

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

6-19-2021

Scholarly Open Access Veterinary and Animal Science Journals indexed in the DOAJ: A Bibliometric Analysis

Ganesan Rathinasabapathy

Tamil Nadu Veterinary and Animal Sciences University, librarian@tanuvas.org.in

Koti Veeranjanyulu

National Institute of Technology, Warangal, veeru030463@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

Rathinasabapathy, Ganesan and Veeranjanyulu, Koti, "Scholarly Open Access Veterinary and Animal Science Journals indexed in the DOAJ: A Bibliometric Analysis" (2021). *Library Philosophy and Practice (e-journal)*. 5920.

<https://digitalcommons.unl.edu/libphilprac/5920>

SCHOLARLY OPEN ACCESS VETERINARY AND ANIMAL SCIENCE JOURNALS INDEXED IN THE DOAJ: A BIBLIOMETRIC ANALYSIS

Dr.G.Rathinasabapathy

University Librarian

Tamil Nadu Veterinary and Animal Sciences University

Chennai – 600 051, Tamil Nadu, INDIA

email: librarian@tanuvas.org.in

and

Dr.K.Veeranjaneyulu

Librarian

National Institute of Technology

Warangal, Telengana, INDIA

email: veeru030463@gmail.com

Abstract

The objective of this study is to report the outcome of the bibliometric analysis of Open Access (OA) journals in veterinary and animal sciences (VAS) indexed by the Directory of Open Access Journals (DOAJ). The DOAJ which indexed 16,460 open access journals as on 10 June 2021, contains 335 open access veterinary and animal science journals (2.03%) and provides access to 1,63,500 articles which is about 2.63% of the total articles. Two journals were indexed in 2003 and the highest number of journals i.e. 46 (13.73%) were added during 2018. The 335 OA journals are contributed by 63 countries and the United Kingdom is the top country with 41 journals (12.24% followed by Indonesia with 35 journals (10.44%). Further, the results indicated that 223 journals are monolingual (66.57%) followed by 81 bilingual (24.17%), 25 trilingual (7.46%), 3 quadrilingual (0.90%) and 3 journals are quintilingual (0.90%). English is the predominant language with 291 journals followed by 55 Spanish, 40 Portuguese and 26 Indonesian. Article processing charge (APC) is not collected by 172 OA journals (51.34%) while 163 journals (48.66%) are collecting APC. Majority of the journals (46.01%) collect APC in US Dollars. Persistent identifier is provided by 243 journals (72.54%) for the resource while 92 journals (27.46%) do not provide PID. The DOAJ seal is awarded to 38 journals (11.34%) and the remaining 297 journals (88.66%) have not been awarded DOAJ seal so far. Majority of the journals (33.43%) contains below 100 articles and only three journals contains more than 5000 articles each.

Keywords: Open access journals, DOAJ, Veterinary Science, Animal Husbandry, Animal Science, Bibliometrics, Scientometrics, Article processing charge.

1. Introduction

Open Access (OA) refers to free, unrestricted online access to research output such as journal articles and books. It includes the practice of making peer-reviewed scholarly research and literature freely available online to the readers. The open access movement started with several declarations provided in the early 2000 i.e. The Budapest Open Access Initiative (2002), the Bethesda Statement on Open Access Publishing (2003) and the Berlin Declaration on Open Access to Knowledge in Sciences and Humanities (2003). The concept of open access led to the publication of research literature through a number of open access resources. Among them, open access journals are gaining huge importance and authors and research scholars show much interest to publish their research output in open access journals so as to ensure visibility to their research work.

2. Directory of Open Access Journals

The emergence of open access journals in huge quantities led to the formation of directory of open access journals (DOAJ). The idea of creating DOAJ developed during the first Nordic Conference on Scholarly Communications held at Lund University in 2002 and the directory was launched in 2003 at Lund University, Sweden. It was originally hosted on the servers of Lund University in Sweden and is currently managed by the independent Community Interest Company, Infrastructure Services for Open Access (IS4OA) located in the UK.

The DOAJ is a service that indexes and provides access to quality, peer-reviewed open access research journals, periodicals and their articles' metadata. The directory covers almost all open access scientific and scholarly journals that use an 'appropriate quality control' system and is not limited to any particular language, subject, size or country of origin.

The DOAJ was started with 300 open access journals and as on 10, June 2021 contains 16,460 open access journals covering 80 languages published by 126 countries. Out of this, 11,816 journals are not charging any article processing fee from the authors and about 62,15,000 articles are available.

3. Review of Literature

A number of studies have been carried out by many authors on various aspects of open access journals indexed in DOAJ and these studies highlight the significance of open access literature provided by DOAJ.

Lihitkar & Waghmare (2013) analysed open access Zoology journals indexed by the DOAJ and found that out of 105 open access journals indexed by DOAJ, 26 journals were published in Spanish language and 12 were published in Portuguese language while most of the journals were published in English language.

Issac & Dominic (2015) have undertaken a scientometric study to analyse psychology journals in DOAJ and reported that Brazil and Spain share first rank in publishing open access psychology journals in DOAJ by publishing 25 journals each and English is the most commonly used medium of the open access journals i.e. 64 journals.

Shukla & Malsawmkimi (2017) carried out a scientometric analysis of open access journals in library and information science based on Scopus and they have identified 21 open access LIS journals and found that the "Library Philosophy and Practice" is the most productive journal in library and information science.

