

Super Elite Pediatricians from 146 Developing Countries: Researchgate Analysis

*Aamir Jalal Al-Mosawi

Advisor doctor and expert trainer ,Baghdad Medical City and Iraqi Ministry of Health
Baghdad, Iraq

Abstract

Background: Bibliometric assessments have been used to quantitatively and qualitatively evaluate the academic (scientific/research) productivity of medical leaders and academic medical leaders. However, emphasis has been increasingly made that paying no attention to the order and authorship role of the researcher being evaluated may lead to a misleading H-index that is completely not relevant to academic leadership determination purpose. Therefore, Researchgate has been increasingly considered the single most important tool for the evaluation of physicians' academic stature, prowess, and academic productivity, and also for the evaluation of academic leadership. **Materials and methods:** More than 1000 Researchgate profiles were examined during the last week of December, 2021, with aim of identifying super elite clinical pediatricians with researchgate RG score of 40 or higher than 40 from 146 developing countries. **Results:** During the last week of December, 2021, there were six pediatricians having an RG score of 40 or higher from 146 developing countries in the world. Aamir Jalal Al-Mosawi was the pediatrician who had the highest RG Score of 41.13 among the pediatricians from 146 countries. Martin M Meremikwu was the Pediatrician from Nigeria who had the highest RG score of 40.99. Ricardo Alberto Guillermo Russo was the Pediatrician from Argentina who had the highest RG score of 40.74. Rose-Mary N Boustany was the Pediatrician from Lebanon who had the highest RG score of 40.15. Pekka Lahdenne was the Pediatrician from Finland who had the highest RG score of 40.07. Adekunle Adekile was the Pediatrician from Kuwait who had the highest RG score of 40.02.

Conclusion: During the last week of December, 2021, there were six pediatricians having an RG score of 40 or higher from 146 developing countries in the world. Aamir Jalal Al-Mosawi was the pediatrician who had the highest RG Score of 41.13 among the pediatricians from 146 countries. The findings in this study confirm that researchgate is more appropriate for academic medical leadership as it reduce to some extent the influence of misleadingly high H-index that is not relevant to academic leadership deterioration resulting from joining large number of collaborative studies.

Keyword Academic productivity, super elite pediatricians, 146 developing countries, Researchgate analysis

Introduction

Potential and actual improvement in medical practices and healthcare services made through the use of evidence-based medicine has been increasingly attributed to the successfulness of academic medical leadership and healthcare leadership within institutions and organizations. Therefore, interest has been increasing for knowing the necessary practices of medical leadership and academic medical leadership, and also for learning the qualities of the genuine medical and academic medical leaders.

There has been also an increasing interest in measuring the academic stature and prowess of physicians and their scholar productivity, because reputable researchers, citations number, and highly influential publications have become the chief factors that help medical colleges in advancing their position in world rankings. In addition, the academic stature and prowess of physicians in the form of influential publications is important for appointment

for leadership positions and also in professional and academic promotion [1-12].

Academic medical leadership which is generally linked with academic productivity is correlated in most academic institutions throughout the world with professional and academic promotions and the attainment of academic leadership positions.

Therefore, research publication has become the most important measure of academic output and efficiency, and thus of academic medical leadership.

However, the mere quantity of published research has not been generally regarded as acceptable nor a suitable measure of academic medical leadership, because the number of publications does not give a clue to the scientific strength and significance of the published research work.

Academic medical leaders are generally selected from

members of academic institutions and organizations, and therefore the emergence of genuine academic medical leaders requires the appropriate selection of adequately qualified physicians for faculty membership in academic medical institutions or organizations.

Bibliometric assessments have been used to quantitatively and qualitatively evaluate the scientific/research productivity of medical leaders and academic medical leaders.

The Hirsch index (h-index) is commonly used for the assessment of academic productivity of physicians because it was found to be generally correlated with the academic rank, and increases progressively with it, and thus was used to determine academic leaders.

However, emphasis has been increasingly made that paying no attention to the order and authorship role of the researcher being evaluated may lead to a misleading H-index that is completely not relevant to academic leadership determination purpose.

Publishing research conducted by a large collaborative research group made many collaborators with a minor contribution to the research creation, development and leadership attain a high misleading H-index and is not correlated with their academic and research prowess [12,13,14,15,16,17]. The use of methods that increase the reliability of the H-index has been increasingly suggested [9].

Assessing academic prowess of physicians by bibliometrics such H-index which relies on publications' citations received alone has been shown to be misleading in many instances and that is because many publications include a large number of collaborators who are not genuine authors, but they will get many citations and a misleadingly high H-index.

In addition, the H-index does not measure the scientific strength and the interest of the scientific community in the researcher work. Papers documenting the occurrence of a very rare or novel conditions or associations will not get a number of citations that is correlated with their scientific strength because of the rarity of the description being published. Therefore, Researchgate has emerged as the single most important tool for the evaluation of physicians' academic stature, prowess, and scholar productivity and also for the evaluation of academic

medical leadership. Researchgate also gives insights into the physician's academic communications [9,10, 11, 18, 19, 20, 21, 22].

Researchgate as a professional academic assessment tool was developed by a German virologist, Ijad Madisch (Figure-1) in 2008. Ranking of academics in Researchgate is based mostly on the final scientific reputation (RG) Score for each academic researcher which is measured based on [11-23]:

- 1-The academic output: The number of publications.
- 2-The impact of the researcher through the cumulative impact factors publications mostly journal articles.
- 3-Measuring other impact indicators including the number of the downloads of full-text articles, and the views of the meta-data of articles.



