

50. Obljetnica časopisa
Food Technology and Biotechnology

Otkrivanje plagiranja u znanstvenom časopisu

Ksenija Baždarić



Znanstveno nepoštenje

- izmišljanje rezultata (engl. *fabrication*)
- prepravljanje rezultata (engl. *falsification*)
- **plagiranje** (engl. *plagiarism*)
 - „neovlašteno preuzimanje tuđih ideja, postupaka, rezultata ili teksta sa svrhom prikazivanja preuzetoga djela kao vlastitoga“
 - **samoplagiranje**
- državna tijela (ORI, OEZVO) i udruge (COPE, ICMJE)



Oblici plagiranja

- napadno plagiranje
 - neovlašteni prijevod
- kolažno plagiranje
- lažno parafraziranje
- mikro plagiranje
- tehničko plagiranje



<http://pilot.scc.losrios.edu/pilot/module6/images/plagiarism.jpg>



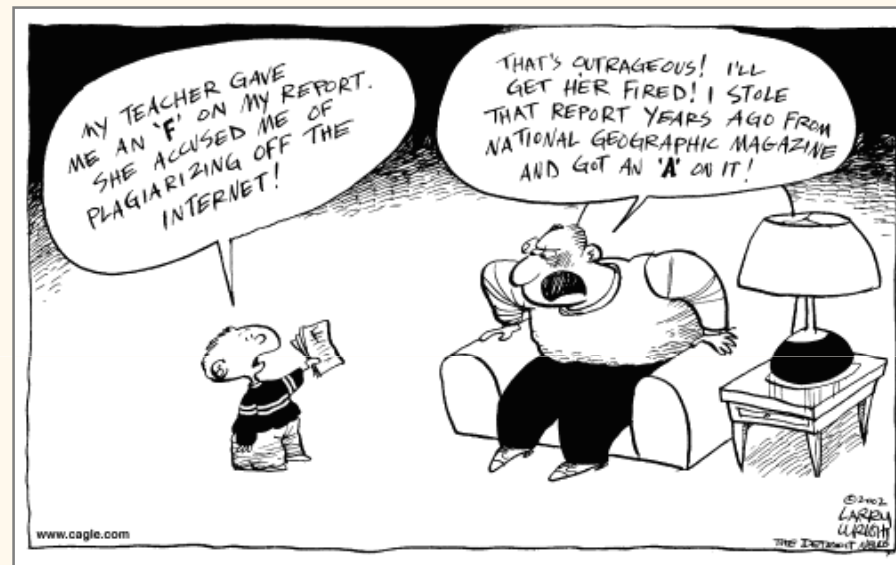
Čimbenici plagiranja

- pritisak za objavljivanjem
- loše znanje engleskog jezika
- neznanje o plagiranju
- nepoznavanje znanstvenoistraživačke metodologije
- kulturološke vrijednosti
- stavovi spram plagiranja
- ostali (ličnost, motivacija, emocije, ...)



Održavanje vrsnoće znanstvenog časopisa

- postupak objavljivanja
 - mala vjerojatnost otkrivanja plagiranja
 - retrakcija – 33% plagiranje*
- sprječavanje plagiranja
 - neizravno: upute za autore i izobrazba
 - izravno: **programi za otkrivanje plagiranja**



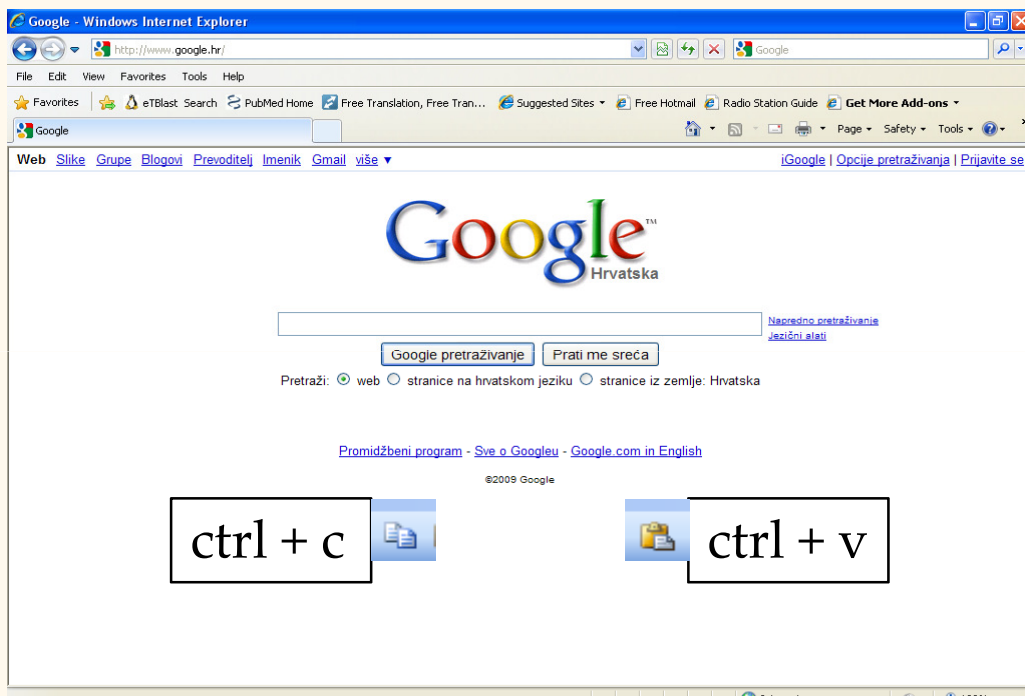
http://4.bp.blogspot.com/_DR9o7xaEXns/S7jX3r_rLaI/AAAAAAABABIM/fTmbiDrw3bY/s1600/plagiarism1.gif



*Van Norden. Nature; 2011;478:26-8.