Chakravarty (2020) has carried out a bibliometric study on open access Library and Information Science journals in DOAJ and reported that USA has published more open access journals in DOAJ and English was the most prominent language.

Mishra (2020) studied the growth pattern of open access social science journals indexed in DOAJ, country-wise distribution, different subject categories, leading publishers, language-wise distribution, article processing charges (APC), licence terms and peer review process and reported that 1,069 journals are related to social sciences.

Selvam and Amudha (2020) have carried out a bibliometric study on open access Library and Information Science journals in DOAJ and reported that out of 15,633 journals indexed in DOAJ, 176

journals are in library and information science. The study has also reported the license type, language distribution, review systems and contribution of various countries.

Reddy & Pujar (2021) have studied the scholarly open access journals in Economics indexed by the DOAJ and reported that 287 Economics open access journals are indexed in DOAJ and the growth rate of journals in economics subject plunged to 87.11% since 2013 and 78.75% journals do not levy any article processing charges.

4. Need for the present Study

Numerous research scholars are engaged in various disciplines of veterinary and animal sciences to find out solutions for various problems faced by the stakeholders of veterinary and animal sciences viz., animal diseases, animal health and production methods, animal husbandry practices, etc. The academicians and research scholars in this field require large amount of literature and information to base their study and research. But, a review of literature revealed that so far, no bibliometric study has been undertaken on the open access journals in veterinary and animal sciences indexed by the DOAJ. Therefore, the present study has been carried out and it is hoped that the results of this study would help the stakeholders of veterinary and animal sciences which includes students, research scholars, faculty, scientists, librarians and policy makers.

5. Objectives of the Study

In order to pursue the study, the following objectives are framed in accordance with the scope of investigation.

- to examine the year-wise growth of open access veterinary and animal sciences indexed by the DOAJ
- to ascertain the country wise distribution of open access journals in veterinary and animal sciences
- to assess the languagewise distribution of OA journals in veterinary and animal sciences
- to examine the peer review process of OA journals in veterinary and animal sciences
- to ascertain the publication time taken by the OA journals in veterinary and animal sciences
- to trace out licencing models of OA journals in veterinary and animal science journals
- to examine the copyright privileges of authors of OA journals in veterinary and animal sciences
- to discover the plagiarism policy adopted by OA journals in veterinary and animal sciences
- to find out article processing charges and waiver policy of OA journals in veterinary and animal sciences
- to identify the number of OA journals providing persistent identifiers for the resources and the type of persistent identifiers
- to find out the number of journals awarded with DOAJ seal

6. Scope and Limitation of the Study

The scope of the present study is confined to only journals publishing articles dealing with various aspects of 'veterinary and animal sciences' indexed in the 'Directory of Open Access Journals' (DOAJ) that are indexed until June 10, 2021.

7. Methodology

The metadata of all the journals indexed in DOAJ has been downloaded into Excel and the complete list of journals in 'Veterinary and Animal Sciences' (VAS) were segregated using the keywords viz., veterinary, animal, cattle, canine, feline, ovine, caprine, poultry and meat from the 'Keywords' category. Downloaded metadata revealed that in total 335 veterinary and animal science journals were being indexed in DOAJ. Further, the data has been extracted by applying filter formula onto the respective fields and analysed.

8. Results and Discussion

8.1 Growth of OA Veterinary and Animal Science Journals

The study revealed that out of 16,460 OA journals indexed by DOAJ, 335 journals are publishing articles in various aspects of veterinary and animal sciences which is about 2.03%. Initially two journals were indexed in the year 2003 and every year new journals are being added regularly by the DOAJ and currently it has 335 titles publishing articles related to various aspects of veterinary and animal sciences. It has been observed that highest number of journals i.e. 46 (13.73%) was added during the year 2018 followed by 41 journals during 2017 (12.24%). The following Figure-1 depicts the growth of OA veterinary and animal science journals in DOAJ since 2003.

