

Article Retraction

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Retraction Watch (Oransky and Marcus, 2010)

← → ↻ ⓘ retractionwatch.com

Retraction Watch

Tracking retractions as a window into the scientific process

Weekend reads: The year's top retractions; quoting Trump leads to a firing; life without Elsevier journals

with one comment

This week at Retraction Watch featured revelations about a [frequent co-author of the world's retraction record holder](#), and a [prison term for fraud](#). Here's what was happening elsewhere: [Read the rest of this entry »](#)



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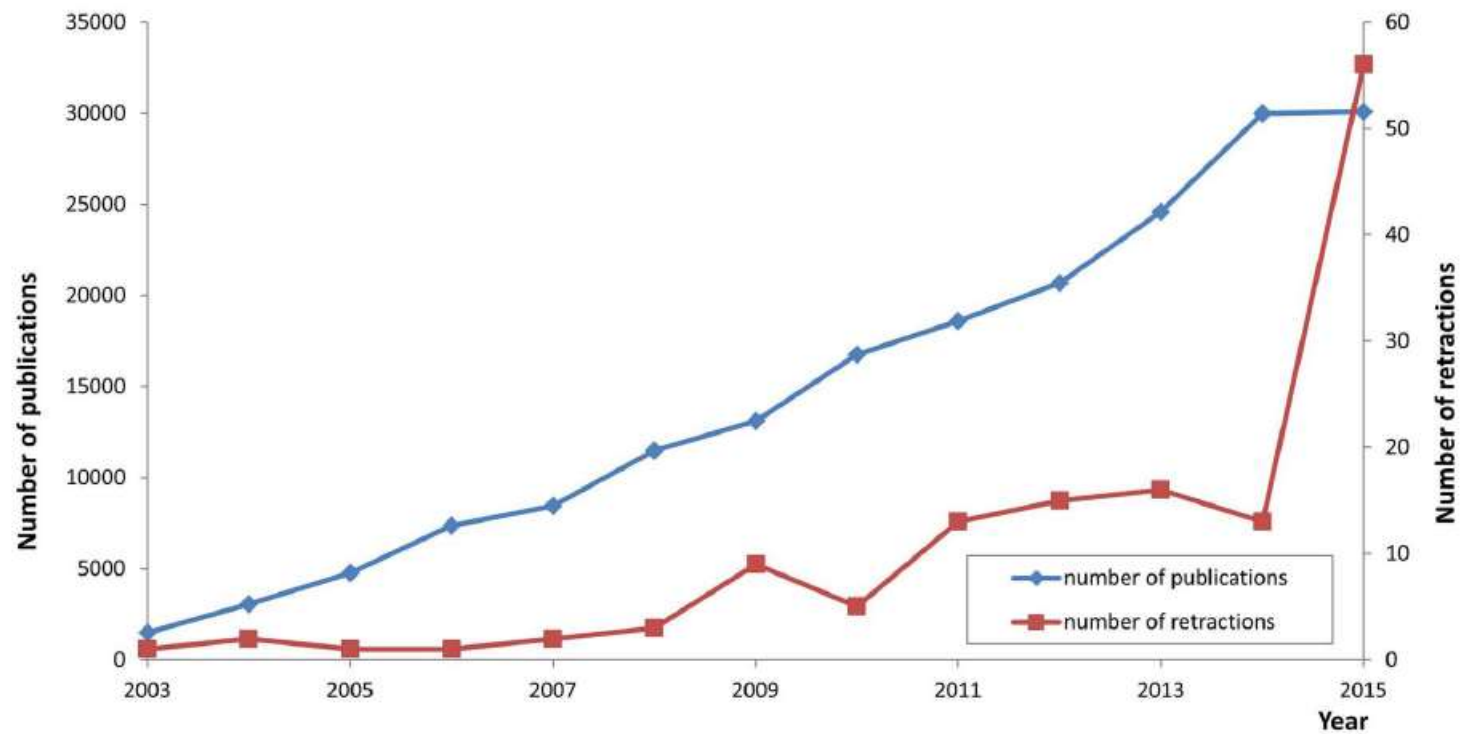
[About Ivan Oransky](#)

[The Center For Scientific](#)

Definition (ICJME, 2016)

- Errors serious enough to invalidate a paper's results and conclusions may require retraction.

Publications vs. retractions (Moylan and Kowalczuk, 2016)



Purpose of retraction (COPE, 2009)

- To correcting the literature and alerting readers to publications that contain seriously flawed or erroneous data that their findings and conclusions cannot be relied upon.
- To alert readers to cases of redundant publication, plagiarism, and failure to disclose a major competing interest likely to influence interpretations or recommendations.

Purpose of retraction (COPE, 2009)

- The main purpose of retractions is to correct the literature and ensure its integrity rather than to punish authors who misbehave.

Indications of retraction (COPE, 2009)

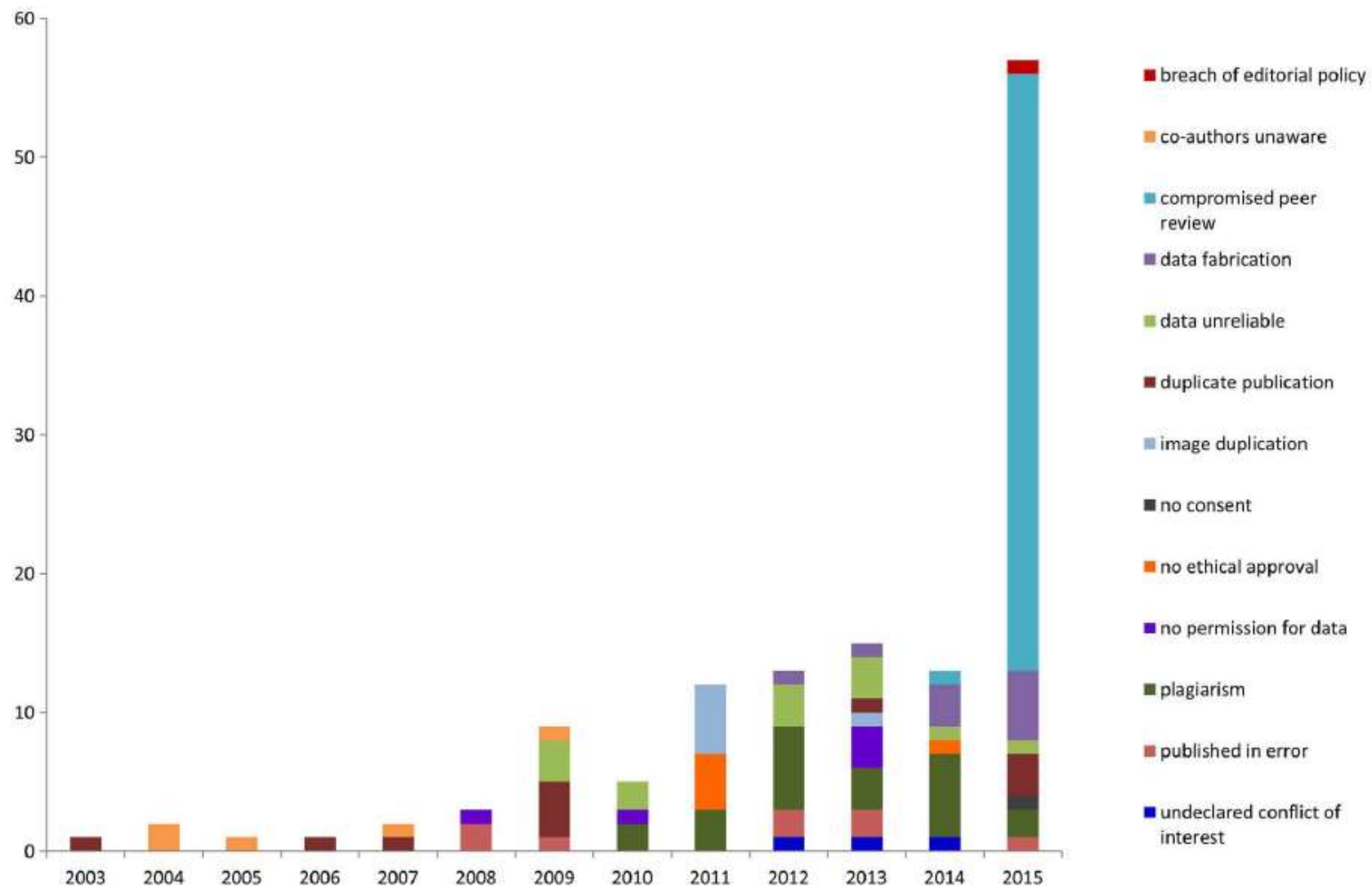
- Existence of clear evidence of unreliable findings:
 - Scientific misconduct (e.g. data falsification/fabrication)
 - Honest error (e.g. miscalculation or experimental error)
- Previously published articles without proper cross-referencing, permission or justification
- Plagiarism
- Unethical research

