Research output from Egypt in orthopaedic and sports medicine Raju Vaishya

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Egypt is a unique nation, being a transcontinental country, and is located in the heart of the world. It is the point of convergence of the three old continents, Africa, Asia, and Europe, spanning the northeast corner of Africa and the Sinai Peninsula in the southwest corner of Asia [1]. It is the 14th-most populated country in the world and the third-most populated in Africa, behind Nigeria and Ethiopia, with approximately 100 million inhabitants [2]. It is a founding member of the Arab League and the African Union and hence cherishes the status of an 'African nation' and also being an 'Arabic country'. Egypt is part of the Islamic world but belongs to the African continent [1]. Egypt has a rich heritage and history dating back to the 6th-4th millennia BCE and is considered as a cradle of civilization. It saw some of the earliest developments of writing, agriculture, urbanization, organized religion, and central governance [2].

In spite of its rich heritage and earliest civilization, Egypt seems to have lagged behind globally in the current medical research field, e.g., in Orthopaedics and Sports Medicine. Based on the data of Scopus, we noticed that Egypt has the current (in 2022) SCImago country ranking of 32 amongst all the countries across the globe in the field of Orthopaedics and Sports Medicine, with a global contribution of 0.53%, amongst 159 countries. Its cumulative global ranking between 1996 and 2022 was 36, with a global contribution of only 0.3%, among 199 countries [3]. However, amongst Arabic countries, it enjoys the top position (amongst 19 nations), followed by Saudi Arabia and Qatar (in 2022) and Qatar and Tunisia (in 1996–2022) (Table 1).

If considered amongst African nations, the ranking of Egypt has been at number 2, both in 2022 and 1996-2022 cumulatively (amongst 36 nations) (Table 2).

I noticed a rising trend of publications from Egypt in the field of Orthopaedics and Sports Medicine over the

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> last three decades. The publications have grown from only 06 (in 1996) to 276 (in 2022), with the majority rising in the last decade (Fig. 1).

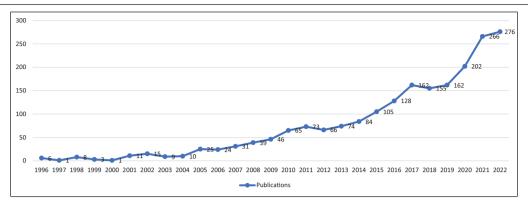
> It has been observed that there is inadequate Orthopaedic research and publications from lowmiddle-income countries (LMICs), despite a high prevalence of the global disease burden in these countries [4]. This disparity could be due to several lacking factors:

- (1) Focus on research and publications
- (2) Lesser time spent on the research
- (3) Novelty of the research done
- (4) Mentorship, Funding, and Collaboration
- (5) Local Orthopaedic journals
- (6) English language barrier

I believe, to improve the quality and output of the research publications from Egypt, these should become an essential part of the undergraduate and postgraduate education curriculum since the endpoint of research is publication. If this is not achieved, then the research is wasted and does not contribute to the fund of knowledge in world literature [4]. It is crucial that the quality-publications should be given enough importance in the job selection and promotion of orthopaedic surgeons. Institutional, National and International collaboration by the Egyptian authors, amongst the authors and institutions, can help improve the numbers and quality of research and publication. The Egyptian government, academic institutions, and funding agencies must come forward to help the researchers.

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Figure 1



Trend of publications from Egypt in Orthopaedics and Sports Medicine during 1996 to 2022.

Table 1 Profile of the top 10 Arabic countries in publications in the field of orthopaedics and sports medicine

Year	Rank	Country	Region	Documents	Citable documents	Citations	Self-citations	Citations per document	H Index
1996-	2022								
	1	Egypt	Africa/Middle East	2047	1994	20762	1149	10.14	54
	2	Qatar	Middle East	1706	1538	47191	4700	27.66	97
	3	Tunisia	Africa	1250	1214	25798	4112	20.64	73
	4	Saudi Arabia	Middle East	1229	1190	18807	1394	15.3	57
	5	Lebanon	Middle East	630	584	8951	936	14.21	43
	6	Morocco	Africa	576	556	3383	308	5.87	27
	7	United Arab Emirates	Middle East	473	445	6414	366	13.56	39
	8	Jordan	Middle East	281	275	3670	109	13.06	29
	9	Kuwait	Middle East	165	162	2454	106	14.87	26
	10	Iraq	Middle East	160	157	987	60	6.17	14
2022									
	1	Egypt	Africa/Middle East	276	268	158	21	0.57	54
	2	Saudi Arabia	Middle East	207	201	147	23	0.71	57
	3	Qatar	Middle East	179	164	310	65	1.73	97
	4	Tunisia	Africa	102	100	168	60	1.65	73
	5	United Arab Emirates	Middle East	86	78	108	18	1.26	39
	6	Jordan	Middle East	62	62	72	10	1.16	29
	7	Lebanon	Middle East	60	54	28	3	0.47	43
	8	Iraq	Middle East	51	51	16	12	0.31	14
	9	Morocco	Africa	23	23	3	0	0.13	27
	10	Kuwait	Middle East	21	19	15	2	0.71	26

Table 2 Profile of the top 10 African nations in publications in the field of orthopaedics and sports medicine

Year	Rank	Country	Region	Documents	Citable documents	Citations	Self- citations	Citations per document	H Index
1996-2022									
	1	South Africa	Africa	2908	2695	70287	7798	24.17	111
	2	Egypt	Africa/Middle East	2047	1994	20762	1149	10.14	54
	3	Tunisia	Africa	1250	1214	25798	4112	20.64	73
	4	Morocco	Africa	576	556	3383	308	5.87	27
	5	Nigeria	Africa	310	300	4247	441	13.7	30
	6	Kenya	Africa	127	121	4713	222	37.11	28
	7	Ghana	Africa	123	119	2268	132	18.44	20
	8	Ethiopia	Africa	110	107	1494	125	13.58	19
	9	Algeria	Africa	84	80	856	61	10.19	16
	10	Malawi	Africa	80	78	1361	188	17.01	24
2022									
	1	South Africa	Africa	339	312	309	69	0.91	111
	2	Egypt	Africa/Middle East	276	268	158	21	0.57	54
	3	Tunisia	Africa	102	100	168	60	1.65	73
	4	Nigeria	Africa	39	38	47	6	1.21	30
	5	Ethiopia	Africa	25	25	2	1	0.08	19
	6	Morocco	Africa	23	23	3	0	0.13	27
	7	Ghana	Africa	18	17	48	4	2.67	20
	8	Algeria	Africa	11	9	37	4	3.36	16
	9	Uganda	Africa	11	11	3	0	0.27	15
	10	Tanzania	Africa	11	11	6	0	0.55	11

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Conflicts of interest

None declared.

References

- 1 COMESA. Arab Republic of Egypt. https://www.comesa.int/ arab-republic-of-egypt/
- 2 Wikipedia. Egypt. Accessed last on 15th September 2023. https:// en.m.wikipedia.org/wiki/Egypt
- 3 SCImago country ranking. Accessed last on 15th September 2023. https:// www.scimagojr.com/
- 4 Vaishya R, Vaish A. Orthopedic research output from SAARC countries in the last 25 years: 1996-2021. J Bone Joint Dis 2023; 38:131-133. DOI: 10.4103/jbjd.jbjd_19_23