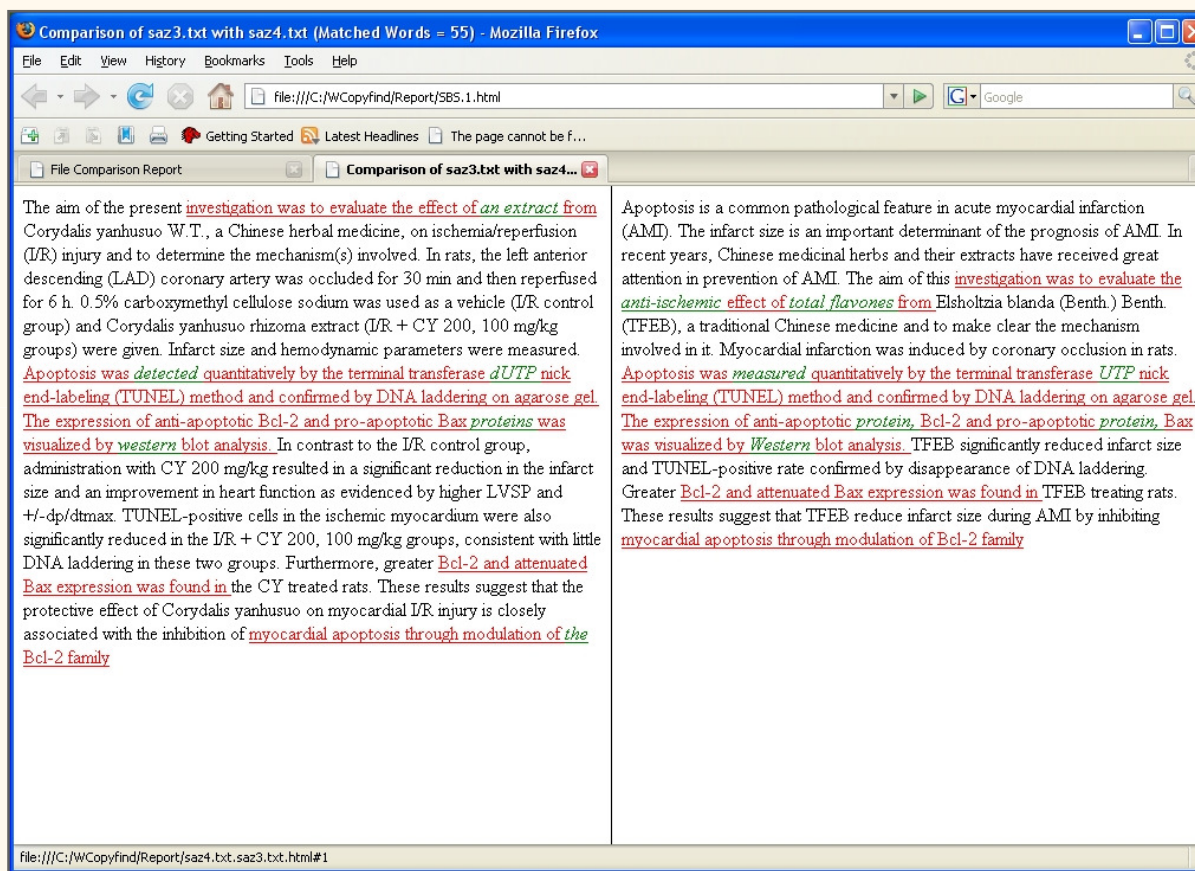
Računalni programi za otkrivanje plagiranja



- Izvanmrežni - *WCopyfind*
- Mrežne usluge:
 - Akademsko plagiranje
 - *Turnitin, Safeassign, EVE, Compilatio, Viper* i druge
 - Znanstvena publicistika
eTBLAST i CrossCheck



Program WCopyFind



Autor: Lou Bloomfield (od 1997.g.)



Mrežna usluga *eTBLAST*

Analyze the results with a post-processor:

[Find Expert](#) [Find Journal](#) [Publication History](#) [Implicit Keywords](#) [Similarity Matrix of Top Hits](#)

Most Similar Matches in MEDLINE:

Score of self-comparison: 1265.83

Relevancy Threshold (Similarity ratio = 0.56). Entries above here have an unusual level of similarity

1	<input type="checkbox"/>	Erythromycin inhibits wear debris-induced inflammatory osteolysis in a murine model.	Score: 691.27 Ratio: 0.55
		W Ren, B Wu, X Peng, L Mayton, D Yu, J Ren, BD Chen, PH Wooley. Journal of orthopaedic research : official publication of the O, 2006, Feb, , 24(2): 280-90. PMID: 16435361	
2	<input type="checkbox"/>	Protection against titanium particle induced osteolysis by cannabinoid receptor 2 selective antagonist.	Score: 495.82 Ratio: 0.39
		D Geng, Y Xu, H Yang, J Wang, X Zhu, G Zhu, X Wang. Biomaterials, 2010, Mar, , 31(3): 1996-2000. PMID: 20004468	
3	<input type="checkbox"/>	Macrophage depletion diminishes implant-wear-induced inflammatory osteolysis in a mouse model.	Score: 463.1 Ratio: 0.37
		W Ren, DC Markel, R Schwendener, Y Ding, B Wu, PH Wooley. Journal of biomedical materials research. Part A, 2008, Jun, , 85(4): 1043-51. PMID: 17937417	
4	<input type="checkbox"/>	Blockade of vascular endothelial growth factor activity suppresses wear debris-induced inflammatory osteolysis.	Score: 436.37 Ratio: 0.34
		W Ren, R Zhang, DC Markel, B Wu, X Peng, M Hawkins, PH Wooley. The Journal of rheumatology, 2007, Jan, , 34(1): 27-35. PMID: 17216676	
5	<input type="checkbox"/>	Evidence for a direct role of cyclo-oxygenase 2 in implant wear debris-induced osteolysis.	Score: 363.9 Ratio: 0.29
		X Zhang, SG Morham, R Langenbach, DA Young, L Xing, BF Boyce, EJ Puzas, RN Rosier, RJ O'Keefe, EM Schwarz. Journal of bone and mineral research : the official journal of, 2001, Apr, , 16(4): 660-70. PMID: 11315993	



Mrežna usluga *eTBLAST*

Detail of Matched Document - Mozilla Firefox

http://test.vit-it.edu/eblast/showDetails?db=MEDLINE&doc=957670&queryid=6359483

eTBLAST 3.0 > Search results

Search results: Cross-sections AMU Data Via Pub, Connections for clients MedBLAST APLs

A Matched Document in MEDLINE:

Title Predictors of suicide behavior in a high school student population: a cross-sectional study.