Main causes of retraction (Moylan and Kowalczyk, 2016)

- Plagiarism
- Compromised peer review
- Data unreliable
- Data falsification/fabrication
- Published in error
- Duplicate publication and image duplication
- Authors unaware of manuscript submission
- No ethical approval, consent, or permission for data
- Undeclared conflict of interest
- Breach of editorial policy

Main causes of retraction (Moylan and Kowalczyk, 2016)

	Honest error	Misconduct	Unclear
Breach of editorial policy		1	
Co-authors unaware of manuscript submission		5	
Compromised peer review		44	
Data falsification/fabrication		10	
Duplicate publication		7	1
Data unreliable	6		8
Image duplication	1	5	
No consent			1
No ethical approval		5	
No permission for data		3	2
Plagiarism		22	
Published in error	10		
Undeclared conflict of interest			3
Sub-totals per broad category	17	102	15



Expression of concern (COPE, 2009)

- Inconclusive evidence of research or publication misconduct by the authors
- Evidence for unreliable findings, but the authors' institution will not investigate the case
- Believe that an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive
- An investigation is underway but a judgment will not be available for a considerable time

Correction (COPE, 2009)

- A small misleading portion of an otherwise reliable publication (especially because of honest error)
- Incorrect list of the authors / contributors

Retraction notice (COPE, 2009)

Notices of retraction should:

- be linked to the retracted article wherever possible
- clearly identify the retracted article
- be clearly identified as a retraction
- be published promptly
- be freely available to all readers
- state who is retracting the article
- state the reason(s) for retraction
- avoid statements that are potentially defamatory or libelous

Examples of ambiguous wording used in retraction statements (Wager and Williams, 2011)

- ‘important irregularities’
- ‘the authors withdraw the paper because of some inaccurate data and other irregularities’
- ‘Retraction is being done for legal reasons based on the advice of counsel’
- ‘the Review contained numerous errors in the text and references that were not discovered until after publication, although neither novel ideas nor data were misappropriated’
- ‘This article has been removed at the request of the authors in order to eliminate incorrect information’

Statement of Retraction

Kourosh Banihashemian, Ruzieh Etesami Pour, Mansour Moazzen, "Frontal acquired brain injury, substance abuse and their common psychological symptoms in the Iranian population".

The editors and publisher would like to inform the readers that the following article has been retracted from publication in *Brain Injury*:

K. Banihashemian, R. Etesami Pour, M. Moazzen, Frontal acquired brain injury, substance abuse and their common psychological symptoms in the Iranian population, *Brain Injury*, 2011, 25(12), 1249-1255

This article has been found to reproduce content to a high degree of similarity, without appropriate attribution or acknowledgement by the authors, from the following original article:

A. Caracul, A. Verdejo-García, R. Vilar-Lopez, M. Perez-García, I. Salinas, G. Cuberos, et al., Frontal behavioural and emotional symptoms in Spanish individuals with acquired brain injury and substance use disorders, *Archives of Clinical Neuropsychology*, 2008, 23(4), 447-454

The journal contacted the authors to investigate and received a response from K. Banihashemian on behalf of all authors. It was agreed that the text in the article was almost word-for-word identical to the text published in *Archives of Clinical Neuropsychology*.

Brain Injury published this article in good faith, and on the basis of signed statements of the corresponding author regarding the originality and ethical reliability of their work. The article is withdrawn from all print and electronic editions.

Jeffrey S. Kreutzer and Nathan D. Zasler, Editors-in-Chief

Anna Treadway, Publishing Director, Informa Healthcare

! RETRACTED ARTICLE

See: [Retraction Notice](#)

Pediatrics. 2007 Mar;119(3):608-10.

P less than .05: what does it really mean?

Kain ZN¹, MacLaren J.

⊕ Author information

Retraction in

P less than .05: what does it really mean? [Pediatrics. 2007]

PMID: 17332213 DOI: [10.1542/peds.2006-3030](#)

[PubMed - indexed for MEDLINE]



Format: Abstract ▼

Pediatrics. 2007 Sep;120(3):698.

P less than .05: what does it really mean?

Kain ZN, MacLaren J.

Retraction of

P less than .05: what does it really mean? [Pediatrics. 2007]

PMID: 17766554 DOI: [10.1542/peds.2007-2209](#)

[PubMed - indexed for MEDLINE]

RETRACTION

Kain ZN, MacLaren J. *P* Less Than .05: What Does It Really Mean? *PEDIATRICS* 2007;119:608–610.

The authors have requested that their commentary titled “*P* Less Than .05: What Does It Really Mean?” that was published in the March 2007 issue of *Pediatrics* (doi:10.1542/peds.2006-3030) be withdrawn because much of the text was published previously in *Anesthesia & Analgesia*.

doi:10.1542/peds.2007-2209

Elsevier's policy

From: <https://www.elsevier.com/about/company-information/policies/article-withdrawal>

- Article withdrawal: for articles in press
- Article retraction
- Article removal: Legal limitations
- Article replacement

Elsevier's policy: Withdrawal and Retraction

1. Errors

2. Accidentally twice submission

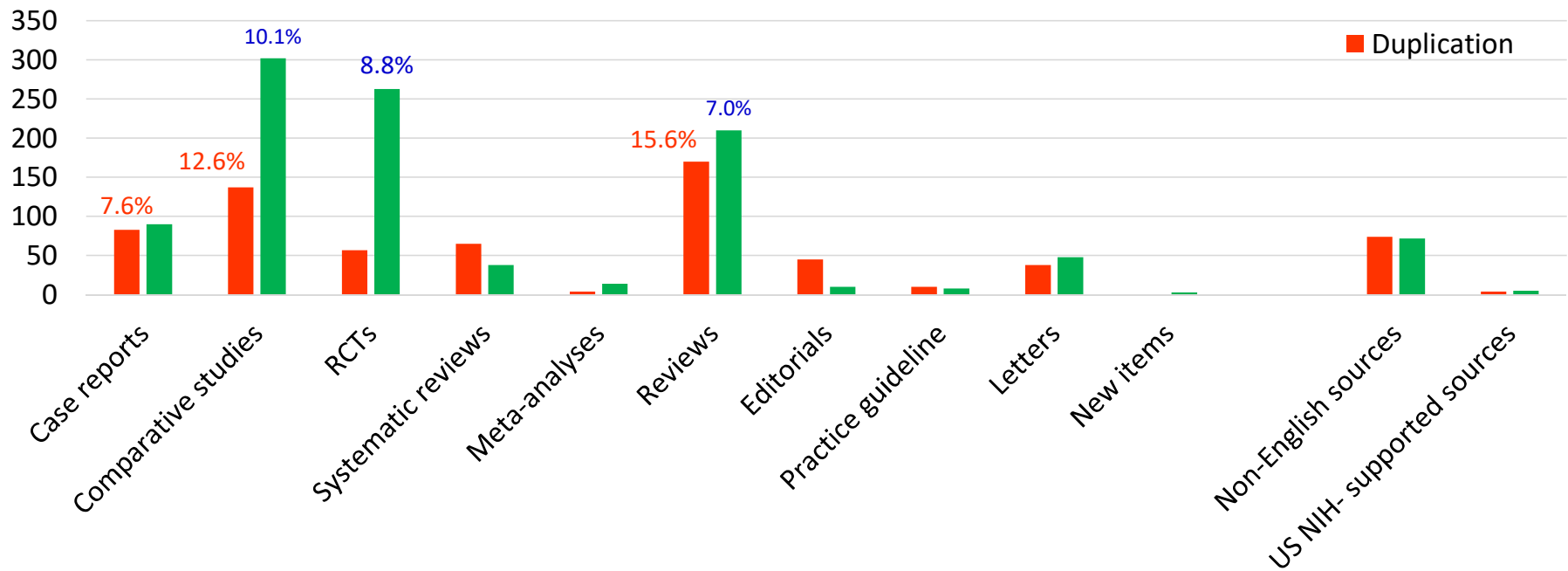
3. Representing infringements of professional ethical codes, such as:

- Multiple submission
- Bogus claims of authorship
- Plagiarism

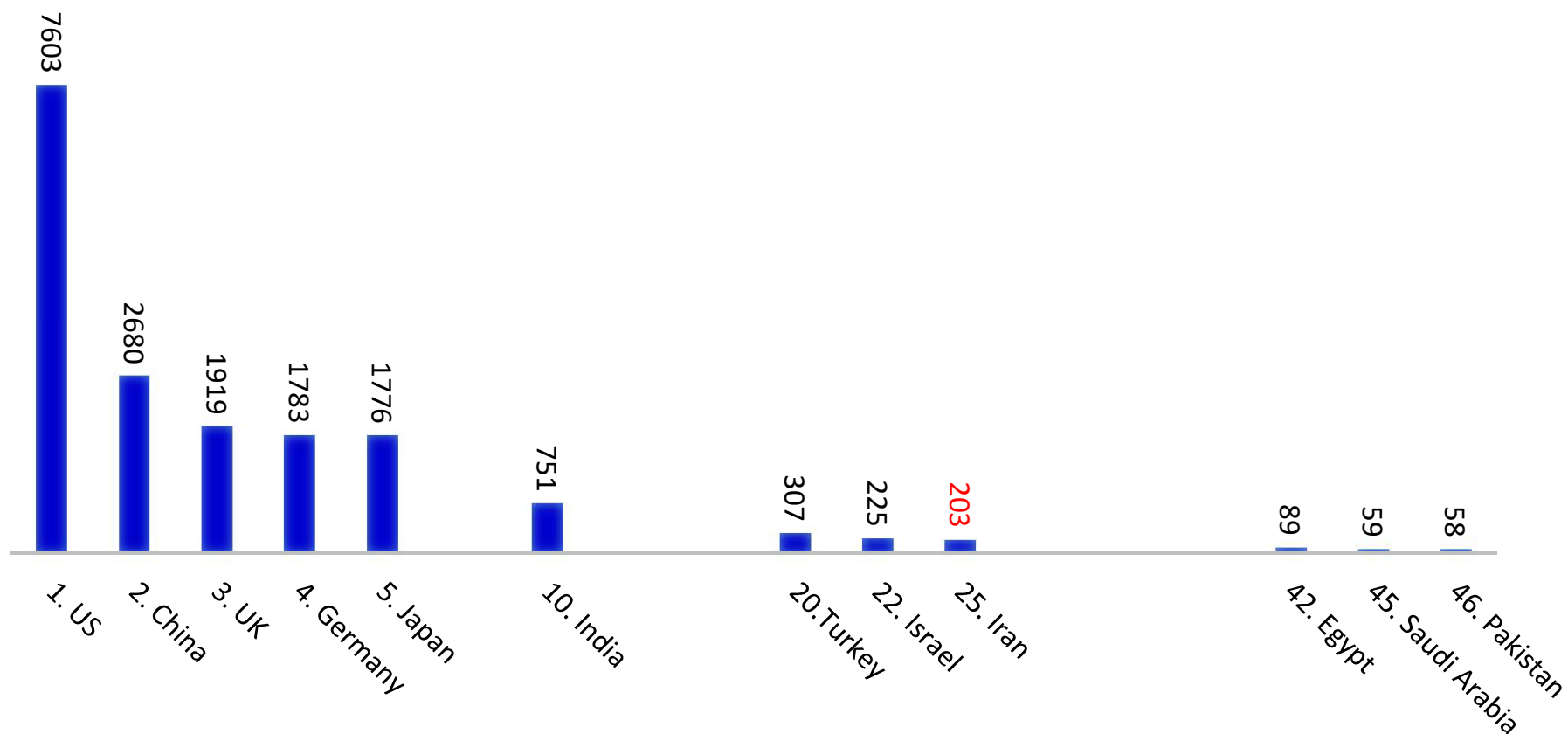
Elsevier's policy: Removal and Replacement

- Removal (legal issues):
 - The article:
 - is clearly defamatory.
 - infringes others' legal rights.
 - is, or we have good reason to expect it will be, the subject of a court order
 - if acted upon, might pose a serious health risk.
- Replacement:
 - In cases where the article, if acted upon, might pose a serious health risk.

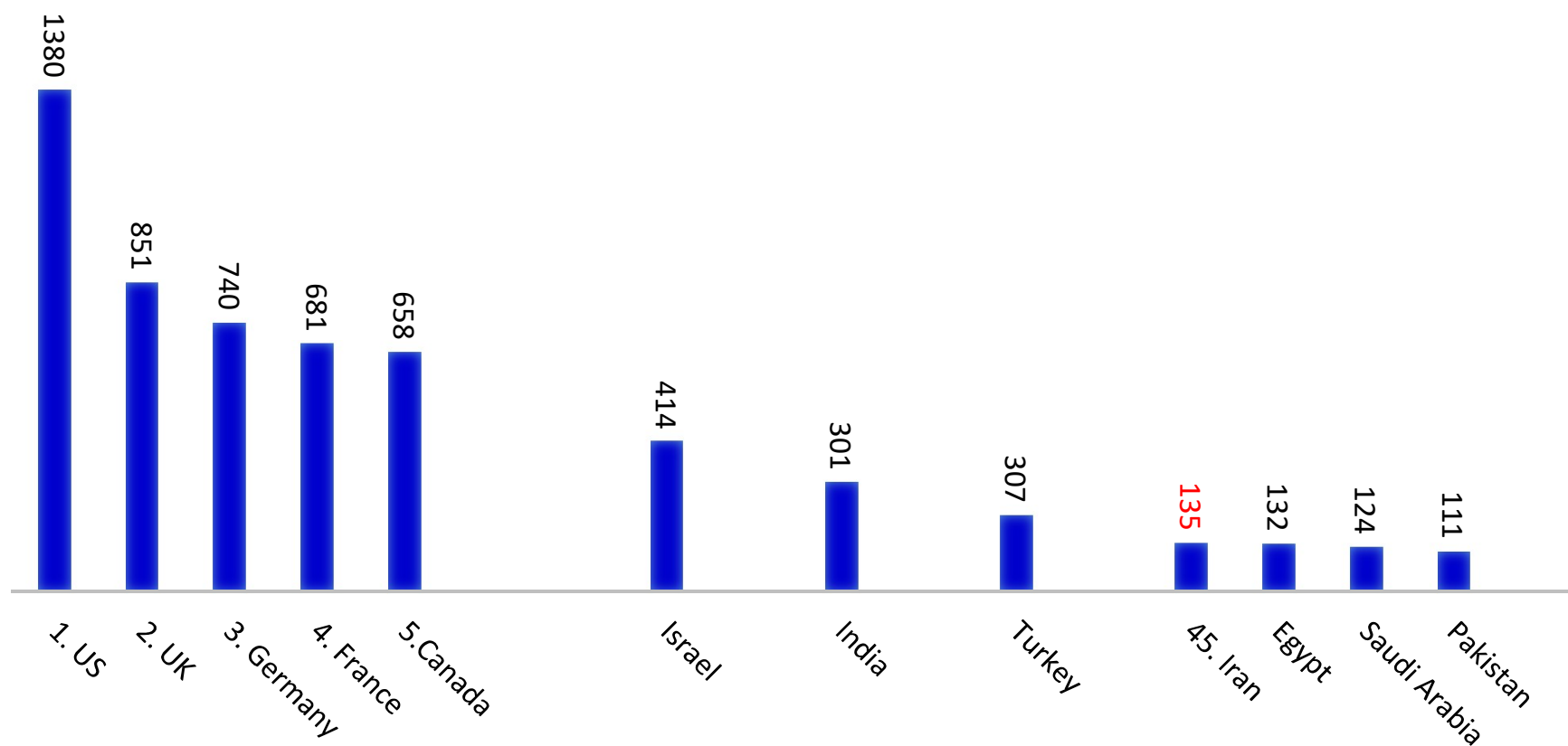
Among 1086 duplications and 3000 retractions (Gasparyan et al., 2014)



