ORIGINAL ARTICLE

Examining Authorship Dynamics, Publication Patterns, and Affiliations in the Pakistan Journal of Medical and Health Sciences (PJMHS) from 2009-2019

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ABSTRACT

Introduction: The Pakistan Journal of Medical and Health Sciences have been peer-reviewed and is included in the Scopus-Elsevier database. This study represents (PJMHS)'s contribution to research productivity from 2019 to 2009.

Methods and Materials: The published data records were obtained from the PJMHS website and the Scopus-Elsevier database for MS Office Excel Sheet tabulation. The frequency of publications, the type of papers, the use of pages, citations, and the initial author's affiliation with their country.

Results: In 43 issues, 15401 (4%) authors wrote 3817 items in seven categories. The average number of pages consumed was (2.8%), with 896 (23.4%) citations in publications. The collaboration of three authors provided 1339 (36.6%) papers and received the top spot, while four authors, 3344 (21.7%), contributed 836 (22%). The first authors from 29 nations engaged in publications, with Pakistan leading the way with 3484 (91%), Iran second with 79 (2%), Indonesia third with 77 (2%), and the Kingdom of Saudi Arabia fourth with 65 (1.7%).

Practical Implication: The information assess the influence and relevance of the research published in the Pakistan Journal of Medical and Health Sciences. In nut-shell, the published data empowers readers to stay informed about the journal's publication trends, authorship patterns, and the breadth of content available. It enables researchers to identify potential collaborators, explore different document types, and gauge the impact of published articles through citation analysis.

Conclusion: Pakistan Journal of Medical and Health Sciences (PJMHS) is a peer-reviewed journal that is published continuously and assists medical and health sciences research communities in gaining their attention in sharing ideas on a reciprocal basis from similar specialties or sub-specialties of common disciplines

Keywords: Bibliometric, Pakistan Journal of Medical and Health Sciences, Pakistan, medical education and research, bibliometric, Zameer Baladi.

INTRODUCTION AND LITERATURE REVIEW

Journals or academic journals perform confronted roles among the researcher's situations, quality of the paper, and journal reputation through assessment, measuring the sub-fields of research, language hurdles, unfamiliarity with a system of standards, and, of-course academic writings [1,2]. The author Holowchak, elaborates on the power of education with words that a person can acquire knowledge as per their needs from basics to a higher level, intellectually and morally, from schools to university [3]. The author [4]explain the necessity of education in medical and health sciences. According to them, medical education is treated with; a scientific approach, ethics, and systemic analysis of medicinal knowledge theoretical and practical[4]·Medical education provides leads to improve expertise and high-value skills for the betterment of society via the utilization of competencies with understanding towards preparedness of patient-related systems, and the transformation of correct knowledge for incorporating quality health communications [5,6].

Health communication works as a bridge to fill the gap between practitioners and laboratory scientists. This communication engages health professionals with day-to-day information about innovations in the research of medical and health sciences field [7]. Researchers of medical and health professions align the needs, priorities, and plans as an integrated part of designing the curricula throughout all four years. Gonzalo, J.D. et al. approach students of the first year to the fourth year to identify students' perceptions and receptivity about the health system's science education; in the end, they reach that; if students accelerate the process of exploring, which evolves the professional identity [8]. Chaudhary, N. et al. conducted a structured survey among the 1029 participants of students and faculty of two departments of Khawaja Muhammad Safdar Medical College, Sialkot, Pakistan.

The research concluded with words that declined medical education is linked with multifactorial reasons and shows dissatisfaction with the quality of medical education in Pakistan [9]. The research highlighted the value of any academic journal's peer-review process. According to their opinions, a manuscript's authors are already involved in editing, reviewing, and writing their ideas. Still, before publishing, the peer reviewer works as a gatekeeper to check the concepts, words, and elegances and polishes the sketch of the article before publication and circulation in the academic world [10,23-30].

Meanwhile, discussed and placed their suggestions to authors to understand the rejection ratio from 80% to 95% as a problem faced by the editorial staff of the academic journal. Lack of focus on the research question, improper settings of references, the gap in supportive knowledge, and shortage of materials in convincing to the reader are reasons [11,12]. Convince researchers that submissions of writings in prestigious journals impact the author's trustworthiness and institutional rankings because an affiliation of the journal with worthy databases proves the credibility of the research [13].