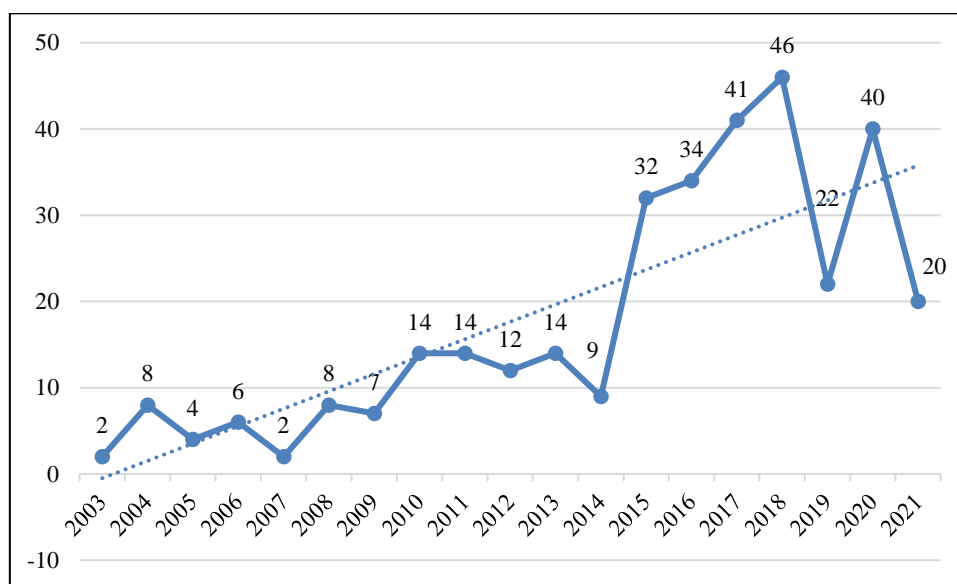


Figure – 1 Growth of OA Journals in VAS

8.2 Leading Countries publishing OA journals in Veterinary and Animal Sciences

It has been observed that 63 countries contributed the 335 open access journals in veterinary and animal sciences and the United Kingdom is the top contributor with 41 journals (12.24%) followed by Indonesia with 35 journals (10.44%), Brazil with 34 journals (10.15%), Poland with 16 journals (4.78%), Iran with 14 journals (4.18%), Turkey and U.S.A. each with 11 journals (3.28%) and Columbia, Iraq, Spain and Switzerland each with 10 journals (2.99%). The details of leading countries publishing open access journals in veterinary and animal sciences which are indexed by the DOAJ are illustrated in Figure-2.

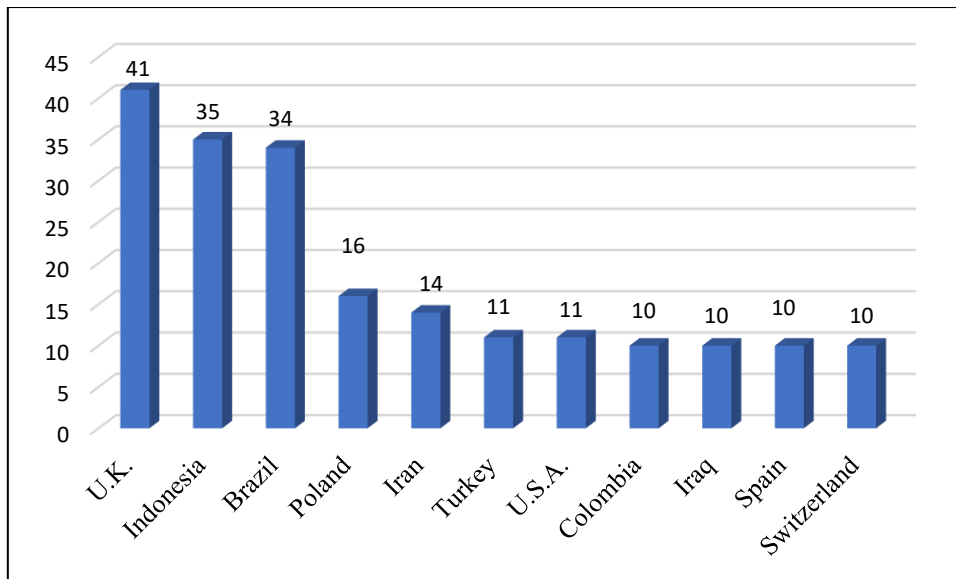


Figure – 2 Leading Countries publishing OA journals in VAS

8.3 Language Distribution

The DOAJ indexes journals published in many languages. The present study revealed that 223 journals are monolingual (66.57%) followed by 81 bilingual (24.17%), 25 trilingual (7.46%), 3 quadrilingual (0.90%) and 3 quintilingual (0.90%). The details are illustrated in Figure-3.

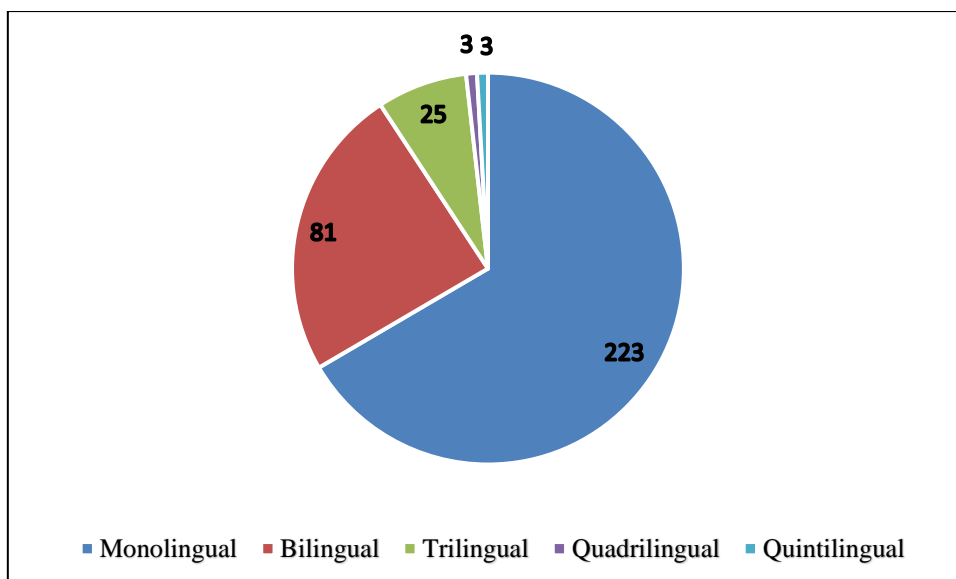


Figure-3 Language Distribution of OA Journals in VAS

8.4 Predominant Languages

English is the predominant language with 291 journals followed by 55 Spanish, 40 Portuguese, 26 Indonesian, 12 Russian, 9 Turkish, 8 French, 4 Romanian and 3 Arabic, Italian and German respectively. Percentage analysis has not been done for this because there are bilingual, trilingual, quadrilingual and quintilingual journals covered under this study. The top 10 predominant languages of OA veterinary and animal science journals indexed by the DOAJ are illustrated in Figure-4.