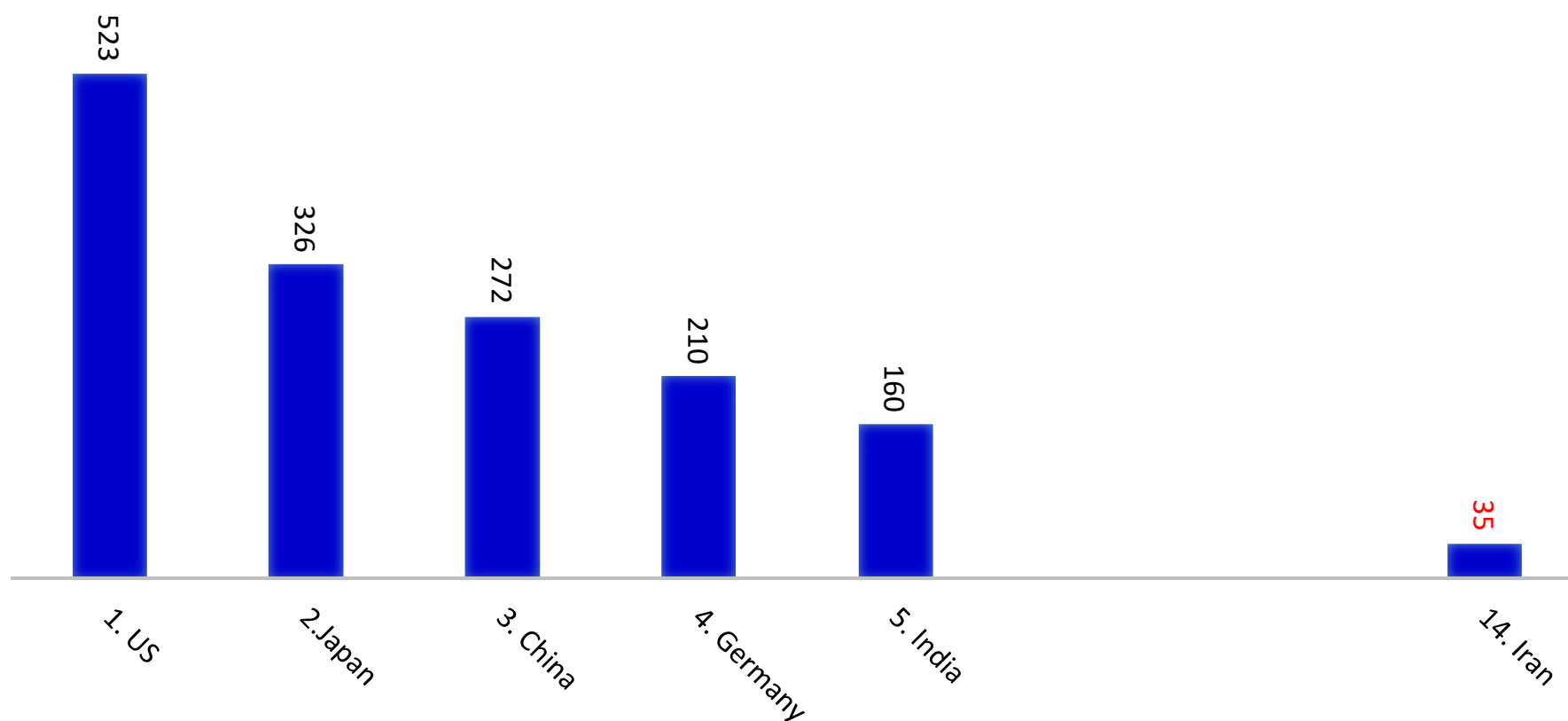
Top countries: Article publishing ($\times 1000$)



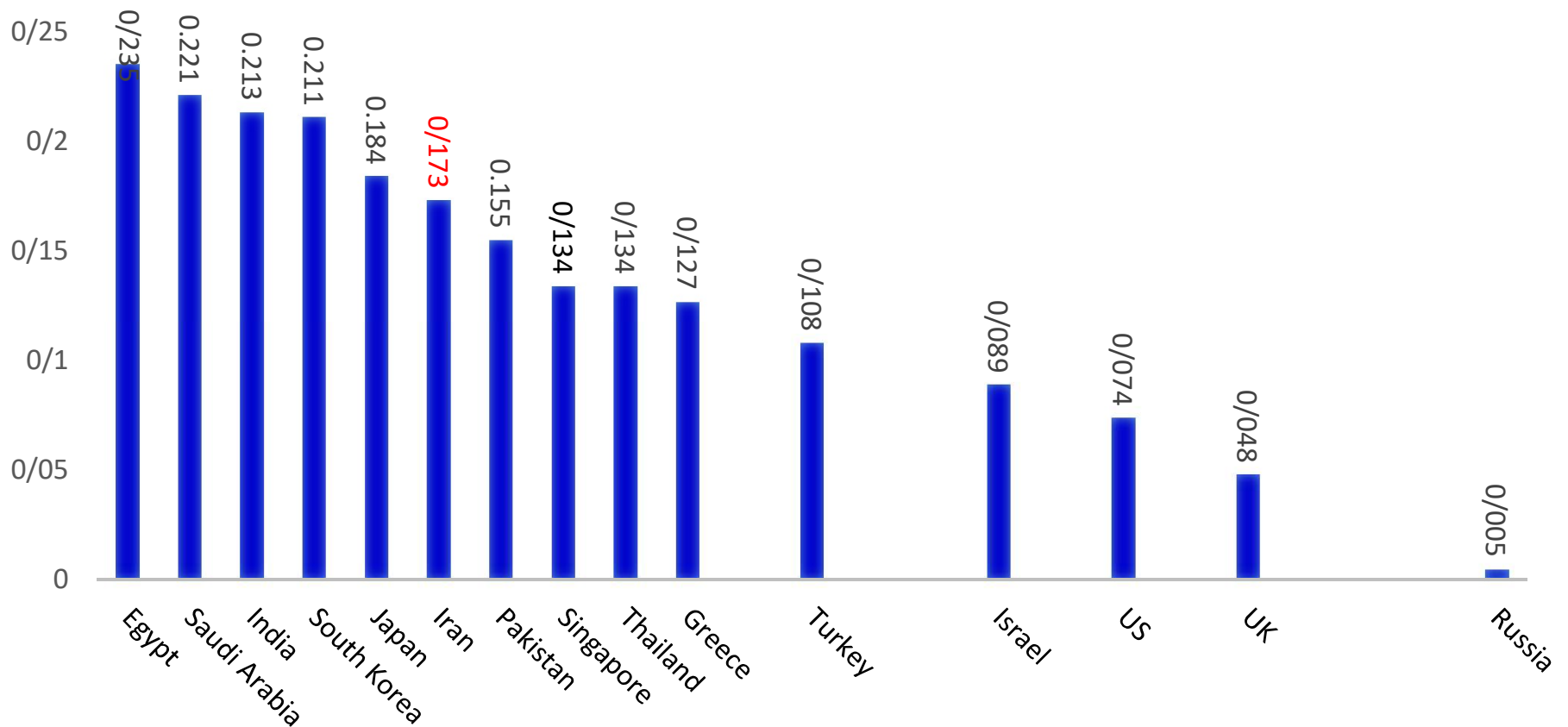
Top countries: H-index



Top countries: Article retraction



Top countries: Article retraction per 1000 published article



Country-based reasons of retraction (2008)