PMID 19890746

Abstract **AIM** To examine high school students' suicide behavior and to identify predictors of suicide attempt among adolescents in Timișoara, Romania. We hypothesized that suicide attempt is associated with other health-risk behaviors. **METHODS** In this cross-sectional study we included 2000 high school students in grades 9 to 12. The students were asked to complete an anonymous structured questionnaire during a normal class. We examined the relationship between having attempted suicide and engaging in other health-risk or problem behaviors. **RESULTS** During the previous 12 months, 15.4% of the students had had suicidal ideation, 7.5% had made a suicide plan and 6.1% reported that they had attempted suicide. Based on logistic regression multivariate analysis, attempted suicide was associated with feeling sad or hopeless almost every day for two or more consecutive weeks (OR = 4.74, 95% CI: 3.03-7.31), being forced to have sexual intercourse (OR = 3.18, 95% CI: 1.83-5.50), being physically aggressed by his or her father (OR = 4.26, 95% CI: 1.86-9.34), performing poorly at school (OR = 4.22, 95% CI: 1.81-9.74), having an impaired relationship with parents (OR = 2.45, 95% CI: 1.17-5.12), not eating for 24 hours or more to lose weight or to avoid gaining weight during the past 30 days (OR = 2.23, 95% CI: 1.40-3.53), being female (OR = 1.91, 95% CI: 1.21-2.90) and carrying a weapon (OR = 2.44, 95% CI: 1.53-3.90). **CONCLUSION** This study suggests that suicide attempts are associated with other risk behaviors. These behaviors may help to evaluate suicide risk and should be considered when establishing preventive programs.

Authors Cristian Vladescu, Brigița Măcuș, Sabina Făboc, Sorin Ghioncu

Journal Title Wiener klinische Wochenschrift

Journal ISSN 1613-7671

Year 2009

Month

Affiliation Department of Public Health, "Victor Babeș" University of Medicine and Pharmacy, Timișoara, Romania, c.vladescu@umf.ro

Published link [Access PMID:19890746 through PubMed](#)



Udruga *CrossRef* i mrežna usluga *CrossCheck*

- *CrossRef*:
 - udruga izdavača i uredništava časopisa (> 5000)
 - osigurava poveznice na znanstvene radove s pomoću DOI (*Digital Object Identifier*) sustava – jedinstvena alfanumerička oznaka za identifikaciju elektroničkog sadržaja (bar kod)
- *CrossCheck*:
 - potrebno članstvo u udruzi *CrossRef*, u 2012. godini koristi ga ~65.000 korisnika
 - jedina usluga koja provjerava radove zaštićene pretplatom



Mrežna usluga *CrossCheck*

Similarity Report - Mozilla Firefox

https://www.crosscheck.ithenticate.com/report/6416845/similarity

iThenticate
Professional Plagiarism Prevention

CMJ-3117.doc
As of: Jan 17, 2011 11:23:21 AM CET
1,383 words - 40 matches - 18 sources

Similarity Index
56%

Mode: Similarity Report

Exclude Quotes | Exclude Bibliography | Exclude small matches

Thoracic Surgery.2

Abstract: Hydatid disease can occur anywhere in the body and can demonstrate different imaging features that vary according to growth stage, associated complications, and affected tissue. To the best of our knowledge we could not find any report about the location of hydatid cysts inside pulmonary arteries and in the mediastinum simultaneously in the literature. Additionally unprecedented way of echinococcal embolization was initially reported. Herein

1 402 words / 29% - Internet from May 27, 2009
ejcts.ctsnetjournals.org

2 101 words / 7% - CrossCheck
[Karitanas, A. "Echinococcus of the pulmonary artery: CT, MRI and MRA findings". Computerized Medical Imaging and Graphics, 200008](#)

3 45 words / 3% - CrossCheck
[Selen Bayraktaroglu. "Hydatid disease of right ventricle and pulmonary arteries: a rare cause of pulmonary embolism —computed tomography and magnetic resonance imaging findings \(2009: 5b\)". European Radiology, 08/2009](#)

4 26 words / 2% - CrossCheck
[I Yalcinkaya. "Surgical treatment of hydatid cyst of the lung: review of 30 cases". European Respiratory Journal, 2/1999](#)



Baza podataka *CrossCheck* sadrži >50 milijuna znanstvenih sadržaja



Istraživanje u *Croatian Medical Journal*-u

Razviti učinkovit model otkrivanja plagiranih znanstvenih radova zaprimljenih za objavljivanje u časopisu *Croatian Medical Journal* (CMJ) te izmjeriti učestalost i značajke plagiranja (2009.-2010.).

Baždarić K, Bilić-Zulle L, Brumini G, Petrovečki M. Prevalence of Plagiarism in Recent Submissions to the Croatian Medical Journal. *Sci Eng Ethics*. 2012; 18 (2): 223-9. DOI:10.1007/s11948-011-9347-2.



