
1	Turkish Journal of Physical Medicine and Rehabilitation	1.3	Q4	Clarivate-JCR	18	SCIE
2	Journal of Back and Musculoskeletal Rehabilitation	1.6	Q3	Clarivate-JCR	6	SCIE
3	Northern Clinics of Istanbul	1.0	Q3	Clarivate-JCR	4	ESCI
4	Turkish Journal of Medical Sciences	2.3	Q3	Clarivate-JCR	3	SCIE
5	Ağrı-The Journal of The Turkish Society of Algology	0.6	Q3	Clarivate-JCR	3	ESCI
6	Archives of Rheumatology	1.1	Q4	Clarivate-JCR	2	SCIE
7	European Journal of Physical and Rehabilitation Medicine	4.5	Q1	Clarivate-JCR	2	SCIE
8	European Journal of Rheumatology	1.9	Q3	Clarivate-JCR	2	ESCI
9	Iranian Journal of Public Health	1.4	Q4	Clarivate-JCR	2	SSCI/SCIE
10	Journal of Pediatric Rehabilitation Medicine	1.9	Q3	Clarivate-JCR	2	ESCI
11	Neurological Sciences	3.3	Q2	Clarivate-JCR	2	SCIE
12	Neurourology and Urodynamics	2.0	Q3	Clarivate-JCR	2	SCIE
13	Pain Physician	3.7	Q2	Clarivate-JCR	2	SCIE

IF: Impact factor; Q: Quartile; JCR: Journal citation reports; SCIE: Science Citation Index Expanded; ESCI: Emerging Sources Citation Index; SSCI: Social Sciences Citation Index

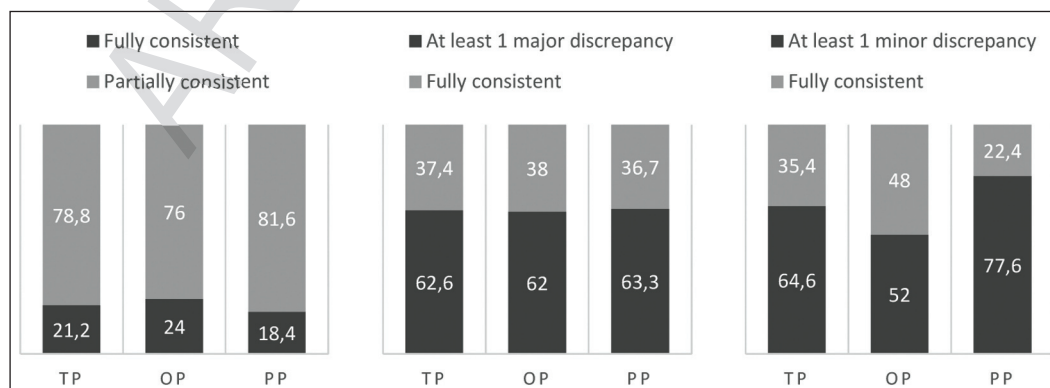


FIGURE 3: Consistency rate between abstracts and published articles

\* $p<0.01$ , chi-square test; TP: Total presentations; OP: Oral presentations; PP: Poster presentations

**TABLE 2:** Consistency rates between abstracts and articles

	Number of discrepancies	Percentage (%)
Minor discrepancies		
Article title	21	21.2%
Number of authors	43	43.4%
Name of the first author	10	10.1%
Differences in the names of the other authors	60	60.6%
Major discrepancies		
Objective/hypothesis of the study	16	16.2%
Number of cases	41	41.4%
Statistical analysis	2	2%
Primary outcome measure	29	29.3%
Study findings	22	22.2%
Precision measurement of study findings	-	-

the study, in 41 articles (41.4%) regarding the number of cases, in 29 articles (29.3%) regarding the primary outcome measure, and in 22 articles (22.2%) regarding differences in study findings. Statistical analysis methods were not reported in 84 articles (84.8%), and differences in the measure of precision of the study results were not reported in 95 articles (96%) (Table 2).

The average publication time after the congress for articles fully consistent with their abstracts ( $15.4 \pm 20.9$  months) was found to be significantly shorter than that for partially consistent articles ( $31.2 \pm 18.5$  months) ( $p < 0.001$ ).

## DISCUSSION

The study found that oral presentations had a significantly higher publication rate than poster presentations. Despite a high rate of major and minor discrepancies between the abstracts and their published articles, the consistency between the articles and their abstracts showed no significant differences between the oral and poster presentations, except for minor discrepancies, which were significantly more common in the poster presentations. Additionally, articles that were fully consistent with their abstracts were published more quickly than those with discrepancies.