(Decullier et al., 2013)

	Total	Mistakes	Plagiarism	Fraud	Overlap	Not detailed	Authorship	Inconsistent data	Property or legal concerns	Editor	Ethics
Total	235	65	48	34	25	21	12	11	8	8	3
USA	52	31 (48)	2 (4)	3 (9)	5 (20)	4 (19)	1 (8)	3 (27)	2 (25)	1 (13)	.
India	35	2 (3)	6 (13)	15 (44)	8 (32)	1 (5)	1 (8)	1 (9)	.	1 (13)	.
China	29	7 (11)	10 (21)	.	2 (8)	3 (14)	3 (25)	1 (9)	2 (25)	1 (13)	.
Japan	25	3 (5)	2 (4)	12 (35)	2 (8)	2 (10)	.	2 (18)	.	.	2 (67)
United Kingdom	11	3 (5)	4 (8)	1 (3)	.	2 (10)	.	1 (9)	.	.	.
Korea	11	5 (8)	.	1 (3)	.	1 (5)	.	.	2 (25)	2 (25)	.

Values are n (column percentage). Column percentage = number of given reason in a country/ total for this reason; allowing to see which countries contribute the most to each reason.

The column percentages do not add to 100% because some countries were not reported in the table.

Association between reason of retraction and Impact factor (Decullier et al., 2013)

Reason of retraction	Mean IF	Median IF	
Fraud	4.9	3.2	p < 0.0001
Mistakes	7.2	4.1	
Plagiarism	2.3	1.9	

Association between reason of retraction and time to retraction (Decullier et al., 2013)

Reason of retraction	Mean (year)	Median (year)	
Fraud	2.2	2.0	p = 0.722
Mistakes	2.5	2.0	
Plagiarism	3.2	2.0	

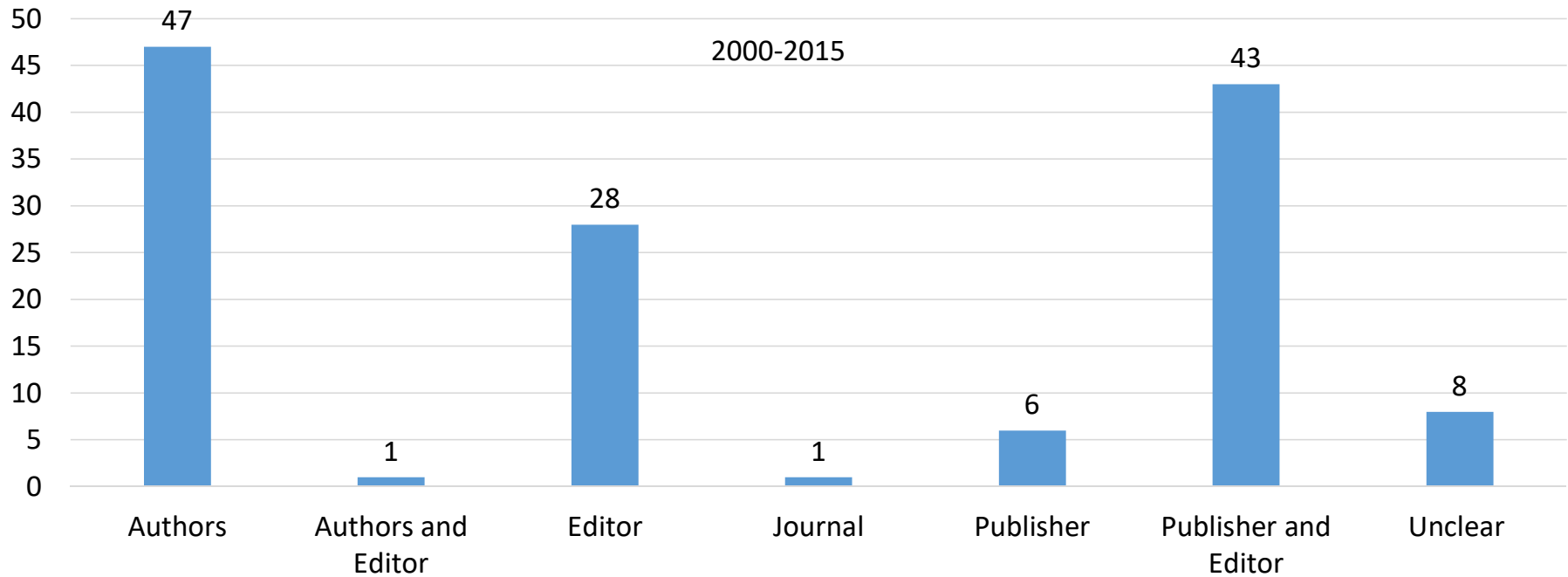
Characteristics of retracted articles: Mistake or Misconduct? (Nath et al., 2006)

Characteristic of retracted article	Misconduct (n = 107)	Mistakes (n = 244)	P
Number of authors			0.04
1	10.5%	5.7%	
2–4	61.1%	53.2%	
5 or more	28.6%	41.1%	
No reported funding source	40.5%	59.4%	0.005
Clinical study (human subjects)	69.3%	65.6%	0.27
Published after 1991	58.9%	65.6%	0.23
Journal ranking by impact factor — in top 100 (as ranked by ISI)	34.6%	47.5%	0.02
Retraction written by author of the initial manuscript	35.2%	90.2%	< 0.001
Time between initial article and retraction (mean, years)	3.3 (95% CI, 2.7–3.9)	2.0 (95% CI, 1.8–2.2)	< 0.001

ISI = Institute for Scientific Information.



Who retracts the article? (Moylan and Kowalczyk, 2016)



Retraction of Iranian articles: Unoriginal articles (Amos, 2014)

Retraction numbers and rates for the 20 countries with 5 or more retracted papers, 2008–2012