French, paid attention to the use of academic writings on graduate levels and professional papers or scholarly essays chalked out by individuals or in collaborative manners considered professionally in higher education for their professional identity [14]. Kozak, supports too many researchers changing academic writing scenarios from clumsy, unclear, and inefficient to pleasurable visualization of research aims through different interpretations of tables and graphs [15]. Writing research is composite work to transmit innovative information or an idea of any specific field of a subject, inclines, or decline in specialization through the literature published in an academic journal [16].

MATERIAL & METHODS

The research data retrieved in August 2022 in the Al-Nafees central library of Ibn-e-Sina University, Mirpurkhas Sindh Pakistan, on Comma-separated values (CSV) and text file from the respective website of Pakistan Journal of Medical and Health Sciences https://pjmhsonline.com/ and Scopus-Elsevier Database for tabulated in MS Office Excel sheet. The following objectives were set to investigate:

1. To explore year and issue-wise published documents, involvement of authors in publications, and use of pages in each issue.
2. Getting citations in each issue.
3. Year-wise pattern of authors.
4. Affiliation of the first author with countries.

In bibliometric research, the researcher can investigate the authors' involvement, sponsoring institutes, areas of study by specific or compound words, and collaboration of authors with each academic arena nationally or internationally. For example, the researcher conducted a bibliometric analysis on publications titled: a) Venous thromboembolism in Children, b) exploring the scientific interest in olive oil origin, c) Assessing clinical embryology research d) Scientific Collaboration across Time and Space [17-21, 25-30].

RESULTS

The seven categories of documents published in the Pakistan Journal of Medical and Health Sciences from 2019 – 2009, articles 3732, review 40, editorials 32, note 5, letters 4, conference papers 2, and erratum 2. Figure 1 and Table 1 show the Pakistan Journal of Medical and Health Sciences' exhaustive publication image from 2019- 2009. There are 3817 documents published in 43 (88.7%) issues in these eleven years, with an annual average of 347 documents. A total of 15401 authors involve in writing manuscripts and an average of four authors in each document. Interestingly, a maximum of 170 articles published in 2018, issue 4, and a minimum of 18 articles published in the year 2010 issue 1. The year 2018 published 634 with an average of (158.5%) articles as maximum, and 102 (34%) articles as a minimum in the year 2009.

The study shows the consumption of 10701 (2.8%) pages per document. The research productivity got 896 (23.4%) citations per document; 01 document got 12 citations, 03 documents got 09 citations, 02 documents got 07 citations, 3 documents got 06 citations, 7 documents got 05 citations, 16 documents got 04 citations, 41 documents got 03 citations, 137 documents got 02 citations, and 329 documents got one citations. It seems fluctuations in the PJMHS, the 9.6% ratio of was higher in the year 2018 than 2019. However, the publication ratio increased by 81.7% in eleven years from 2009 – 2019.
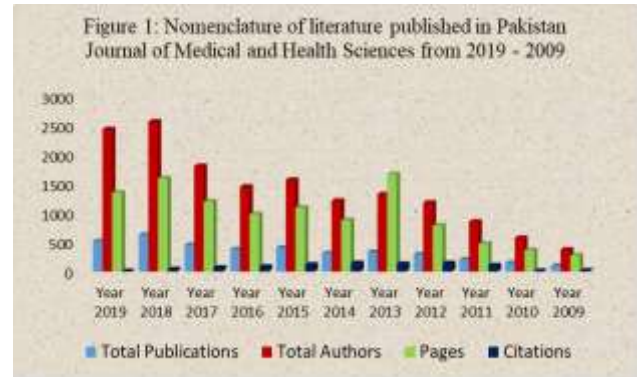

Figure 1: Nomenclature of literature published in Pakistan Journal of Medical and Health Sciences from 2019 - 2009

Table 1: Research productivity published in the Pakistan Journal of Medical and Health Sciences from 2019 - 2009.

