Plagiarism detection during submission in three Croatian biomedical journals

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European Science Editing, Chief Editor
Croatian Medical Journal, Research Integrity Editor
CrossRef Similarity Check

no statistically important differences in vitamin D deficiency and insufficiency between girl and boy children. However, the vitamin D deficiency prevalence were significantly higher in girls than in boys, when was analyzed in the 11-15 age group (girl 43%, boy 13%, p=0.006) (Table 1).

Discussion

The present study is the first one to investigate vitamin D status among the pediatric population in Zonguldak, Turkey.

Recent studies on vitamin D status in children have suggested that vitamin D deficiency is prevalent in Turkey (Table 2). Few studies in our country, prevalence of Vitamin D deficiency were investigated both younger and adolescent same time (7, 9, 11). Therefore, in this study, prevalence of Vitamin D deficiency was analyzed both 5-10 age group and 11-15 age group in children. We found that the plasma 25(OH)D levels decreased when the children became older, and the prevalence of vitamin D deficiency increased at the same time. This is
## Prevalence of plagiarism in scholarly journals

<table>
<thead>
<tr>
<th>Authors (publication)</th>
<th>Journal, manuscripts</th>
<th>Prevalence/Threshold</th>
<th>Method of detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bazdaric et al (Sci Eng Ethics, 2012)</td>
<td>Croatian Medical Journal (2009-2010); N=754</td>
<td>11% OSI ND</td>
<td>&gt;10% similarity in one source Manual verification</td>
</tr>
<tr>
<td>Higgins, Lin, Evans (RIPR; 2016)</td>
<td>Genetics in Medicine (2013-2014); N=400</td>
<td>17% OSI 15%</td>
<td>80% in a sentence Methods excluded Manual verification</td>
</tr>
</tbody>
</table>
AIM

- to detect textual similarity in manuscripts submitted for publication in three biomedical Croatian journals and to establish the threshold of plagiarism.

- IF: 3.05
- IF: 1.48
Methods

- All manuscripts submitted from June to December 2015. BM and CMJ have research integrity editor.
- The type of article, country of first author, overall similarity score (OSI), citing, plagiarism and type of plagiarism

Criteria: OSI: 25% & MV OSI: 10% & MV MV
Results
Submitted manuscripts (N=279)

Type: original articles [201(72%)], case-reports [34(12%)] & others [44(16%)]
Country: Croatia [49(18%)], Turkey [45(16%)], China [37(13%)], Iran [15(5%)], BIH [14(5%)] & others [119(43%)].
Results

- Out of 279, 75 (27%) manuscripts contained plagiarism → 11(14%) SP
- Patchwork plagiarized [56(74%)] out of 75
- Mostly partially cited [52(69%)] out of 75

Manuscripts submitted in three Croatian biomedical journals (June-December 2015)

<table>
<thead>
<tr>
<th>Journal</th>
<th>Plagiarized</th>
<th>Non-plagiarized</th>
</tr>
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<tbody>
<tr>
<td>ASCRO</td>
<td>18(40%)</td>
<td>40(80%)</td>
</tr>
<tr>
<td>BM</td>
<td>7(13%)</td>
<td>58(97%)</td>
</tr>
<tr>
<td>CMJ</td>
<td>50(28%)</td>
<td>180(72%)</td>
</tr>
</tbody>
</table>
Text similarity rate (OSI) in plagiarized manuscripts

H = 18.46, P < 0.001

CMJ: 28 (12-56)
BM: 15 (3-30)
ASCR: 36.5 (24-63)
The threshold value of overall similarity was 14% sensitivity 91 (CI 82-96) specificity 70 (CI 63-76)

AUC (C.I. 0.86-0.93)  
P<0.001
Conclusion

- The detected prevalence of plagiarism in submitted manuscripts (27%) is 22 times greater than rates of committed plagiarism in non-self reports in a recent systematic review of plagiarism.

- The recommended threshold for screening with Similarity Check is overall text similarity value of 14% which afterwards require manual verification by the editor.