Postupci

ispitivanje podudarnosti teksta
s pomoću računalnih programa
eTBLAST i CrossCheck



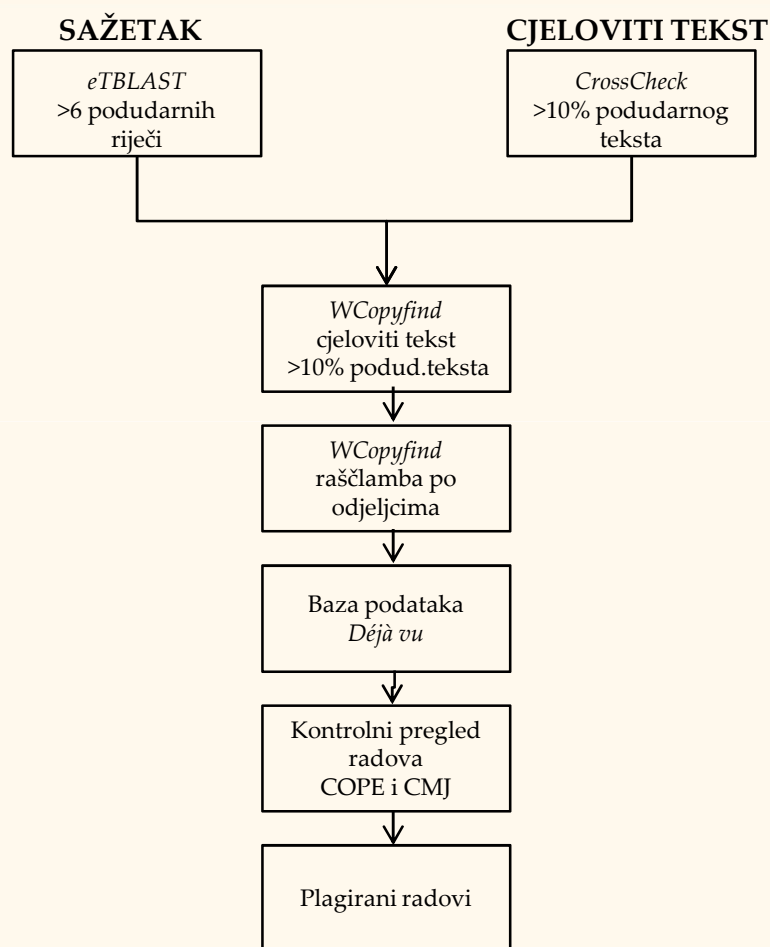
kontrolna raščlamba istraživača
usporodnim čitanjem



donošenje zaključka o radu



Postupci



Kontrolni pregled radova:

- a) "Ručna" provjera preuzetog teksta - citat
- b) Tumačenje podudarnosti odjeljaka (prema 2. i 3. kriteriju)
- c) Utvrđivanje vrste plagiranja
- d) Citiranje izvornika

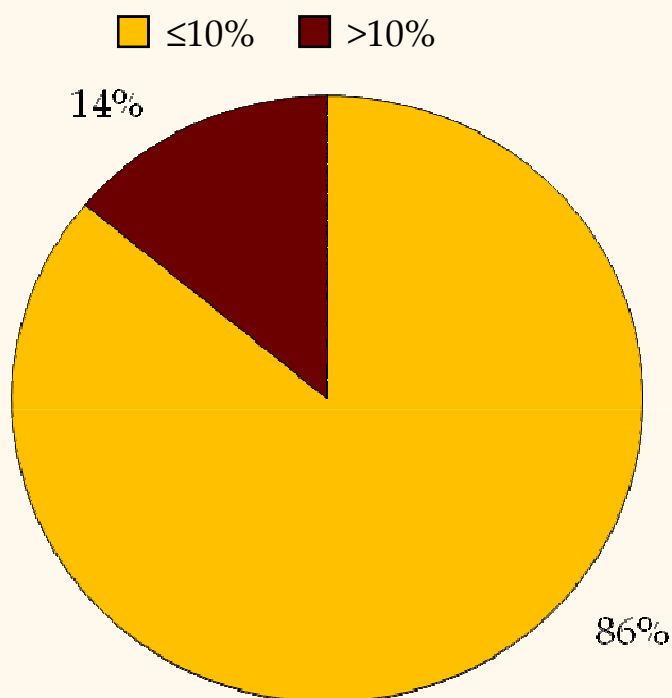


Donošenje zaključka o radu

- izvješće o podudarnom radu – preporuka urednicima na temelju rezultata opisane raščlambe
- kategorije plagiranja:
 - slabo (11% - 24%)
 - umjereno (25% - 49%)
 - napadno (>50%)



Rezultati - obradba računalnim programima



- 105 (14%, N=754) sumnjivih radova – podudarnost teksta >10%
- 102 (98%) pronađena *CrossCheck*-om
- 33 (31%) pronađeno *eTBLAST*-om

$\chi^2=27,58$
 $P<0,001$



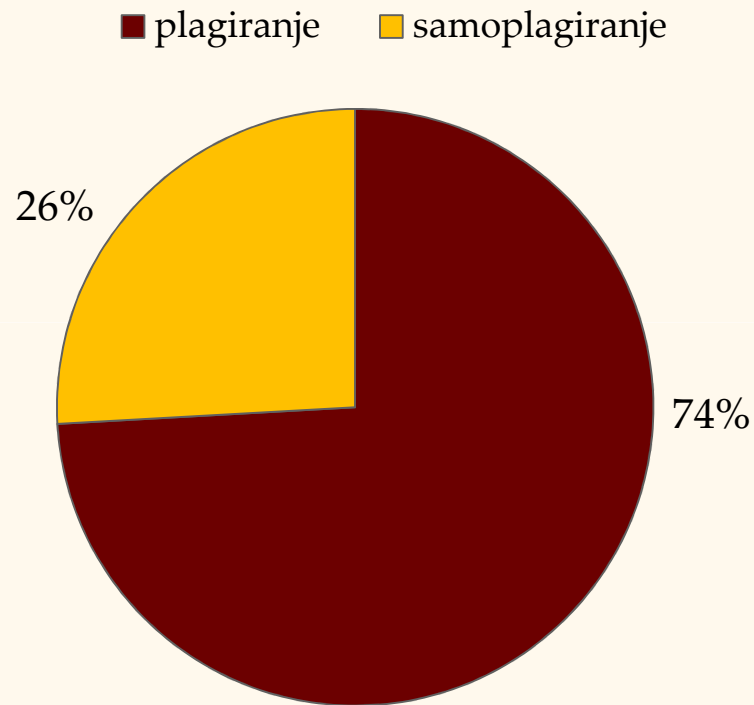
Kontrolni pregled radova

Značajke radova isključenih iz daljnje raščlambe

- 20 (19%, N=105 sumnjivih radova) isključenih radova
 - 10 radova tehničko plagiranje
 - 5 nastavak istraživanja
 - 5 ostali oblici dozvoljenih publikacija