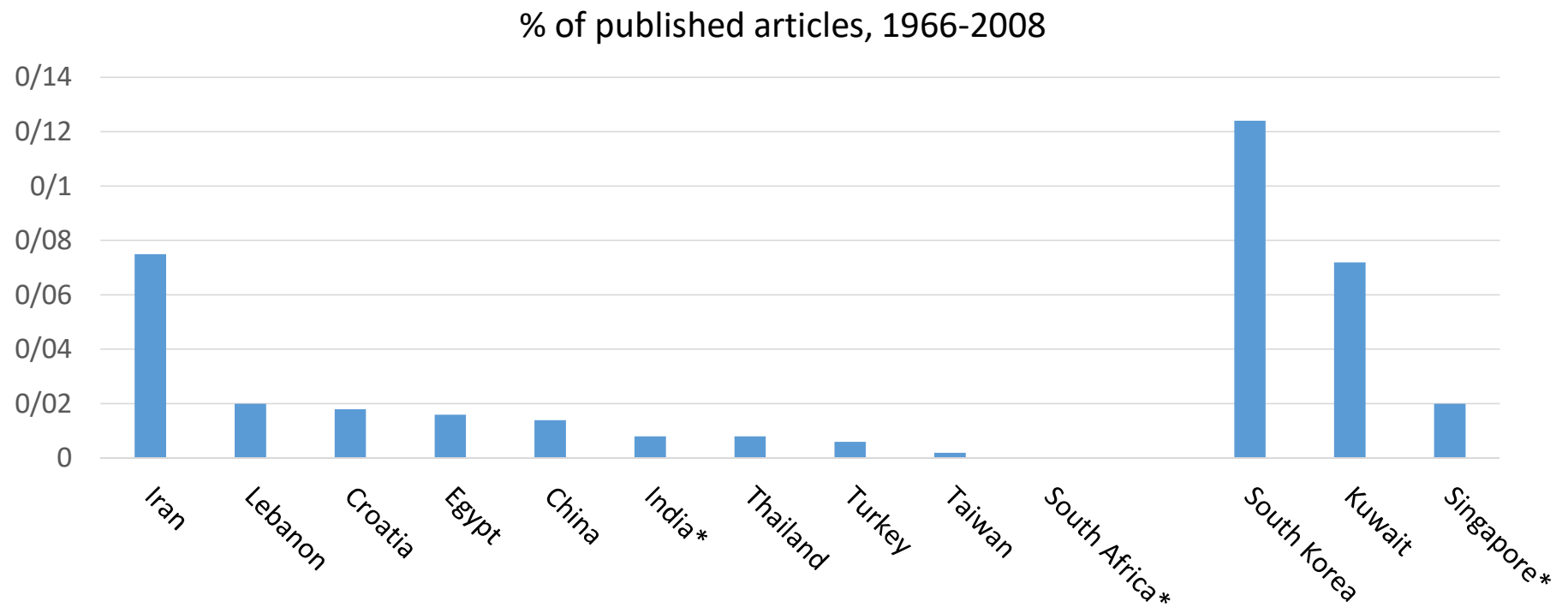
Country	Number of papers retracted			Rate of retraction	
	Total	Plagiarism	Duplicate publication	Plagiarism	Duplicate publication
United States	199	17	26	8.5%	13.1%
China	143	24	42	16.8%	29.4%
Japan	57	2	13	3.5%	22.8%
Germany	55	0	9	—	16.4%
South Korea	55	3	7	5.5%	12.7%
India	49	18	7	36.7%	14.3%
United Kingdom	30	3	5	10.0%	16.7%
Italy	24	16	2	66.7%	8.3%
Australia	19	4	1	21.1%	5.3%
Netherlands	17	2	2	11.8%	11.8%
Iran	14	6	3	42.9%	21.4%
Canada	13	2	2	15.4%	15.4%
France	13	5	1	38.5%	7.7%
Turkey	13	8	2	61.5%	15.4%
Egypt	12	4	1	33.3%	8.3%
Spain	12	2	1	16.7%	8.3%
Brazil	9	3	1	33.3%	11.1%
Finland	8	0	3	—	37.5%
Tunisia	7	3	2	42.9%	28.6%
Sweden	5	1	0	20.0%	—

Retraction of Iranian articles: Unoriginal articles (Amos, 2014)

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Iran	14	6	3	42.9%	21.4%
Canada	13	2	2	15.4%	15.4%
France	13	5	1	38.5%	7.7%
Turkey	13	8	2	61.5%	15.4%
Egypt	12	4	1	33.3%	8.3%
Spain	12	2	1	16.7%	8.3%
Brazil	9	3	1	33.3%	11.1%
Finland	8	0	3	—	37.5%
Tunisia	7	3	2	42.9%	28.6%
Sweden	5	1	0	20.0%	—

Plagiarism retraction of Iranian articles (Stretton et al., 2009)

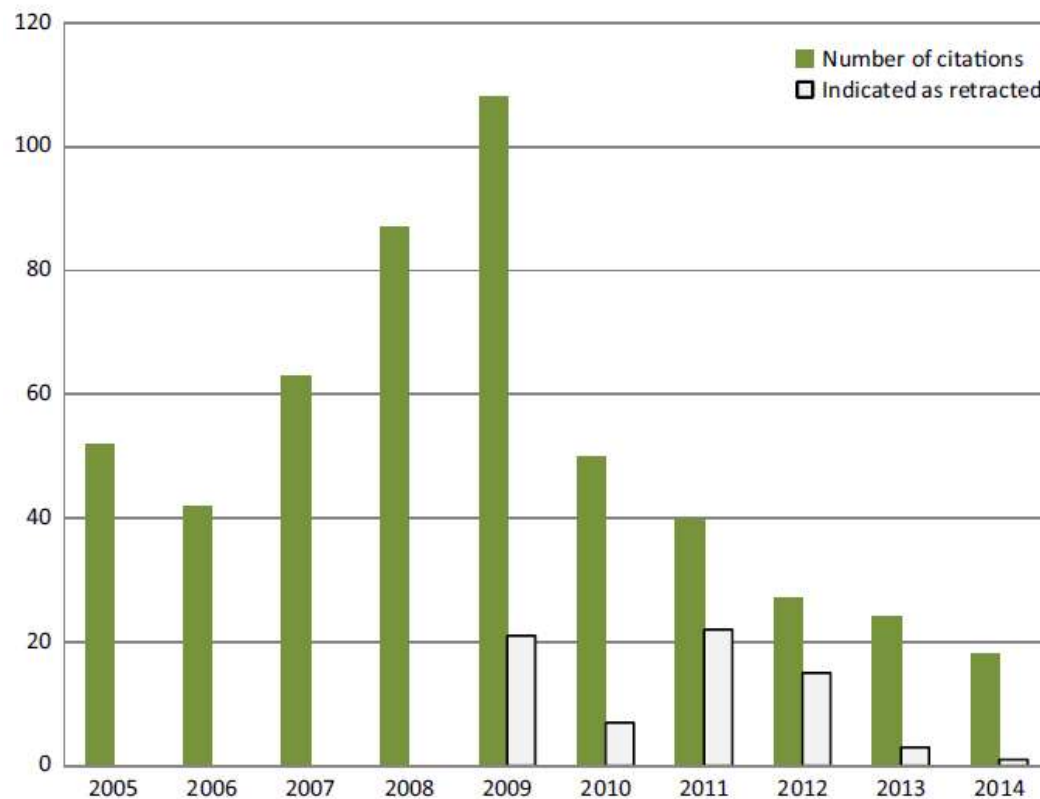


How many patients are put at risk by flawed research? (Green, 2011)

- English-language papers published from 2000 to 2010
- 180 primary studies (retracted) and 851 secondary studies
- Retracted papers were cited over 5000 times.
- Over 28 000 subjects were enrolled and 9189 patients were treated in 180 retracted primary studies.
- Over 400 000 subjects were enrolled and 70 501 patients were treated in 851 secondary studies which cited a retracted paper.
- Papers retracted for fraud (n=70) treated more patients per study ($p < 0.01$) than papers retracted for error (n=110).

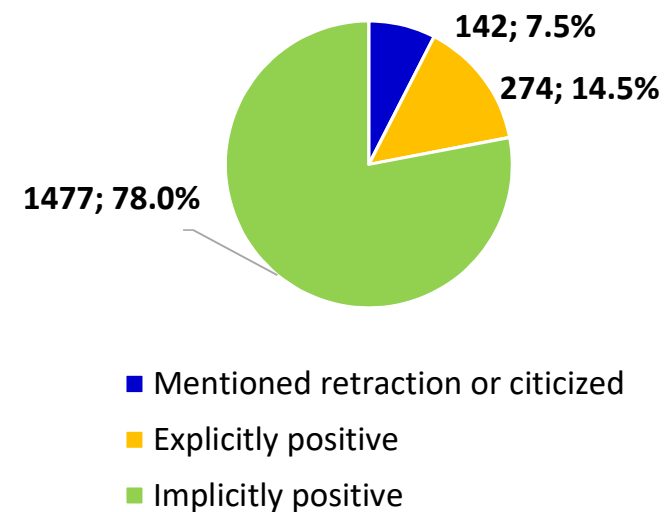
Post-retraction citation: Case of Scott S Reuben

(Bornemann-Cimenti et al., 2015)

