The Scientific Impact of Abstracts on Functional Urology – an Evaluation of the European Association of Urology (EAU) and International Continence Society (ICS) congresses of 2015 until 2019

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Abstract

**Background:** Publication of abstracts at congresses represents an important contribution to the dissemination of scientific knowledge and new studies.

**Objectives:** Determination of the publication rates about functional urology at the EAU and ICS congress.

**Design, Setting and participants:** Between 2015 and 2019, all abstracts on functional urology presented at the EAU and ICS congress were examined. The discrepancy between the congress abstracts conclusion and the published abstracts conclusion was compared using a specially created discrepancy score. We determined the publication rates, and the journal impact factors.

**Results:** 546 abstracts on functional urology were presented at the EAU congress. Of these, 288 were published in a journal. It corresponds to a publication rate of 53%. At the ICS congress, 722 abstracts on functional urology were presented and 411 of them were published in a journal, so we determined a publication rate of 57%.

**Conclusion:** We recorded a high acceptance rate and distribution of these abstracts. More than 50% of the abstracts on functional urology at both congresses were published in a journal.

Introduction

At the annual congresses of the European Association of Urology (EAU) and the International Continence Society (ICS) many clinicians and scientists present their recent research work. Before an abstract is published in a journal, it is preferred to present it at scientific meetings [1]. The quality and value of these annual scientific meetings can be measured by the publication rates of abstract presentations [2]. The aim of the present study was to find out what proportion of all abstracts on functional urology published at the EAU and ICS were published as full papers. In addition, we analyzed the differences between functional urology related abstracts presented EAU and ICS. Moreover, by using a self-designed discrepancy score we intended to find out whether the actual concluding messages of presented abstracts would differ from the final publication.

Material and Methods

All abstracts published between 2015 and 2019 at the EAU and the ICS congress were selected according to the following functional urology keywords and included in the statistics: Benigne Prostate Hyperplasie (BPH); Bladder

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Outlet Obstruction (BOO); Bladder Pain Syndrome (BPS); Chronic Pelvic Pain Syndrome (CPPS); Erectile Dysfunction (ED); Interstitial Cystitis (IC); Lower Urinary Tracts Symptoms (LUTS); Nocturia; Stress Urinary Incontinence (SUI); Underactive/Overactive Bladder Syndrome (U/OAB).

For our analysis, the abstracts were taken from the respective issues of the ICS website and for the EAU Congress from the European Journal of Urology Supplements. A PubMed search was carried out to find out if these abstracts were published in a scientific journal. Only abstracts with the same or very similar title and at least one identical author between the congress abstracts and the paper published in a journal, were included in the statistics. A discrepancy score of 0-3 was also created, which shows the deviation between the abstract and the publication in a journal [9]. The discrepancy score was divided into grades 0-3.

Results

Between 2015 and 2019, a total of 6759 abstracts were presented at the EAU Congress, 546 of these abstracts were functional urology related. Of these 546 abstracts, 288 were published in a journal in the subsequent years. At the ICS meetings of 2015 to 2019, a total of 3246 abstracts were presented, 722 of these abstracts were functional urology related. Of these 722 abstracts, 411 abstracts were published in a scientific journal. Of all abstracts with the subject of functional urology presented at the EAU congresses, 75% were published in 2015, 56% in 2016 and 64% in 2017. Moreover, in 2018, 44%, and in 2019 43% were published. On the other hand, of the functional urology related abstracts presented at the ICS 62% were published as full paper in 2015, 54% in the following year 2016, 57% in 2017 and 54% in 2018. In 2019 57% of the abstracts were published as full paper. In summary, for the years 2015-2019, an average of 53% of the EAU functional urology abstracts were published. For the same period, 57% of the functional urology abstracts presented at the ICS were published. More detailed publication data of each year and each of the two congresses is presented in Table 2.

More than 80% of the abstracts were published in the same year or only after the respective congresses.

In total, there were 54 (17.7%) abstracts that had been published as full paper before the EAU congress in the years 2015 – 2019. A total of 234 (82.3%) were published in the same year or later (Figure 1A). For the ICS, between 2015 and 2019, 50 (13.8%) abstracts were published before the ICS congress and 361 (86.2) abstracts at the same year or later (Figure 1B).

Figure 2 presented shows the distribution of topic frequency occurring in the abstracts that were published. The graphics show that at both congresses for the functional urology, three major subjects dominate. Figure 2A shows that the 288 published abstracts of the EAU congress 59 abstracts included the topic of urinary incontinence, 61 the topic of under/overactive bladder and 87 the topic of LUTS. Figure 2B shows that of the 411 published abstracts of the ICS congress 141 included the topic of urinary incontinence, 120 the topic of under/overactive bladder and 77 abstracts the topic of LUTS.

Detailed Data about the discrepancy score of EAU and ICS abstracts is presented in table 3. The discrepancy score shows that most of the published abstracts correspond in content to the original abstracts that were presented at the respective congresses, in particular the results and conclusions were identical.