Raspodjela plagiranih radova s obzirom na vrstu plagiranja

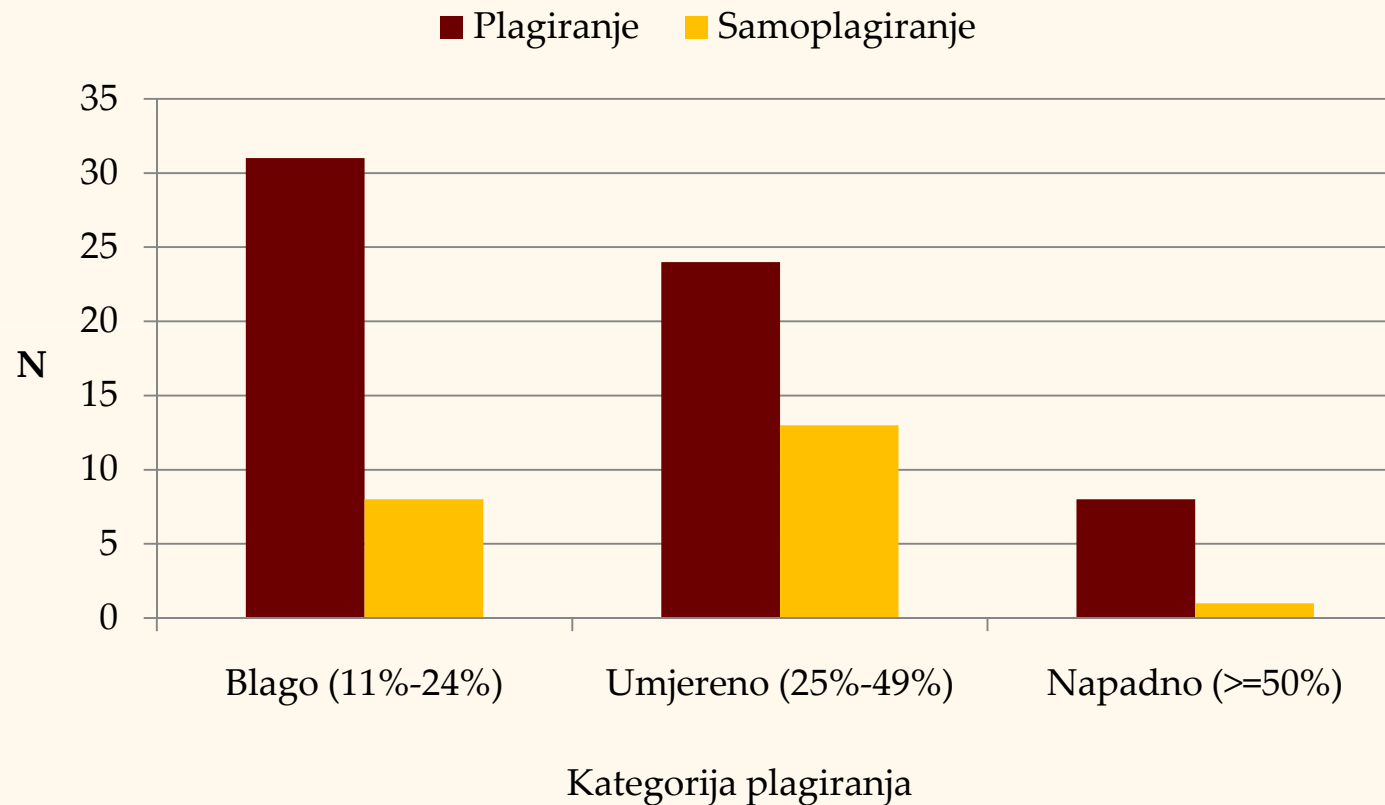


- ukupno 85 (11%) plagiranih radova
- 22 (3%) samoplagerana rada
- od 63 plagirana 19 (30%) kolažno plagirani