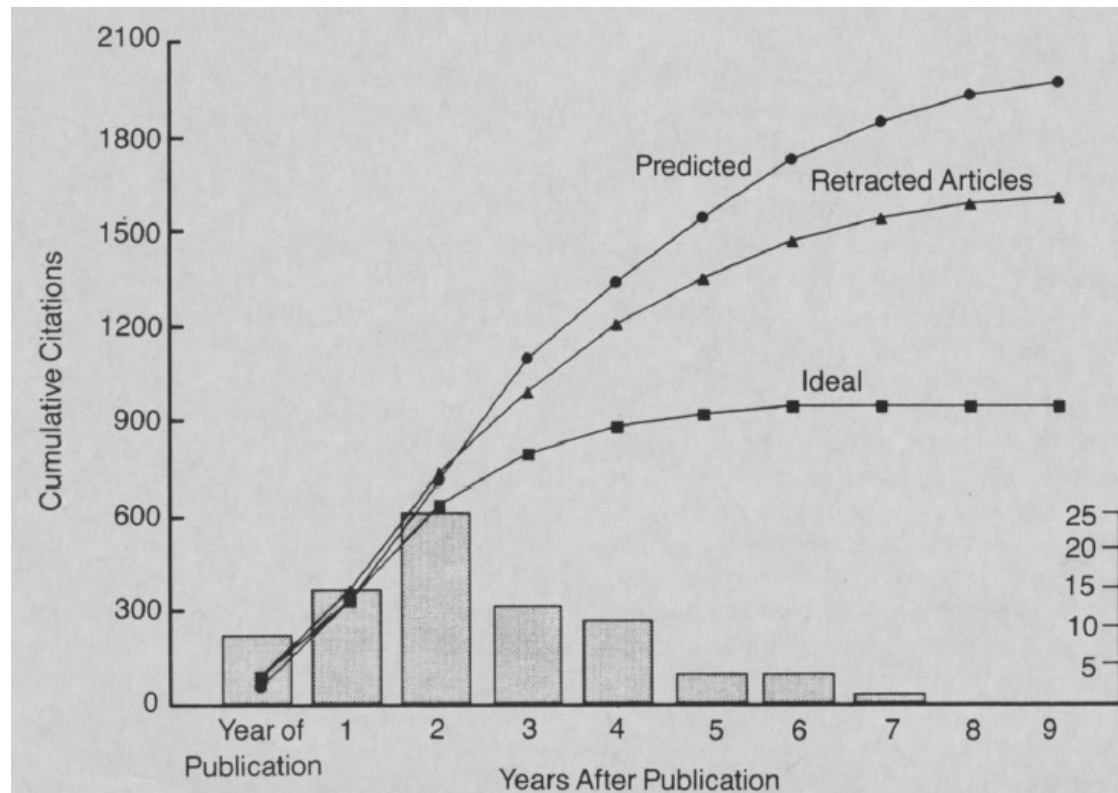


Post-retraction citations (Budd et al., 1999)

- 235 retracted articles (200 totally, 35 partially)
- 2034 post-retraction citations!
- 1893 cases were analyzed:



Should be hopeless? (Pfeifer & Snodgrass, 1990)

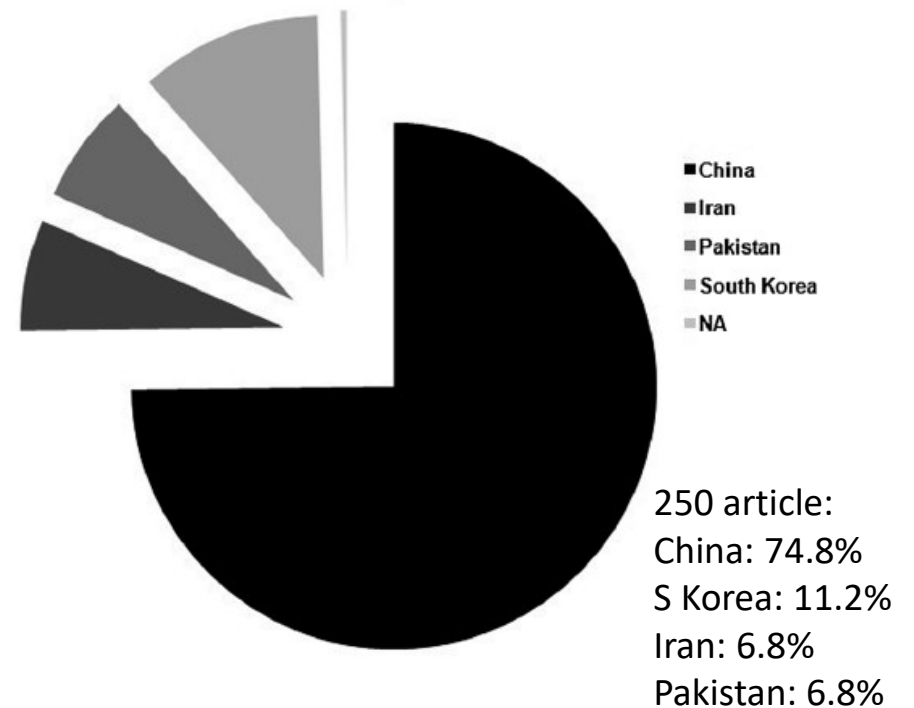


Faked peer review (Qi and Guo, 2016)

Number of retracted papers according to the journal impact factor



Number of retracted papers according to the country



Repeat offenders (Grieneisen and Zhang, 2012)

Researcher	Retraction years	Country	Field of study	Number of retractions	Justification given for retractions
Joachim Boldt ¹	2010–2011	Germany	Anesthesiology	88	Lack of IRB approval
Adrian Maxim ²	2007	USA	Electrical engineering	48	Alleged data fraud and fictitious co-authors
H. Zhong ³	2010	China	Chemistry	43	Alleged data fraud
Jon Hendrick Schön ⁴	2002–2004	USA	Physics	33	Alleged data fraud
T. Liu ³	2010	China	Chemistry	29	Alleged data fraud
Robert A. Slutsky ⁴	1985–1987	USA	Cardiology	25	Alleged data fraud
Scott S. Reuben ⁴	2009–2010	USA	Anesthesiology	24	Alleged data fraud
Naoki Mori ⁵	2010–2011	Japan	Oncology	23	Alleged data fraud
Friedhelm Herrmann ⁶	1997–2003	Germany	Oncology	22	Alleged data fraud
John R. Darsee ⁴	1982–1984	USA	Cardiology	19	Alleged data fraud
Pattium Chiranjeevi ⁷	2008	India	Chemistry	19	Plagiarism
Wataru Matsuyama ⁵	2007–2010	Japan	Immunology	17	Alleged data fraud
Suresh Radhakrishnan ⁸	2010	USA	Immunology	15	Alleged data fraud
M. Quik, G. Goldstein and collaborators	1993–1994	Canada	Physiology	15	Artifact (contamination)
Jon Sudbø ⁹	2006–2007	Finland	Oncology	14	Alleged data fraud