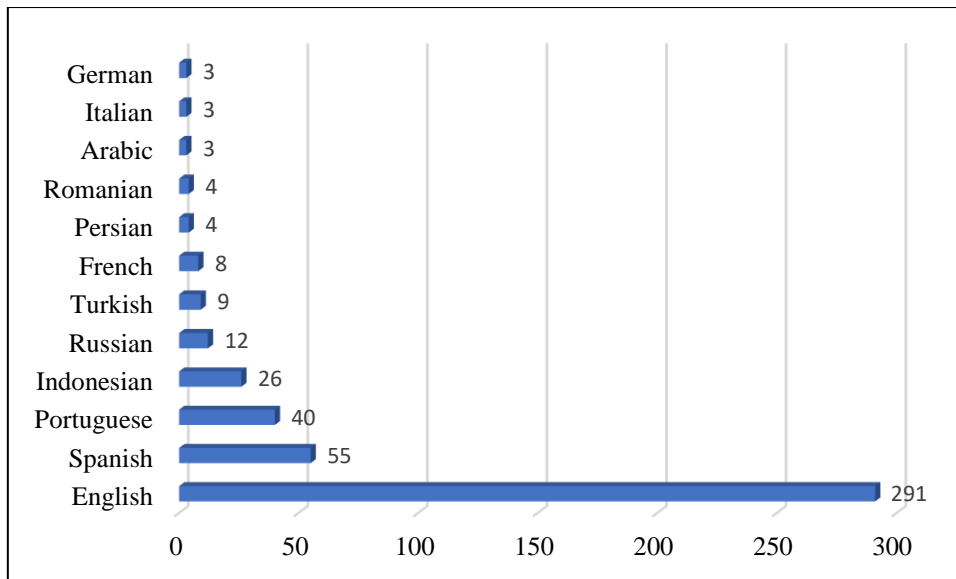


Figure-4 Predominant Languages of OA veterinary and animal science journals

8.5 Peer review policy adopted by OA veterinary and animal science journals

The peer review system exists to validate academic work and helps to improve the quality of published research. It also increases networking opportunities within research communities. Though there are criticisms against peer review, it is still the only widely accepted method for research validation and has continued successfully with relatively minor changes for some 350 years. There are many types of peer review systems in practice such as open peer review, blind peer review, double blind peer review.

The present study found that majority of the journals i.e. 155 (46.27%) adopt double blind peer review followed by blind peer review by 112 journals (33.43%), peer review by 67 journals (20%) and one journal (0.30) i.e. Veterinary Evidence published by Royal College of Veterinary Surgeons, United Kingdom follows open peer review system. The data are illustrated in the following Figure – 5.

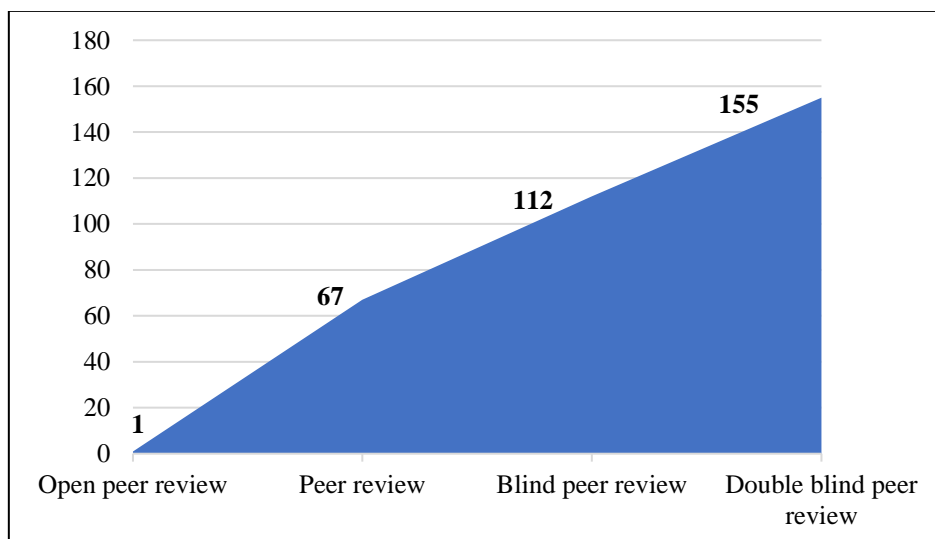


Figure-5 Peer review policy of OA veterinary and animal science journals

8.6 Publication Time

Scholarly journals always need some time to review the paper and find out the suitability of its publication. In general, authors want to publish their paper as early as possible due to various reasons. Therefore, this study analysed the average time between article submission and publication by the open access journal publishers of veterinary and animal sciences and found that 84 journals (25.07%) take 4 – 8 weeks. It has been observed that the minimum time taken is within 4 weeks and the maximum time is 53 weeks. The details are furnished in Table – 1.