S.No	Year	Issue 1	Authors	Pages	Citations	Issue 2	Authors	Pages	Citation	Issue 3	Authors	Pages	Citation	Issue 4	Authors	Pages	Citations	Total Publications	Total Authors	Total Pages	Total Citations
1	2019	97	438	263	3	120	577	303	2	137	654	340	3	169	774	451	3	523	2443	1357	11
2	2018	147	552	399	19	163	669	377	15	154	637	403	5	170	717	421	4	634	2575	1600	43
3	2017	140	549	343	23	87	371	234	16	111	444	304	14	121	448	319	17	459	1812	1200	70
4	2016	71	268	171	15	100	375	248	25	109	398	294	17	104	418	271	28	384	1459	984	85
5	2015	131	505	323	34	93	373	327	25	96	348	229	35	88	349	220	27	408	1575	1099	121
6	2014	74	273	187	47	62	246	176	33	87	332	222	37	91	365	298	31	314	1216	883	148
7	2013	77	306	652	35	83	334	548	37	78	313	201	37	101	373	270	25	339	1326	1671	134
8	2012	73	292	206	53	60	262	170	15	83	319	217	35	80	311	195	43	296	1184	788	146
9	2011	52	212	144	36	48	199	162	26	56	236	15	23	52	210	155	22	208	857	476	107
10	2010	18	72	65	2	24	100	88	4	35	146	78	3	73	258	136	3	150	576	367	12
11	2009	24	81	58	3	32	106	79	8	46	191	139	8					102	378	276	19
12	Totals	904	3548	2811	270	872	3612	2712	206	992	4018	2442	217	1049	4223	2736	203	3817	15401	10701	896
13	Average	82.1	3.9	3.1	29.8	79.2	4.1	3.1	23.6	90.1	4%	2.4	21.8	104.9	4%	2.6	19.3	347	4%	2.8	23.4%

Table 2: Year wise pattern of authorship in the Pakistan Journal of Medical and Health Sciences from 2019 – 2009.

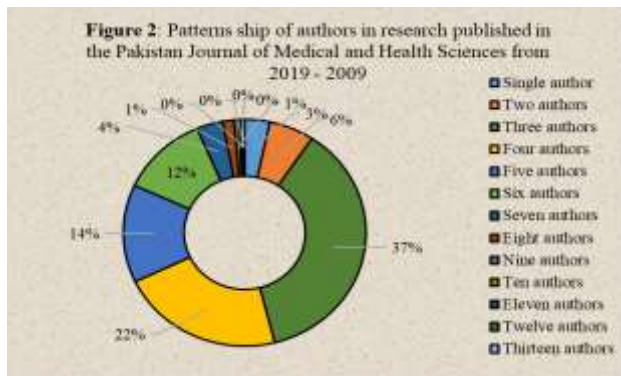| S. No	Pattern of authorship	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Total Publications	Total authors involvement in Publications	Authors average per year
1	Single author	14	12	9	11	19	9	17	7	12	10	8	128	128	21.3
2	Two authors	34	23	20	20	12	28	32	17	13	16	14	229	458	38.1
3	Three authors	117	257	197	168	187	127	122	100	54	44	26	1399	4197	233.1
4	Four authors	83	142	102	99	89	61	65	86	48	31	30	836	3344	139.3
5	Five authors	72	85	69	42	45	42	46	48	44	27	13	533	2665	88.8
6	Six authors	150	82	38	27	27	28	32	20	22	16	5	447	2682	74.5
7	Seven authors	27	19	15	9	17	10	11	10	2	2	2	134	938	22.
8	Eight authors	15	8	2	2	5	5	8	6		3	2	56	448	10.1
9	Nine authors	5	3	3	4	3	2	4		2	1	1	28	252	5
10	Ten authors	4		2	1	2	2	2	1			1	15	150	3.3
11	Eleven authors			1	1	2			1	1			6	66	2
12	Twelve authors	2	2	1									5	60	2.5
13	Thirteen authors		1										1	13	1
12	Total	523	634	459	384	408	314	339	296	208	150	102	3817	15401	47.6

Table 3: Participations of countries (Alphabetically) in research productivity published in the Pakistan Journal of Medical and Health Sciences from 2019 - 2009