Table 1: Definition of the discrepancy grades.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Definition</th>
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<tbody>
<tr>
<td>0</td>
<td>Exactly the same data and conclusion OR one different data point, but same content and conclusion</td>
</tr>
<tr>
<td>1</td>
<td>Two or more changed data points but same content, same conclusion OR same data points and one further content, but same conclusion</td>
</tr>
<tr>
<td>2</td>
<td>Data similar, maximum one further content, adapted conclusion</td>
</tr>
<tr>
<td>3</td>
<td>Further investigation based on the abstracts research, more data, more content, same or different conclusion</td>
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Table 2: Detailed publication data of the functional urology related abstracts od the EAU and ICS congresses between 2015 and 2019.

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAU</td>
<td>1174</td>
<td>528</td>
<td>1146</td>
<td>582</td>
<td>1263</td>
<td>749</td>
</tr>
<tr>
<td>ICS</td>
<td>582</td>
<td>1146</td>
<td>528</td>
<td>1174</td>
<td>749</td>
<td>1263</td>
</tr>
<tr>
<td>Total</td>
<td>1756</td>
<td>1674</td>
<td>1724</td>
<td>1752</td>
<td>1752</td>
<td>3508</td>
</tr>
</tbody>
</table>

More than 80% of the abstracts were published in the same year or only after the respective congresses.

The average discrepancy score of the published ICS abstracts was constant at 0.5, compared to the score of the published abstracts from the EAU congresses, which was higher at 0.6 which is shown in Figure 3.

The abstracts of the EAU congress were published in a total of 74 different journals. For the ICS congress, the abstracts were published in 82 different journals. Table 4 shows the journals that most frequently published abstracts from the congress.

The Impact Factor (IF) can be perceived as a fortifying measure of journal quality, its papers, and corresponding authors. Researchers consider IFs when choosing their publication outlets, journal editors formulate policies explicitly designed to improve their IFs, and publishers...
advertise their IFs on their websites to further magnify this proxy measure of quality [2]. The average IF of papers published from the 2015-2019 EAU abstracts was 3.8. The IF for papers published from the ICS Congress abstracts was 3.4 (Figure 4). Furthermore, the publication rate of the EAU Congress decreased over the years compared to the publication rate of the ICS Congress, remained relatively constant (Figure 5).

**Discussion**

In our study we analysed data of a total of 1268 abstracts that were related to functional urology subjects and were presented between 2015 and 2019 at the ICS and EAU meetings. These abstracts can be divided to 722 abstracts on functional urology that were presented at the ICS and 546 abstracts on functional urology that were presented at the EAU meeting. Between 2015 and 2019, we found a publication rate of 53% for the abstracts presented at the EAU congresses and 57% for the abstracts presented at the ICS congresses. Compared to other urological events, this publication rate is higher. For example, in comparison to the urological Brazilian meeting in 2003, that had a reported publication rate of 39% [3]. Or in comparison to the annual meetings of the American Urology Association.
(AUA) between 1998-2000, were a publication rate of 37.8% was reported [5]. Moreover, a publication rate of 29.8% was reported for New Zealand Annual Scientific Meeting (USANZ) [6]. There have been some previous reports on the EAU abstract that have analysed the general publication rates for all the abstracts presented at the EAU congress. Autorino et al. reported a publication rate of 47.3% at the EAU for the meetings of 2000-2007 [7]. In addition, similar results were reported for the AUA meeting were a publication rate over 55% was shown [8]. More recently, the study of Ataei et al. from 2021, showed a publication rate of 57% of prostate carcinoma related abstract presented at the EAU congress from 2015-2018 [9]. In a meta-analysis by Scherer et al. [10], the authors examined characteristics of the abstracts that submitted to scientific congresses and later published in full-text-publications. Accordingly, presentations that produced statistically significant results had a higher chance of being converted of full-text publication [4]. A unique aspect of our study is that we created a discrepancy score. This scoring system was designed to assess how different the abstracts conclusions are from the final published full paper results. We found an average discrepancy score of 0.6 for the abstracts of the EAU congress and 0.5 for the abstracts of the ICS Congress. “The score was quiet low which reflects the accurate reproduction of the abstracts presented at the congress”. In other words, based on our results, clinicians can rely on the scientific findings of the functional urology related abstracts that are presented as an abstract on the congresses [9]. The average IF of 3.8 and 3.4 show that the abstracts presented at the congresses meet high quality standards. This is also a reflection of a high-quality peer reviewed selection of the abstracts that are accepted for presentation at both the ICS and EAU congresses. Nevertheless, more than 40% of the abstracts were not published after their presentation at a congress. In other words, these unpublished abstracts never underwent a peer review process to validate the quality of their findings [11]. Our results show very small differences between the ICS and EAU regarding the publication rates of the functional urology related abstracts. The publication rate has decreased from 2015-2019 at the EAU Congress, whereas the publication rate of the ICS Congress has remained relatively constant. A limitation of our study is that we have only based our findings on PubMed search i.e.; there could well be other publications from these abstracts on other platforms, which could affect the publication rate.

Conclusion

Our data shows that the topic of functional urology accounts for only a small percentage of all published abstracts at the EAU Congress, i.e., 8% of total. Nevertheless, most of these abstracts were then published in a journal (53%). This is quite like the publication rate of the abstract on prostate cancer of 57%. In comparison, at the ICS congresses in the same period, a total of 22% of all abstracts contained the topic of functional urology, of which 57% were then published in a journal. This acceptance rate illustrates the high quality of the abstracts. The high IF of 3.8 and 3.4 and the low discrepancy score speaks for the high quality of both congresses.

References