$\chi^2=27,58$
 $P<0,001$



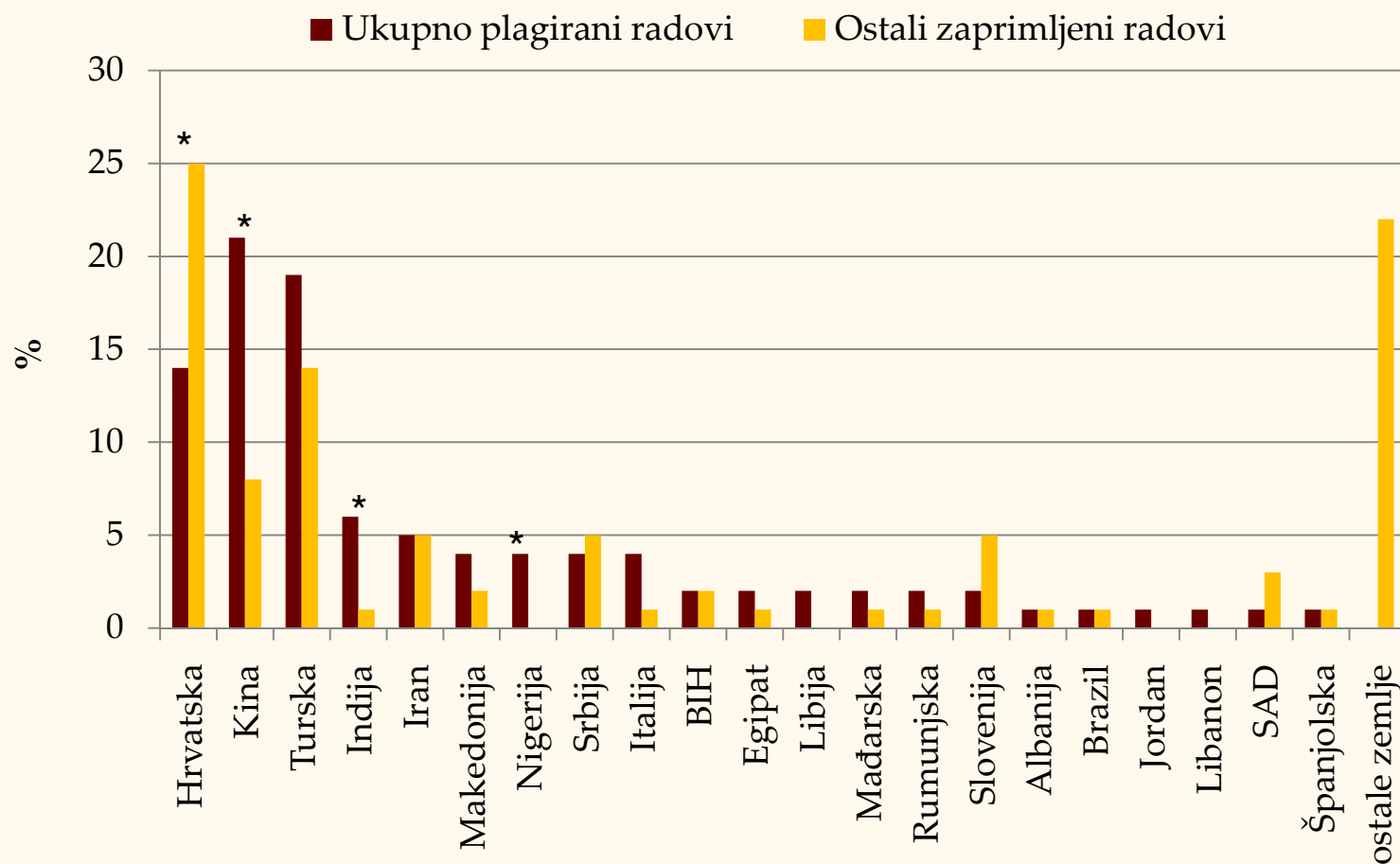
Raspodjela plagiranih i samoplagiranih radova s obzirom na kategoriju plagiranja



$\chi^2=3,26;$
 $P=0,196$



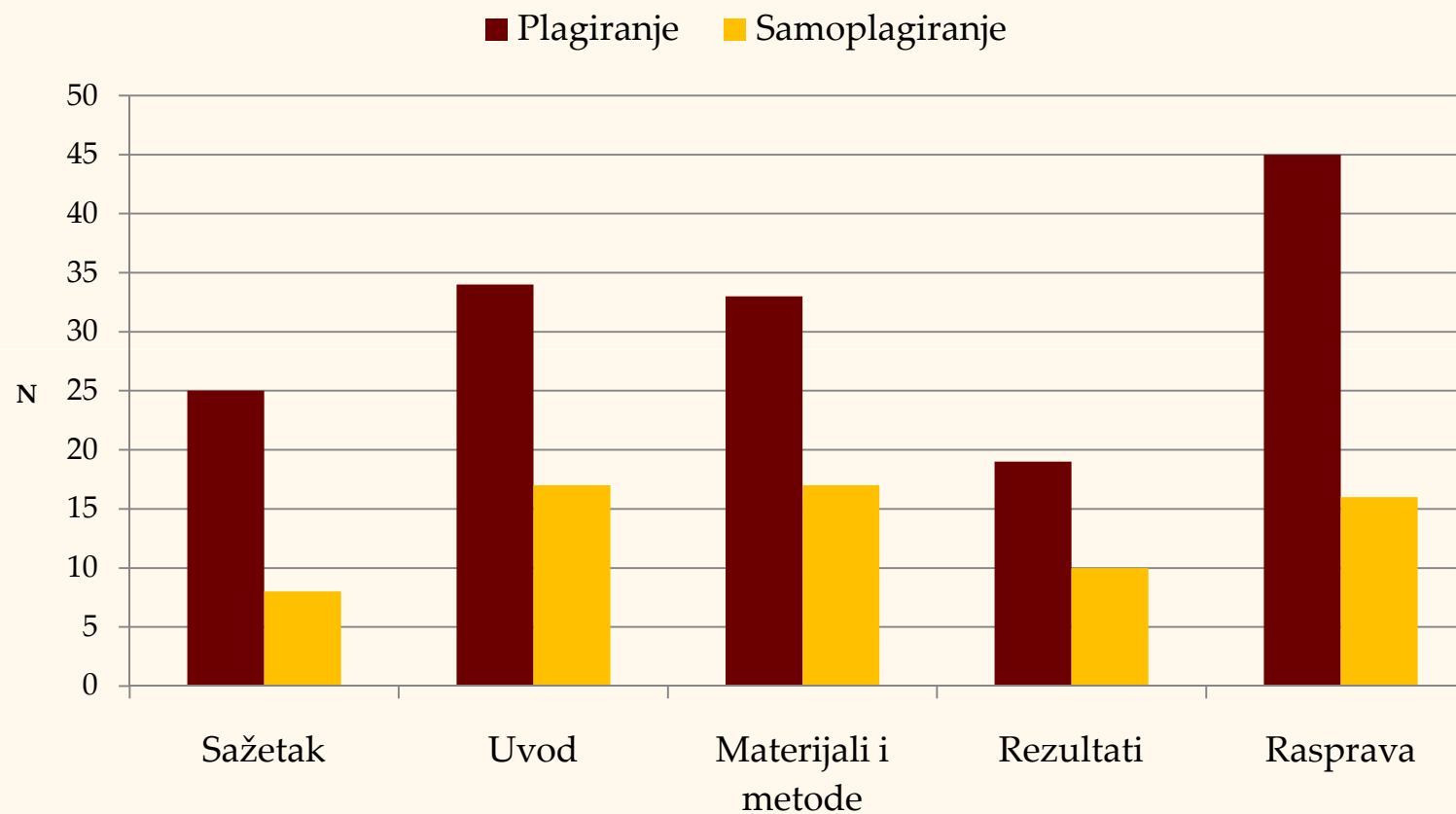
Raspodjela plagiranih radova s obzirom na zemlju podrijetla autora za dopisivanje