S. No	Name of country	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	Total	%
1	Australia	1						2					3	0.08%
2	Bangladesh		1										1	0.03%
3	China				1			2					3	0.08%
4	Germany								1		1	1	3	0.08%
5	Ghana		1										1	0.03%
6	India	10	5	6					1				22	0.58%
7	Indonesia	39	31	4		3							77	2.02%
8	Iran	40	34	4	1								79	2.07%
9	Iraq	3	3	2							1		9	0.24%
10	Ireland		2		2			1		1			6	0.16%

No	Country												Total	%
11	Italy										2		2	0.05%
12	Jorden			1					1	5			7	0.18%
13	Kingdome of Saudi Arabia	29	4	5	8	7	6	3		1	1	1	65	1.70%
14	Kuwait				1								1	0.03%
15	Malaysia	2	1	5		4	1		1			1	15	0.39%
16	Netherland		1										1	0.03%
17	Nepal	1											1	0.03%
18	Nigeria			1				1					2	0.05%
19	Pakistan	381	545	428	370	391	306	328	292	201	145	97	3484	91.28%
20	Russian Federation	12	2	2									16	0.42%
21	South Korea	1											1	0.03%
22	Sudan	4	1										5	0.13%
23	Sweden										1		1	0.03%
24	Taiwan					1							1	0.03%
25	Turkey						1						1	0.03%
26	United Arab Emirate							1					1	0.03%
27	Uganda					1							1	0.03%
28	United Kingdome			1	1	1		1			1		5	0.13%
29	United States of America		3										3	0.08%
30	Total publications	523	634	459	384	408	314	339	296	208	150	102	3817	

Table 3 shows the breakdown of names of countries in research productivity published in PJMHS from 2019 – 2009, that 29 countries participated in the research published in the Pakistan Journal of Medical and Health Sciences from 2019 – 2009. The majority 3484 (91%) documents scripted and published by Pakistan, followed by Iran with 79 (2%), Indonesia with 77 (2%), and Kingdome of Saudi Arabia with 65 (1.7%) of documents. Two countries contributed 5 and 2 articles, four countries 3, and 1 article submitted by eleven countries each.

Figure 2 and table 2, show the fascinating combination of involvement of authors in the research published in the Pakistan Journal of Medical and Health Sciences from 2019 – 2009. Total 15401 authors written 3817 documents, with an average of (4%) per document out of 739 papers. The majority 1399 documents written by three authors, followed by four (3344) authors wrote 836 documents, and six authors contributed in 447 (2682) documents. Only 128 documents scripted by solo or single authors. The names of five authors reveals, that Latif, A. contributed 50 articles, followed by Abbasi, M.H 40, Farooq, M. 39, Abid, K.J. 34, and Dar, U.F. 29 articles as most contributed authors.

Figure 2: Patterns ship of authors in research published in the Pakistan Journal of Medical and Health Sciences from 2019 - 2009

- Single author
- Two authors
- Three authors
- Four authors
- Five authors
- Six authors
- Seven authors
- Eight authors
- Nine authors
- Ten authors
- Eleven authors
- Twelve authors
- Thirteen authors

DISCUSSION & CONCLUSION

Pakistan Journal of Medical and Health Sciences (PJMHS) is regular and indexed as Q4 in a globally acknowledged database, famous in medical and health sciences communities worldwide. The data published in PJMHS can facilitate readers in several ways; a) Readers can gain insights into the publication trends within the Pakistan Journal of Medical and Health Sciences over the specified time; b) Identify the number of articles published each year, the distribution of articles across different issues, and the overall growth or decline in publication output; c) This information helps readers stay updated on the journal's progress and development; d) Examining the involvement of authors in the published documents, readers can understand the patterns of collaboration and authorship dynamics within the journal; e) Observe the average number of authors per document, the

frequency of solo or single-authored papers, and the most active or contributing authors; f) This valuable knowledge enabling them to identify potential collaborators or establish networks within their field; g) The data provide information about the seven categories of documents published in the journal, including articles, reviews, editorials, notes, letters, conference papers, and erratum; h) Interested specific document types can easily navigate the journal's content and access relevant articles based on their interests; i) Although the citation count for each issue is not specified, readers can potentially track the citation impact of published articles by referring to other databases or citation metrics; j) The information assess the influence and relevance of the research published in the Pakistan Journal of Medical and Health Sciences. In nut-shell, the published data empowers readers to stay informed about the journal's publication trends, authorship patterns, and the breadth of content available. It enables researchers to identify potential collaborators, explore different document types, and gauge the impact of published articles through citation analysis.