Table – 1 Average time between article submission and publication

S. No.	Weeks	No. of Journals	% of Journals
1	Within 4 weeks	5	1.49
2	4 – 8 weeks	84	25.07
3	9 – 12 weeks	81	24.18
4	13 – 18 weeks	69	20.60
5	19 – 24 weeks	56	16.72
6	25 – 36 weeks	28	8.36
7	37 – 48 weeks	7	2.09
8	49 – 53 weeks	5	1.49
	Total	335	100.00

8.7 Licensing Models of OA Journals

There are many licensing models used in open access publishing field. The present study revealed that the 335 open access veterinary and animal science journals follow different licensing models such as Creative Commons (CC), Attribution alone (BY), Share-alike (SA), Non-commercial (NC), No derivative works (ND), Freeing content globally without restrictions (CC0) and Publishers' own license. The analysis revealed that majority of the journals i.e. 146 journals (43.58%) follow Creative Commons (CC) Attribution alone (BY) licensing model. The complete details are illustrated in the Figure – 6.

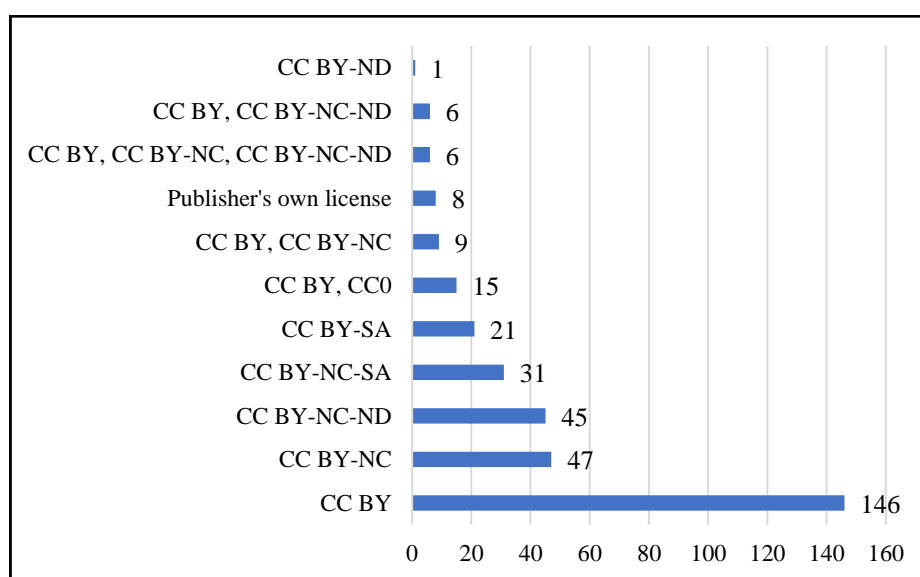


Figure – 6 Licensing Models of OA Journals in Veterinary and Animal Sciences

8.8 Copyright Privileges of Authors

The OA journal publishers provide two kinds of copyrights to the authors of the publications. Some publishers provide copyright without restrictions while some provide copyright with some restrictions. This study revealed that the 160 (47.76%) OA veterinary and animal science journals provide the authors copyright without any restrictions while 175 journals (52.24%) provide copyright with some restrictions. The same is illustrated in Figure-7

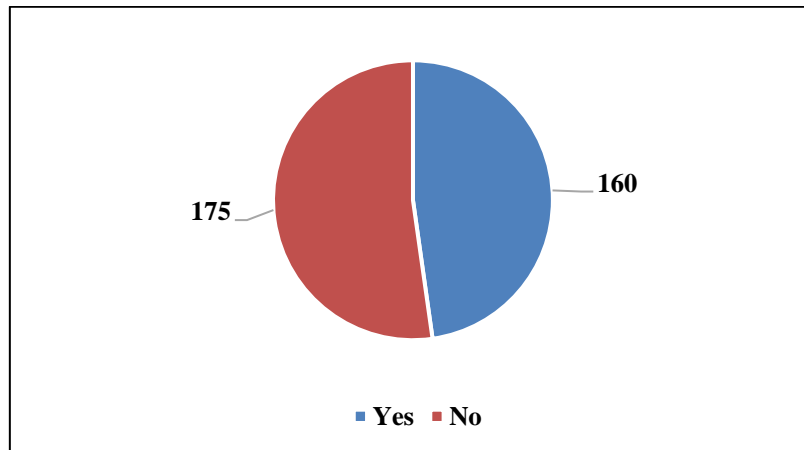


Figure – 7 Copyright privileges of Authors

8.9 Plagiarism Policy

As far as the plagiarism policy is concerned, 207 journals (61.79%) have plagiarism policy while 128 journals (38.21%) do not have a plagiarism policy which is depicted in Figure - 8.

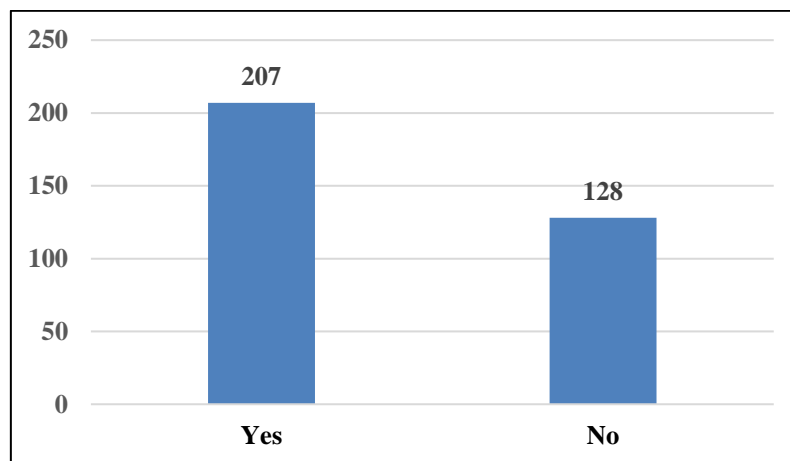


Figure – 8 Plagiarism Policy of OA Journals

8.10 Article Processing Charges and Waiver Policy

Some journals insist that the author has to pay a publication fee which is also known as 'Article Processing Charge (APC), a fee to make a work available open access in either an open access journal or hybrid journal. The fee may be paid by the author, the author's institution, or their research funder. The study found that 172 OA journals (51.34%) are not collecting article processing charge (APC) while 163 journals (48.66%) collect APC. Further, 77 journals (22.99%) have APC waiver policy

while 258 (77.01%) journals do not have any waiver policy. Out of 172 OA journals which are not collecting APC, 16 journals (4.78%) insist some other fees. The details of APC are illustrated in Figure-9.