Retraction in Psychiatry field

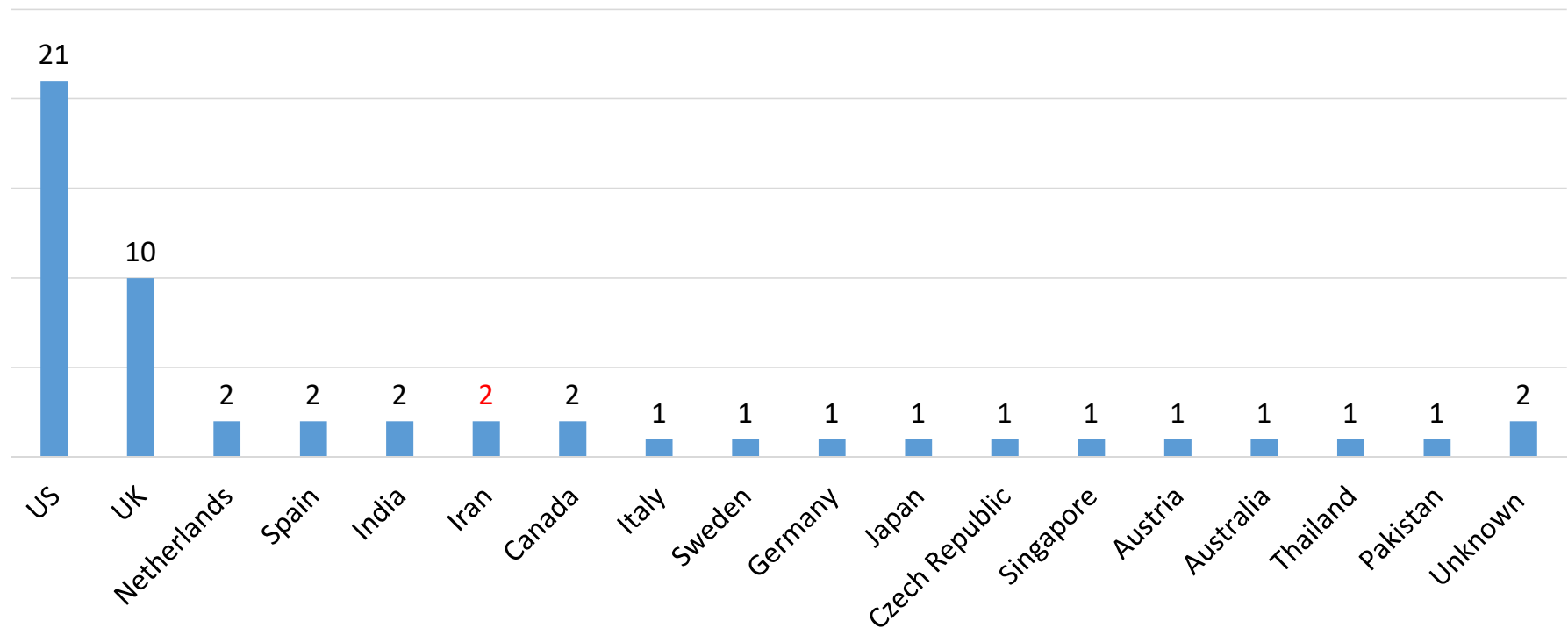
- Nikoobakht M, Pourkasmaee M, Nasseh H. The relationship between lipid profile and erectile dysfunction. *Urol J*. 2005 Winter;2(1):40–4.
- Reason: Duplicate publication

- Safarinejad MR, Taghva A, Shekarchi B, Safarinejad SH. Safety and efficacy of sildenafil citrate in the treatment of Parkinson-emergent erectile dysfunction: a double-blind, placebo-controlled, randomized study. *Int J Impot Res*. 2010 Sep–Oct;22(5):325–35.
- Reason: Not Cited

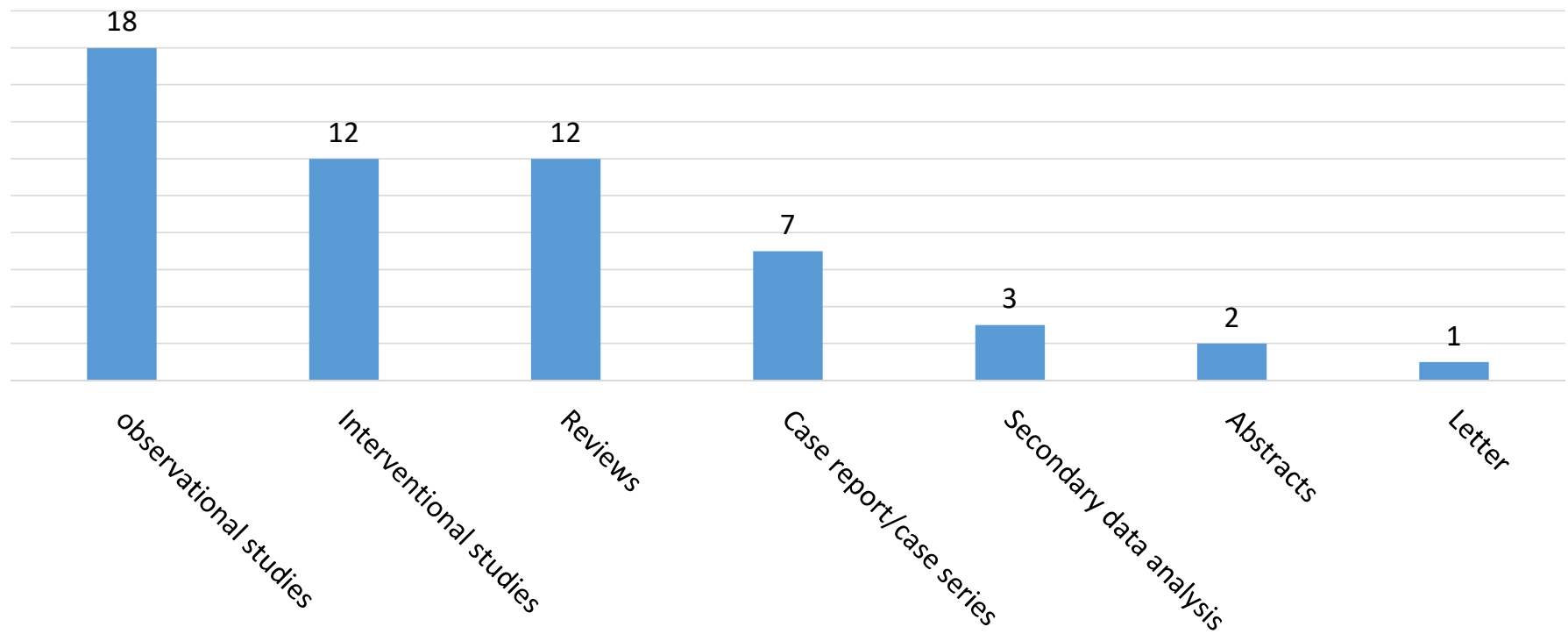
Reason of retraction (Singh Balhara and Mishra, 2014)

Reason for retraction		Number	Percentage
Fraud	Data falsification	7	18.91
	Data fabrication	1	2.70
	Data fabrication and falsification	1	2.70
Duplicate publication		7	18.91
Plagiarism		5	13.51
Methodological concerns		5	13.51
Duplicate publication and non-verifiable references		3	8.10
Lack of author approval		2	16.20
Biased sample collection and no ethical approval		2	16.20
Non-verifiable references		1	2.70
Authorship conflicts		1	2.70
Legal reasons		1	2.70
Erroneous retraction		1	2.70
The reason was not cited for 8 articles.			
Retraction notices were not available/accessible for 10 articles.			

Mental article retraction by country (Singh Balhara and Mishra, 2014)



Mental article retraction by type of study (Singh Balhara and Mishra, 2014)



Six major problems (Allison et al., 2016)

- Editors are often unable or reluctant to take speedy and appropriate action.
- Where to send expressions of concern is unclear.
- Journals that acknowledged invalidating errors were reluctant to issue retractions.
- Journals charge authors to correct others' mistakes.
- No standard mechanism exists to request raw data.
- Informal expressions of concern are overlooked.

What can we do? (Cox & Rennie, 2006)

Table. The Responsibilities of Research Institutions, Editors, and Citing Authors*

Action	The Scientist's Institution	Editors	Citing Authors
Investigating misconduct	Conduct a thorough investigation of alleged misconduct, and notify the ORI, if appropriate. In proven misconduct, investigate each of the questionable author's articles by interviewing coauthors.	Call for an investigation in cases of suspected scientific misconduct.	None
Correcting the scientific literature	Notify journals that published fraudulent findings, and publish the results of the investigation of the fraudulent author's articles.	Retract an article that an investigation has shown to contain faked data. Publish a correction to an article if it has cited an article containing faked data.	If a published article contains a reference to a retracted article, submit a correction to the journal.
Preventing misconduct and its consequences	Educate researchers on their responsibilities as scientists and as role models.	Publish an account of instances of scientific misconduct affecting the journal.	Before submitting a manuscript, check each referenced article to see if it has been retracted.

* ORI = Office of Research Integrity.