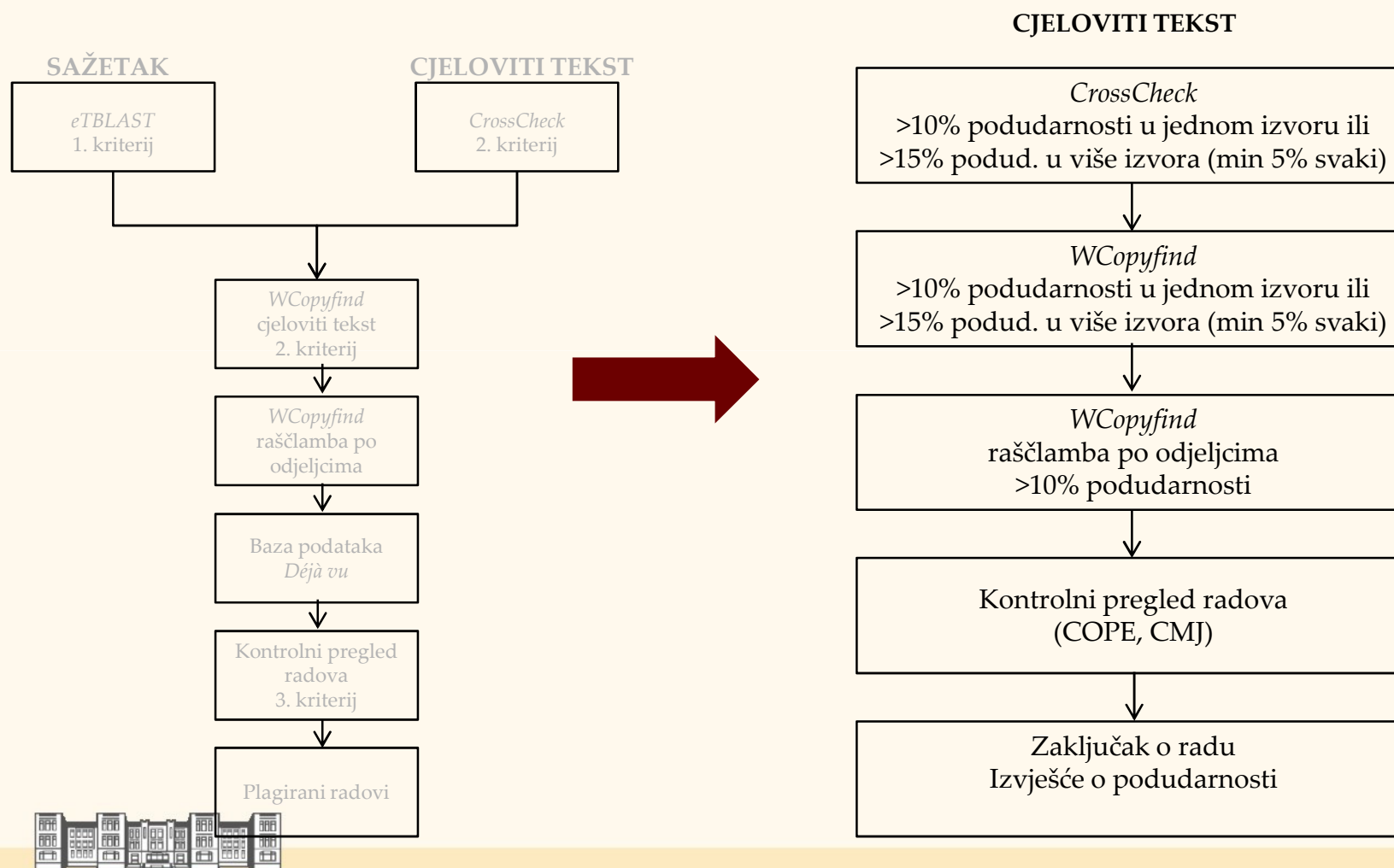
* $P < 0,05$



Učestalost preuzimanja teksta odjeljaka plagiranih i samoplagiranih radova



Hodogram za otkrivanje plagiranih radova u znanstvenom časopisu



Report on manuscript submitted to *CMJ* suspected of being plagiarized

Authors: _____

Manuscript code number: _____

Title: _____

Analysis report

Section	Similarity	Text Similarity Rate (TSR)	Comment
Full-text	YES	insert TSR	name of the source(s)
Abstract	YES/NO	insert TSR	What paragraphs have been derived?-
Introduction	YES/NO	insert TSR	-
Materials and Methods	YES/NO	insert TSR	
Results	YES/NO	insert TSR	-
Discussion	YES/NO	insert TSR	
Citing of original paper(s)	YES/NO		

Conclusion

Manuscript has identical portions of text in: Abstract, Introduction, Materials and Methods, Results, and Discussion sections (delete sections).

Manuscript has characteristics of (delete if not needed):

- technical plagiarism,
- follow-up investigation,
- self-plagiarism,
- plagiarism,
- patchwork plagiarism,
- or else: _____

Corrections needed

Obrazac za podnošenje izvješća o plagiranju

- Šalje se autorima svakog rada sumnjivog na plagiranje



Analysis report

Section	Similarity	Text Similarity Rate (TSR)	Comment
Full-text*	YES	43%	1. cc1 – 25% text similarity with Grinda JM, Macé L, Dervanian P, Folliguet TA, Neveux JY. Bypass graft for complex forms of isthmic aortic coarctation in adults. Ann Thorac Surg. 1995;60(5):1299-302. 2. cc2 – 18% text similarity with Wells WJ, Prendergast TW, Berdjis F, Brandl D, Lange PE, Hetzer R, Starnes VA. Repair of coarctation of the aorta in adults: the fate of systolic hypertension. Ann Thorac Surg. 1996;61(4):1168-71.
Abstract	NO	-	
Introduction	YES	68%	Large portions of this section were copied without citing the original source (the first source).
Materials and Methods	YES	21%	The text of this section was partially derived from the text of the same section of article no 1.
Results	NO	-	
Discussion	NO	26%	The text of this section was partially derived from the text of the same section of article no 2.
Citing of original paper(s)	NO		The authors have NOT cited the first source. The second source was cited.