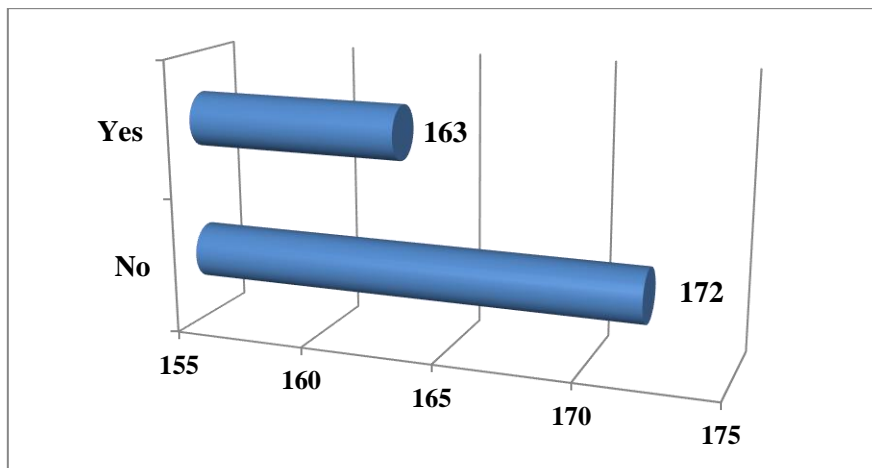


Figure – 9 Article Processing Charges (APC) of OA Journals

8.11 Predominant Currency of APC

It has been observed that the OA journals in veterinary and animal sciences accept APC by 13 different currencies . The study revealed that 75 journals (46.01%) collect APC in US Dollars followed by GBP by 21 journals (12.88%), IRR by 19 journals (11.67%), Euro by 17 journals (10.43%), BRL by 14 journals and CHF by 3 journals (2.45%). Three journals (1.84%) collect the APC in USD or GBP or Euro. Two journals (1.23%) each collect APC in KRW, PLN, UAH respectively and each one journal (0.61%) collects APC in JPY, MXN, TRY and ZAR respectively. The type of currency in which the OA journal publishers collect APC are furnished in Table-2

Table -2 Type of Currency by which APC has to be paid to OA Publishers

Currency	Amount	%
USDollar	75	46.01
Great Britain Pound	21	12.88
Iranian Rial (IRR)	19	11.67
Euro	17	10.43
Brazilian Real (BRL)	14	8.59
Swiss Franc (CHF)	4	2.45
USD / GBP / Euro	3	1.84
Korean Republic Own (KRW)	2	1.23
Polish Zloty (PLN)	2	1.23
Ukraine Hryvnia (UAH)	2	1.23
Japanese Yen (JPY)	1	0.61
Mexican Peso (MXN)	1	0.61
Turkish Lira (TRY)	1	0.61
South African Rand (ZAR)	1	0.61
Total	163	100.00

8.12 Persistent Identifier

Persistent identifier (PID) is a long-lasting reference to a resource which is very much important for a publication as it provides the information required to reliably identify, verify and locate it. There are different PID types available viz., URNs, DOIs, ARKs, Handle, etc. The study revealed that out of 335 OA journals in veterinary and animal sciences, 243 journals (72.54%) provide PID for the resource while 92 journals (27.46%) do not provide PID. Out of the 243 journals, 242 journals provide Digital Object Identifier (DOI) 99.59% and one journal (0.41%) provide Archival Resource Key (ARK). The details are depicted in Figure – 10.

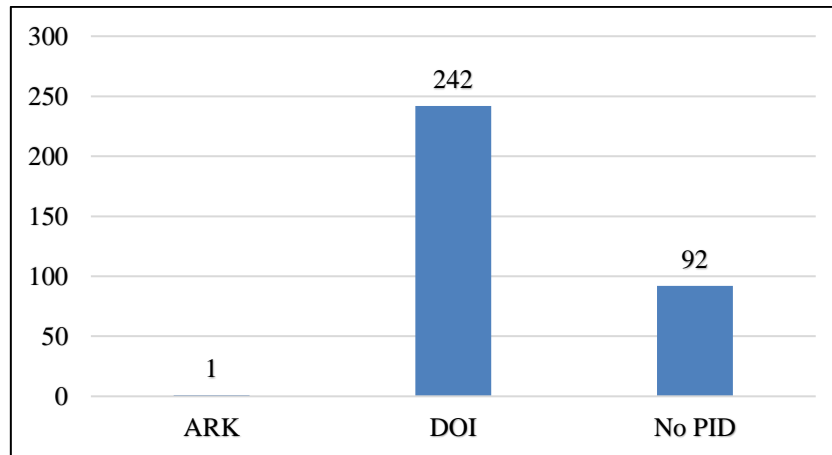


Figure – 10 Persistent Identifiers used by OA Journals

8.13 DOAJ Seal

The DOAJ seal is awarded to journals that demonstrate best practice in open access publishing. Around 10% of journals indexed in DOAJ have been awarded the seal based on seven criteria which a journal must meet to be eligible for the DOAJ seal which relate to best practice in long term preservation, use of persistent identifiers, discoverability, reuse policies and authors' rights. The present study revealed that out of 335 journals, only 38 journals (11.34%) have been awarded DOAJ seal while the remaining 297 (88.66) journals have not been awarded DOAJ seal so far and the same is illustrated in Figure – 11.