REFERENCES

1. Kim, L., Portenoy, J.H., West, J.D., Stovel, K.W. Scientific journals still matter in the era of academic search engines and preprint archives (2020) Journal of the Association for Information Science and Technology, 71 (10), pp. 1218-1226. DOI: 10.1002/asi.24326.
2. Li, M., Yang, R. Enduring hardships in global knowledge asymmetries: a national scenario of China's English-language academic journals in the humanities and social sciences. (2020) Higher Education, 80 (2), pp. 237-254. DOI: 10.1007/s10734-019-00476-3.
3. Holowchak, M.A. A system of education, not just a university: Thomas Jefferson's philosophy of education. (2018) History of Education, 47 (4), pp. 488-503. DOI: 10.1080/0046760X.2017.1411531
4. Bohrer, T., Schmidt, M., Königshausen, J.-H. On the necessity of philosophy in medical education [Zur Notwendigkeit der Philosophie im Medizinstudium] (2018) Deutsche Medizinische Wochenschrift, 143 (17), pp. 1272-1275.
5. Gonzalo, J.D., Chang, A., Dekhtyar, M., Starr, S.R., Holmboe, E., Wolpaw, D. R. Health Systems Science in Medical Education: Unifying the Components to Catalyze Transformation (2020) Academic medicine: journal of the Association of American Medical Colleges, 95 (9), pp. 1362-1372.
6. Gonzalo, J.D., Chang, A., Wolpaw, D.R. New Educator Roles for Health Systems Science: Implications of New Physician Competencies for U.S. Medical School Faculty (2019) Academic Medicine, 94 (4), pp. 501-506.
7. Silk, K.J., Walling, B., Totzkay, D., Mulroy, M., Smith, S., Quaderer, T., Boumis, J., Thomas, B. Continuing Medical Education as a Translational Science Opportunity for Health Communication Researchers: The BCERP Model. (2020) Health Communication, 35 (10), pp. 1266-1273.
8. Gonzalo, J.D., Davis, C., Thompson, B.M., Haidet, P. Unpacking Medical Students' Mixed Engagement in Health Systems Science

Education. (2020) Teaching and Learning in Medicine, 32 (3), pp. 250-258.

9. Chaudhary N., Latif A., Aimen I., Zaheer A., Ahmad T., Ansar A. Quality of education in medical colleges of Sialkot district. Pakistan Journal of Medical and Health Sciences. 2019, 13 (1). Pp 25- 27. https://www.pjmhsonline.com/2019/jan_march/pdf/25.pdf

10. Babin, B.J., Moulard, J.G. To what is the review process relevant?: What's right and what's wrong with peer review for academic business journals, (2018). European Business Review, 30 (2), pp. 145-156. DOI: 10.1108/EBR-09-2017-0162

11. LaPlaca, P., Lindgreen, A., Vanhamme, J. How to write really good articles for premier academic journals. (2018) Industrial Marketing Management, 68, pp. 202-209. DOI: 10.1016/j.indmarman.2017.11.014

12. Cocal, C.J., De Vera, I. Challenges and strategies on paper publication to international indexed journals by Filipino academic researchers (2018). Asian ESP Journal, 14 (7), pp. 113-131. https://www.asian-esp-journal.com/volume-14-issue-7-2-december-2018/

13. Strielkowski, W., Gryshova, I. Academic publishing and «predatory» journals (2018) Science and Innovation, 14 (1), pp. 5-12. DOI: 10.15407/scine14.01.005

14. French, A. Academic writing as identity-work in higher education: forming a 'professional writing in higher education habitus' (2020) Studies in Higher Education, 45 (8), pp. 1605-1617. DOI: 10.1080/03075079.2019.1572735

15. Kozak, M. Academic Writing, and How to Learn How to Write. (2020) Journal of graduate medical education, 12 (3), pp. 373-374. DOI: 10.4300/JGME-D-20-00154.1

16. Baladi ZH. Journal of Liaquat University of Medical & Health Sciences (JLUMHS): Bibliometric Profile 2002-2015. Journal of Liaquat University of Medical & Health Sciences. 2017 Jul 1;16(3):158-64.