Numerous studies have examined abstracts presented in oral or poster formats at national or inter-

national meetings across various medical specialties.<sup>1,3,8,9</sup> The primary goals of these studies include reporting the publication rates of the abstracts, assessing the consistency between the abstracts and their subsequent full-text publications, and identifying the factors that influence publication rates.<sup>1,3,8</sup>

In the current study, we selected the 2017 congress to allow sufficient time for the oral and poster abstracts to be published as full articles. Of the 513 oral and poster presentations listed in the congress's abstracts and proceedings book, 99 (19.3%) were found on PubMed, highlighting a relatively low publication rate. This finding reflects a broader issue observed in the academic community, where a significant proportion of research presented at conferences never reaches peer-reviewed publication.<sup>10</sup> There are 2 main reasons why a study presented at a congress might not be published: either it was never submitted to a journal, or it was submitted but failed to pass the peer-review process.<sup>4</sup> Never submitting to a journal could be due to a variety of factors, including a perceived lack of novelty, insufficient results, or the researchers' hesitance to commit the time and effort required to prepare a manuscript. Researchers may feel that additional effort is required which complicates or even prevents the submission of their work to peer-reviewed journals. Moreover, a survey among researchers identified "time constraints" as the most common reason for not pursuing publication. Unfortunately, the lack of care and attention to writing an article, often due to these time constraints, can increase the likelihood of rejection.<sup>9</sup> Additionally, the process of writing a publishable manuscript requires not only time but also a high level of attention to detail, including rigorous data analysis, clear presentation of results, and adherence to journal guidelines. When this level of care is not taken, the quality of the submission may fall short of the standards expected by the reviewers, further diminishing the chances of acceptance. Peer review, while critical for maintaining the quality and credibility of scientific literature, can be challenging for researchers, particularly for those who may not be well-versed in academic writing or who lack mentorship and guidance during the process.

Another important perspective is to investigate



what motivates some authors to successfully publish their work after presenting it as an abstract. Understanding these differences could offer strategies to encourage and educate others.<sup>11</sup> A Cochrane systematic review found that abstracts reporting positive results (significant or favorable outcomes), larger sample sizes, oral presentations, randomized study designs, multicenter studies, high-quality studies, presentations from academic settings, studies identified as impactful, and abstracts presented in English were more likely to be published.<sup>7</sup> Similarly, this study revealed that oral presentations had a higher publication rate than poster presentations. Oral presentations showed fewer discrepancies than poster presentations. Additionally, the consistency between the abstracts and articles was related to the time taken for publication.

The discrepancies observed between the abstracts and published articles may be attributed to various factors. Some changes might have been made to enhance the chances of publication. However, not all discrepancies can be attributed to this, as many factors during the publication process can contribute to these discrepancies. For example, the format of presentations at meetings often differs from the structure of articles published in peer-reviewed journals. Consequently, during the peer-review process, an article might undergo minor or major revisions based on the reviewers' recommendations, which could be perceived as discrepancies.<sup>8,9</sup> Another reason is that preliminary results are frequently presented at congresses.<sup>4</sup> These meetings allow for initial evaluations of studies, and subsequent detailed analyses and additional research can alter the results. Furthermore, while abstracts typically offer a summary of the study, full-text articles provide more comprehensive details. This difference can lead to some points being interpreted differently when transitioning from the abstract to the full text, resulting in perceived discrepancies. Despite the high discrepancy rates reported in studies, it has been noted that these discrepancies are not usually clinically significant.<sup>12</sup>

This study has several limitations. First, national databases were excluded from the evaluation of whether the abstracts were published as full-text articles. This decision was based on the primary objective of presenting scientific research at a congress,

which is to facilitate the global dissemination of medical knowledge rather than limiting it to the event itself. As a result, the study focused on assessing how widely accessible the scientific data presented at the congress became beyond the national scope. Second, the search was conducted exclusively using PubMed. While PubMed is one of the most comprehensive databases for medical and health sciences literature, relying solely on this platform may have excluded relevant publications indexed in other databases. Although this approach is consistent with similar studies on the topic, which also focused on PubMed for methodological comparability, it remains a limitation of the study.<sup>4,8,13</sup> Additionally, the article screening and parameter assessment were jointly performed by 2 authors. Although this collaborative approach ensured consistency, it precluded the opportunity to measure inter-rater reliability.

To evaluate improvement efforts, future studies should examine the publication rates of abstracts presented at upcoming congresses and identify emerging trends. Future studies should consider evaluating factors that may affect publication rates, such as sample sizes and study designs, as well as analyzing the topics covered in the published studies, including fields such as hemiplegia, spinal cord injury, electrotherapy, and rheumatology. Furthermore, further studies should be planned to investigate why oral presentations have a higher publication rate. Analyzing all data related to the publication of the presented abstracts could contribute to an increase in publication rates.

## CONCLUSION

Consequently, the subsequent publication of congress abstracts in peer-reviewed journals is a key objective. Evaluating the rate at which these abstracts are later published in indexed journals, comparing these findings with similar studies, and examining emerging trends are vital for assessing the quality of scientific research. A portion of the oral and poster presentations from the Abstracts and Proceedings Book of the 26<sup>th</sup> National Physical Medicine and Rehabilitation Congress held in 2017 were eventually published as articles. This study revealed that oral presentations had a higher publication rate compared to poster presentations, exhibited fewer minor

discrepancies, and that the consistency between abstracts and articles was related to the time of publication. The reasons behind the low publication rates and the factors that either hinder or facilitate the

publication process remain unclear. However, identifying the factors associated with the publication of the presented abstracts could help increase the publication rates.

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