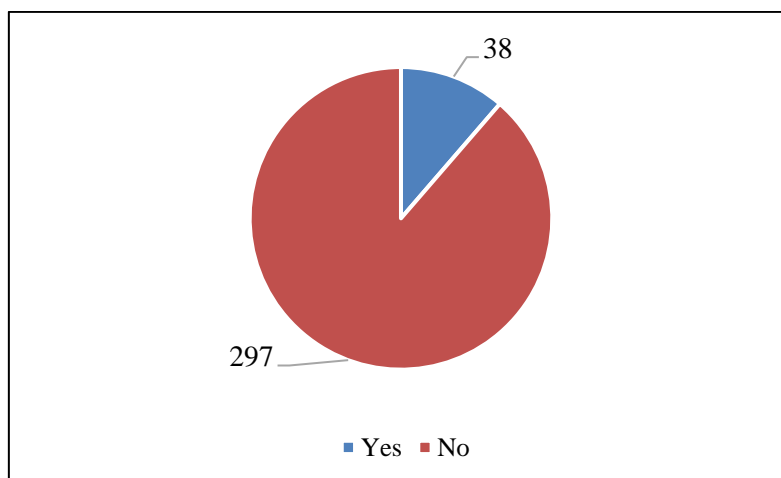


Figure – 11 OA Journals with and without DOAJ Seal

8.14 Number of Articles

The DOAJ provides open access to about 6.00 million articles and the study revealed that the 335 open access journals provide access to 1,63,500 articles which is about 2.63%. The number of articles published by open access veterinary journals is varying widely. Two journals contain more than 6,000 articles and one journal contains more than 5,000 articles. Five journals contain articles between 3000 to 3999 and the details are furnished in the following Table -3.

Table - 3 Number of Articles contained by OA Journals

S. No.	Number of Articles	No. of Journals	%
1	More than 6000	2	0.60
2	5000 – 5999	1	0.30
3	4000 – 4999	2	0.60
4	3000 – 3999	5	1.49
5	2000 – 2999	9	2.69
6	1000 – 1999	20	5.97
7	500 – 999	44	13.13
8	400 – 499	20	5.97
9	300 – 399	26	7.76
10	200 – 299	40	11.94
11	100 – 199	54	16.12
12	Below 100	112	33.43
	Total	335	100.00

8.15 Top 20 Journals with more number of articles

The study revealed that 20 open access (5.97%) veterinary journals provide access to 49,168 articles (30.07%) while the remaining 315 journals (94.03%) provide access to 1,14,332 articles (69.93%). The top 20 open access journals providing access to more number of articles are listed in Table-4.

Table - 4 Top 20 OA Journals with more number of Articles

S. No.	Journal title	No. of Article	%
1.	Animals	5704	3.49
2.	Revista Brasileira de Zootecnia	4389	2.68
3.	Animal	4136	2.53
4.	Brazilian Journal of Veterinary and Animal Sciences	3867	2.37
5.	Italian Journal of Animal Science	3125	1.91
6.	Frontiers in Veterinary Science	3071	1.88
7.	Veterinary World	2980	1.82
8.	Brazilian Journal of Veterinary Research	2812	1.72
9.	BMC Veterinary Research	2479	1.52
10.	Scientific Papers Animal Science and Biotechnologies	2335	1.43
11.	Brazilian Journal of Veterinary Research & Animal Science	2171	1.33
12.	Asian-Australasian Journal of Animal Sciences	2021	1.24
13.	Acta Scientiarum: Animal Sciences	1642	1.00
14.	Brazilian Animal Science (Ciencia Animal Brasileira)	1607	0.98
15.	Poultry Science	1245	0.76

16.	Journal of the South African Veterinary Association	1222	0.75
17.	Journal of Tropical Livestock Science	1145	0.70
18.	Acta Veterinaria Scandinavica	1115	0.68
19.	Brazilian Journal of Poultry Science	1069	0.65
20.	Brazilian Journal of Veterinary Parasitology	1033	0.63
	Other 315 journal titles	114332	69.93
	Total	163500	100.00

9. Summary and Conclusion

Open access journals have shown a steady growth in different disciplines worldwide and the present study revealed that the number of open access journals in veterinary and animal sciences indexed by the DOAJ is steadily increasing from 2003. Out of 16,460 OA journals indexed by DOAJ, 335 journals are publishing articles in various aspects of veterinary and animal sciences which is about 2.03%. It has been observed that highest number of journals i.e. 46 (13.73%) was added during the year 2018 followed by 41 journals during 2017 (12.24%).