Conclusion

Manuscript has identical portions of text in Introduction, Materials and Methods and Discussion sections. The published articles, from which the text was derived, were partially cited.

Manuscripts has characteristics of:

- patchwork plagiarism

Corrections needed

Recommendation for peer review and publishing: NO

- Primjer kolažno plagiranog rukopisa



Analysis report

Section	Similarity	Text Similarity Rate (TSR)	Comment
Full-text	YES	17%	Gongadze E, Kabaso D, Bauer S, Slivnik T, Schmuki P, van Rienen U, Igljč A. Adhesion of osteoblasts to a nanorough titanium implant surface. Int J Nanomedicine. 2011;6: 1801-16.
Abstract	NO	-	
Introduction	YES	20%	
Materials and Methods	YES	39%	
Results	NO	-	
Discussion	NO		
Citing of original paper(s)	YES		

Conclusion

Manuscript has identical portions of text in: Introduction and Materials and Methods.

Manuscripts has characteristics of (delete if not needed):

- follow-up investigation

Corrections needed

Change the similar text in Introduction (1 st paragraph)

Recommendation for peer review and publishing: YES

- Primjer isključenog rada - nastavka istraživanja



Analysis report			
Section	Similarity	Text Similarity Rate (TSR)	Comment
Full-text	YES	98 %	Liang Q, Li ZY, Zhou Y, Liu QL, Ou WT, Huang ZG. Construction of a recombinant eukaryotic expression vector containing PHD3 gene and its expression in HepG2 cells. J Exp Clin Cancer Res. 2012 Aug 17;31(1):64. [Epub ahead of print]
Citing of original paper(s)	NO		

Conclusion
 Manuscript is identical to the one sent to J Exp Clin Cancer Res.
 One author is added in the article submitted in the Croatian Medical Journal, which raises serious doubts about authorship in the article.

Manuscripts has characteristics of (delete if not needed):
- duplicate publication

Recommendation for peer review and publishing: NO

- Primjer dvostruke publikacije
- 98% podudarnog teksta



Analysis report

Section	Similarity	Text Similarity Rate (TSR)	Comment
Full-text	YES	85 %	The text was derived from: Mishra SK, Mohapatra PK, Bhattacharya K, Gupta T, Agarwal JP. Prevalence of psychiatric disorder in asymptomatic or minimally symptomatic cancer patients on treatment. J Cancer Res Ther. 2006;3:136-9. Available at: http://www.cancerjournal.net/article.asp?issn=0973-1482;year=2006;volume=2;issue=3;spage=136;epage=139;aualast=Mishra
Abstract	YES	80 %	
Introduction	YES	92 %	-
Materials and Methods	YES	89 %	The sample is identical to the sample in previously published article (n=47), although Mousavi et al claim that there were initially 240 patients whereas in Mishra et al (2006) there were 200 patients.
Results	YES	91 %	The results are almost identical to that in previously published article. The frequencies, the relative frequencies, the P-values are identical to that in previously published article. Table 1 is not presented. Table 2 is different from the table 2 in previously published article, but the results are the same.
Discussion	YES	79 %	
Citing of original paper(s)	NO		The original article is not cited. The list of references is almost the same (14 out of 17).
Author(s) in Déjà vu database	NO		

Conclusion

Manuscript has identical portions of text in all sections, the whole text and the results were derived from previously published article, including the title of the manuscript.

The authors have taken the whole article and tried to present it as theirs, which is considered major (blatant) plagiarism.

The institution should be contacted as the manuscripts could be sent to another journal and even be published.

Manuscript has characteristics of:

- major plagiarism

Recommendation for peer review and publishing: NO

- Primjer napadnog plagiranja
- 85% podudarnog teksta



Zaključak

Program	Prednosti	Nedostaci
<i>WCopyFind</i>	<ul style="list-style-type: none">• besplatan• udio podudarnosti• svi jezici (latinica)• usporedni prikaz tekstova	<ul style="list-style-type: none">• isključivo zadani tekstovi• ne pretražuje internet
<i>eTBLAST</i>	<ul style="list-style-type: none">• besplatan• pretražuje sažetke radova u b.p. <i>Medline</i> , <i>Wikipedia</i>, itd.	<ul style="list-style-type: none">• isključivo sažetci• nema udjela podudarnosti
<i>CrossCheck</i>	<ul style="list-style-type: none">• pretražuje cjelovite radove zaštićene pretplatom• udio podudarnosti• usporedni prikaz tekstova	<ul style="list-style-type: none">• usluga se plaća• korisnici samo članovi udruge <i>CrossRef</i>



Zaključci

- Kontrolna raščlamba radova neizostavan dio otkrivanja plagiranja
- Predloženi hodogram i obrazac za izvješće o podudarnom radu mogu postati standardni alati prilikom obrade zaprimljenih radova u postupku objavljivanja u znanstvenom časopisu.
- Prevencija plagiranja (i ostalih nečestitosti): postupci za otkrivanje plagiranja i izobrazba autora o znanstvenoj čestitosti.



Hvala na pozornosti



[http://www.loopland.net/uploaded_images/\(c\)-Allan-Sanders-2008-guardian_plagiarism-760689.jpg](http://www.loopland.net/uploaded_images/(c)-Allan-Sanders-2008-guardian_plagiarism-760689.jpg)