17. Tian L, Zhang Y, Zeng J, Wang L, Gao H, Su Y, Li Y. A bibliometric analysis of publications on venous thromboembolism in children from 1988 to 2019. Medicine. 2020 May 1;99(20):e20114. https://pubmed.ncbi.nlm.nih.gov/32443321/

18. Maléchaux A, Le Dréau Y, Artaud J, Dupuy N. Exploring the Scientific Interest for Olive Oil Origin: A Bibliometric Study from 1991 to 2018. Foods. 2020 May;9(5):556. https://doi.org/10.3390/foods9050556

19. Simopoulou M, Sfakianoudis K, Maziotis E, Rapani A, Giannelou P, Pantou A, Anifandis G, Bakas P, Vlahos N, Pantos K, Koutsilieris M. Assessing Clinical Embryology research: A global bibliometric analysis. Medicina. 2020 May;56(5):210. https://www.mdpi.com/1010-660X/56/5/210

20. Yilmaz M, Grilli ML, Turgut G. A Bibliometric Analysis of the Publications on In Doped ZnO to Be a Guide for Future Studies. Metals. 2020 May;10(5):598. https://www.mdpi.com/2075-4701/10/5/598

21. Zohrabian VM, Staib LH, Castillo M, Wang L. Scientific Collaboration across Time and Space: Bibliometric Analysis of the American Journal of Neuroradiology, 1980–2018. American Journal of Neuroradiology. 2020 May 1;41(5):766-71. http://www.ajnr.org/content/41/5/766

22. Jabeen M, Shahjahan M, Farid G. Information Dissemination during COVID-19 Pandemic among Postgraduate Allied Health Sciences Students in Pakistan. Pakistan Journal of Medical & Health Sciences. 2022;16(11):366-.

23. Farid G, Zaheer S, Khalid A, Arshad A, Kamran M. Evaluating Medical College Lib Guides: A Usability Case Study. Pakistan Journal of Medical & Health Sciences. 2022 Aug 26;16(07):461-.

24. Chughati AS, Zaheer S, Farid G, Niazi AK, Mujtaba M, Islam A, Malik WA. Emotional Intelligence as a Predictor of Academic Performance. Pakistan Journal of Medical & Health Sciences. 2022 Dec 12;16(10):636-.

25. Farid G, Niazi A K, Muneeb M, Iftikhar S. Attitude towards Utilization of e-Resources of Medical Images among Health Care Professionals. Pakistan Journal of Medical and Health Science., 2021 15 (9), 261-263

26. Shahjahan M, Jabeen M, Farid G. Information Providing in COVID-19 by Health Professionals in Pakistan. Pakistan Journal of Medical & Health Sciences. 2022 Dec 12;16(10):641-.

27. Farid G, Miraj I, Iqbal S, Iftikhar S. ACCESSIBILITY, USAGE, AND BEHAVIORAL INTENTION OF PRINT BOOKS AND EBOOKS BY MEDICAL STUDENTS. Library Philosophy and Practice (e-journal). 2021. 6020.

28. Farid G, Soroya S. Masooma. Perception and Behavioral Intention of Print and Electronic Books among Medical Students; A Comparative Study. Pakistan Library & Information Science Journal. 2018 49 (1), 52-60.

29. Farid G, Warraich NF, Iftikhar S. Digital information security management policy in academic libraries: A systematic review (2010–2022). Journal of Information Science. 2023:01655515231160026.

30. Khalid A, Malik GF, Mahmood K. Sustainable development challenges in libraries: A systematic literature review (2000–2020). The Journal of academic librarianship. 2021 May 1;47(3):10234