It has been observed that 63 countries contributed the 335 open access journals in veterinary and animal sciences and the United Kingdom is the top contributor with 41 journals (12.24%). The DOAJ indexes journals published in many languages i.e. 223 journals are monolingual (66.57%) followed by 81 bilingual (24.17%), 25 trilingual (7.46%), 3 quadrilingual (0.90%) and 3 quintilingual (0.90%). English is the predominant language with 291 journals. Majority of the OA journals i.e. 155 (46.27%) adopt double blind peer review followed by blind peer review by 112 journals (33.43%), peer review by 67 journals (20%) and one journal (0.30). The majority of the publishers i.e. 84 journals (25.07%) take 4 – 8 weeks and the minimum time taken is within 4 weeks and the maximum time is 53 weeks. The analysis revealed that majority of the journals i.e. 146 journals (43.58%) follow Creative Commons (CC) Attribution alone (BY) licensing model.

As far as the copyright is concerned, 160 (47.76%) journals provide the authors copyright without any restrictions while 175 journals (52.24%) provide copyright with some restrictions. It is found that 207 journals (61.79%) have plagiarism policy while 128 journals (38.21%) do not have a plagiarism policy. It has been observed that 172 OA journals (51.34%) are not collecting article processing charge (APC) while 163 journals (48.66%) collect APC. The OA journal publishers accept APC by 13 different currencies and the US Dollar is the most preferred currency and 243 journals (72.54%) provide PID for the resource while 92 journals (27.46%) do not provide PID.

The DOAJ seal is awarded to journals that demonstrate best practice in open access publishing and 38 journals (11.34%) have been awarded DOAJ seal which is higher than the average as the DOAJ awards the seal for about 10% of the journals.

The DOAJ provides open access to about 6.00 million articles and the study revealed that the 335 open access journals provide access to 1,63,500 articles which is about 2.63%. The number of articles published by open access veterinary journals is varying widely. Two journals contain more than 6,000 articles and one journal contains more than 5,000 articles. Five journals contain articles between 3000 to 3999. The study found that many of the open access veterinary and animal sciences published from India has not been indexed by the DOAJ so far and the concerned publishers should take necessary initiatives to include them in the DOAJ so that the journals will get more visibility.

References

- Budapest Open Access Initiative (2017). Retrieved from <https://www.budapestopenaccessinitiative.org/boai15-1> (Accessed on 10th June 2021).
- Choudhary and S Khode, "Analysis of open access journals in the area of computer science" (2010). *SRELS Journal of Information Management*, 47(3), 339-349.
- Das, P.K, "Anatomy of Open Access Mathematics Journals" (2016). *SRELS Journal of Information Management*, 53(6), 447-454.
- Isaac, Tijomon and J, Dominic, "Psychology Journals in DOAJ: A Scientometric Study" (2015). *Paradigm Shift in Libraries available at* <https://core.ac.uk/download/pdf/290490318.pdf#page=85> (Accessed on 12.06.2021).
- KottiThavamani and P, Umamageswari, "Directory of Open Access Journals: A Scientometric Study of Surgery Journals" (2016). *International Research: Journal of Library & Information Science*, 6 (1); 23-34.
- Kuri, R, "Foot Marks of LIS Journals in DOAJ: An Analytical Study. *Asian Journal of Multidisciplinary Studies*, 2 (5), 80-86.
- Lihitkar R S & Waghmare P, "Open Access Zoology Journals on DOAJ: An Analytical Study" (2013). *International Journal of Life Sciences*, 1 (4), 321 – 27.
- Mehraj, Midhat; Rehman, Ikhlaqur; and Ganaie, Shabir Ahmad, "Open Access Computer Science Journals in the DOAJ: An analytical study" (2019). *Library Philosophy and Practice (e-journal)*. 5079. Available at <https://digitalcommons.unl.edu/libphilprac/2738>
- Mishra, Sumanta, "Open Access Social Science Journals Indexed in DOAJ: A Critical Analysis" (2020). *Library Philosophy and Practice (e-journal)*. 3883. Available at <https://digitalcommons.unl.edu/libphilprac/3883>
- Neera Bansal, "Directory of Open Access Journals, Music: A Bibliometric Study" (2014). *International Journal of Scientific and Research Publications*, 4 (1), 1-9.
- Reddy, Anjaneya N M and Pujar, Shamprasad, M., "Scholarly open access journals in Economics: A study of DOAJ" (2021). *Library Philosophy and Practice (e-journal)*. 5079. Available at <https://digitalcommons.unl.edu/libphilprac/5079>
- Selvam and G, Amudha, "A Bibliometric Study on open access library and information science journals in DOAJ" (2020). *Library Philosophy and Practice (e-journal)*. 4868. Available at <https://digitalcommons.unl.edu/libphilprac/4868>
- Shah, U.Y., Loan, F.A. and Jan, N, "Open Access Legal Studies Journals in DOAJ: An Analytical Study" (2018). In *5th International Symposium on Emerging Trends and Technologies in Libraries and Information Services (ETTLIS), IEEE*, 217-220
- Shukla, Akhandanand&Malasawmkimi, "Mapping of Open Access Library and Information Science Journals on Scopus: A Scientometric Assessment" 2017). Available at [http://mzuir.inflibnet.ac.in/bitstream/123456789/491/1/Malsawmkimi%20\(LIS\).pdf](http://mzuir.inflibnet.ac.in/bitstream/123456789/491/1/Malsawmkimi%20(LIS).pdf) (Accessed on 10th June 2021).
- Vashistha Rajeev and Jat Madan Lal, "Directory of Open Access Journals, Health Science, Nursing: A Bibliometric Study". *Journal of Indian Library Association*, 28 (2), 26-35.