

## EDITORIAL

# Elevating Orthopedics and Sports Medicine Research in the Middle East

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## Editorial

The Middle East is emerging as a significant contributor to the fields of Orthopedics and Sports Medicine (OSM).<sup>1-5</sup> Our recent bibliometric analysis, based on SCImago<sup>6</sup> and Scopus data, reveals that the region's OSM publications have surged nearly 14-fold, escalating from 837 in the period 1996-2000 to an

impressive 11,684 between 2021 and 2024 [Figure 1]. This remarkable growth underscores an evolving research landscape and highlights the region's commitment to addressing critical health issues impacting quality of life.

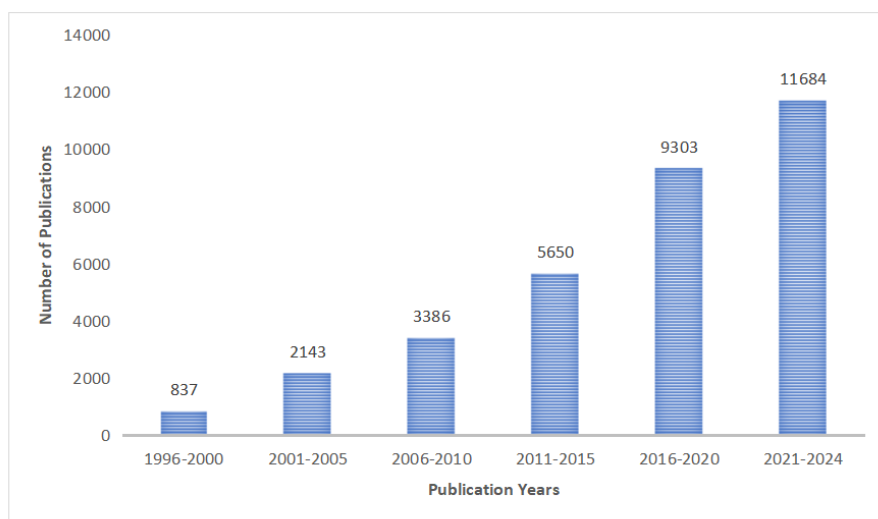


Figure 1. Trend of publications in Orthopedics and Sports Medicine from Middle Eastern Countries: 1996-2024 (Source: SCImago<sup>6</sup>)

## Leading Contributors and Their Impact

Five countries—Turkey, Iran, Israel, Egypt, and Qatar—account for a staggering 86.04% of the Middle East's total OSM publications. Turkey leads this impressive output with 13,372 documents, suggesting not only a substantial investment in research but also a robust academic infrastructure supporting advanced healthcare studies.

Meanwhile, Qatar and Israel have distinguished themselves with the highest citation impact per document, achieving citations per document (CPD) of 34.11 and 26.17, respectively [Table 1]. These figures reflect a high quality of research relative to output, positioning these nations as leaders in OSM research productivity and influence.

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**Table 1. Comparative Bibliometric profile of the Middle Eastern countries in Orthopedics and Sports Medicine from 1996 to 2024 (Source: SCImago®)**

Rank	Country	Documents	Citations	Citations Per Document	H Index	Global Ranking
1	Turkey	13372	149425	11.17	108	15
2	Iran	6415	75581	11.78	86	21
3	Israel	3924	102690	26.17	125	31
4	Egypt	2651	30155	11.37	63	37
5	Qatar	2019	68866	34.11	118	39
6	Saudi Arabia	1827	30393	16.64	67	41
7	Lebanon	760	11913	15.68	49	53
8	United Arab Emirates (UAE)	662	10654	16.09	50	56
9	Jordan	447	5483	12.27	33	62
10	Iraq	298	1621	5.44	19	67
11	Kuwait	225	3113	13.84	29	72
12	Oman	174	1993	11.45	24	77
13	Bahrain	82	869	10.6	17	98
14	Palestine	66	768	11.64	14	104
15	Syrian Arab Republic	45	784	17.42	12	116
16	Yemen	17	57	3.35	3	140

**Addressing Disparities in Research Quality**

The Middle East's contribution to global OSM research has increased from 4.22% in 1996 to 5.77% in 2024, signalling a growing prominence in the field and an increasing potential for international collaboration. This trend is particularly relevant given the global rise in sports-related injuries and the associated demands on healthcare systems. With populations becoming more active and participation in sports expanding, the need for innovative research and effective healthcare solutions is paramount. However, despite these advancements, there remain challenges to be addressed. Lower citation impacts observed in countries such as Iraq (CPD of 5.44) and Yemen (CPD of 3.35) highlight disparities in research quality and recognition. These differences may stem from various factors, including varying levels of investment in research infrastructure, access to academic resources, and the political and economic instability prevalent in some areas of the region. To foster a more equitable research environment, it is essential to facilitate collaborations between higher-performing nations and those striving to enhance their research output.<sup>1-5</sup>

**Path Forward for OSM Research**

The positive trajectory of OSM research in the Middle East signifies the region's potential to contribute to global health discourse. Continued investment in research infrastructure, combined with strategic funding allocation, can further enhance the quality and impact of OSM research. Moreover, fostering international collaborations will be crucial in sharing best practices, pooling resources, and driving innovation. As the Middle East continues to navigate complex socio-economic landscapes, the growing body of research in OSM represents not just an academic achievement but a

crucial step toward improved health outcomes for its populations.<sup>7,8</sup> By addressing existing gaps and prioritizing collaboration, the region can further solidify its role in the global dialogue on musculoskeletal health, ultimately enhancing the lives of individuals affected by these conditions.

**Conclusion**

The Middle East's advancements in Orthopedics and Sports Medicine research offer a promising prospect for the future. With concerted efforts to overcome challenges and maximize the region's research potential, we can look forward to significant contributions that will benefit not only the Middle East but the global community at large. The data shows a clear mandate: fostering excellence in OSM research is not only advantageous; it is essential for the health and well-being of future generations.

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