Figure-1: Ijad Madisch, a German virologist
Materials and methods

More than 1000 Researchgate profiles were examined during the last week of December, 2021, with aim of identifying super elite clinical pediatricians with researchgate RG score of 40 or higher than 40 from 146 developing countries (Table-1).

Results

During the last week of December, 2021, there were six pediatricians having an RG score of 40 or higher from 146 developing countries in the world.

Aamir Jalal Al-Mosawi was the pediatricians who had the highest RG Score of 41.13 among the pediatricians from 146 countries (Figure-2A) [24].

Table-1			
Afghanistan	Albania	Algeria	Andorra
Angola	Antigua & Barbuda	Argentina	Armenia
Azerbaijan	Bahamas	Bahrain	Bangladesh
Barbados	Belarus	Belize	Benin
Bolivia	Bosnia & Herzegovina	Botswana	Brunei
Burkina Faso	Burundi	Côte d'Ivoire	Cabo Verde
Cambodia	Central African Republic	Cameroon	Chad
Chile	Colombia	Comoros	Congo
Costa Rica	Congo Democratic Repl.	Croatia	Cuba
Cyprus	Djibouti	Dominica	Dominican
Ecuador	Equatorial Guinea	El Salvador	Eritrea
Estonia	Estonia	Eswatini	Ethiopia
Fiji	Finland	Gabon	Gambia
Georgia	Ghana	Grenada	Guatemala
Guinea	Guinea-Bissau	Guyana	Haiti
Honduras	Iceland	Indonesia	Iraq
Jamaica	Jordan	Kazakhstan	Kiribati
Kuwait	Kyrgyzstan	Laos	Latvia
Lebanon	Lesotho	Liberia	Libya
Liechtenstein	Lithuania	Luxembourg	Madagascar
Malawi	Malaysia	Maldives	Mali
Malta	Marshall Islands	Mauritania	Mauritius
Mexico	Micronesia	Moldova	Monaco
Mongolia	Montenegro	Morocco	Mozambique
Myanmar	Namibia	Nepal	New Zealand
Nicaragua	Niger	Nigeria	North Korea
Oman	North Macedonia	Pakistan	Palestine
Panama	Papua New Guinea	Paraguay	Peru
Philippines	Poland	Portugal	Romania
Rwanda	Senegal	Serbia	Singapore
Slovakia	Slovenia	Somalia	South Africa
South Sudan	South Korea	Sri Lanka	Sudan
Syria	Tajikistan	Tanzania	Timor-Leste
Togo	Trinidad and Tobago	Tunisia	Turkey
Turkmenistan	United Arab Emirates	Uganda	Uruguay
Uzbekistan	Venezuela	Vietnam	Yemen
Zambia	Zimbabwe		

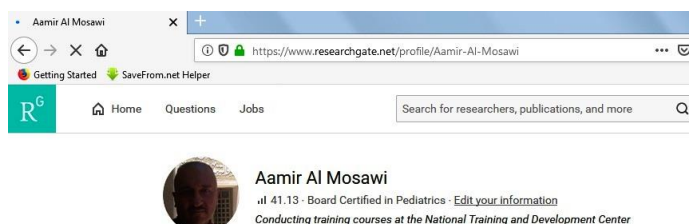


Figure-2A: Aamir Jalal Al-Mosawi was the pediatricians who had the highest RG Score of 41.13 among the pediatricians from 146 countries
 Martin M Meremikwu (Figure-2B) was the Pediatrician from Nigeria who had the highest RG score of 40.99 [25]. Ricardo Alberto Guillermo Russo (Figure-2C) was the Pediatrician from Argentina who had the highest RG score of 40.74 [26]. Rose-Mary N Boustany (Figure-2D) was the Pediatrician from Lebanon who had the highest RG score of 40.15 [27]. Pekka Lahdenne (Figure-2E) was the Pediatrician from Finland who had the highest RG score of 40.07 [28]. Adekunle Adekile (Figure-2F) was the Pediatrician from Kuwait who had the highest RG score of 40.02 [29].



Figure-2B: Martin M Meremikwu was the Pediatrician from Nigeria who had the highest RG score of 40.99



Figure-2C Ricardo Alberto Guillermo Russo was the Pediatrician from Argentina who had the highest RG score of 40.74



Figure-2D: Rose-Mary N Boustany was the Pediatrician from Lebanon who had the highest RG score of 40.15



Figure-2E: Pekka Lahdenne was the Pediatrician from Finland who had the highest RG score of 40.



Figure-2F: Adekunle Adekile was the Pediatrician from Kuwait who had the highest RG score of 40.02

Mi Jung Park was the Pediatrician from South Korea who had the highest RG score of 38.97 [30]. Nerin Bahceciler (Figure-2G) was the Pediatrician from Cyprus who had the highest RG score of 38.47 [31]. Najwa khuri-bulos (Figure-2H) was the Pediatrician from Jordan who had the highest RG score of 37.41 [32]. Simon Denny (Figure-2I) was the Pediatrician from New Zealand who had the highest RG score of 37.19 [33]. Marcela Ferrés (Figure-2J) was the Pediatrician from Chile who had the highest RG score of 37.08 [34]. Celia DC Christie (Figure-2K) was the Pediatrician from Jamaica who had the highest RG score of 35.85 [35]. Ragnar Bjarnason (Figure-2L) was the Pediatrician from Iceland who had the highest RG score of 34.99 [36]. Sertac Arslanoglu (Figure-2M) was the Pediatrician from Turkey who had the highest RG score of 34.88 [37]. Choe Cheah (Figure-2N) was the Pediatrician from Malaysia who had the highest RG score of 32.13 [38]. Svetlana Sharapova (Figure-2O) was the Pediatrician from Belarus who had the highest RG

score of 29.89 [39]. Tiina Talvik (Figure-2P) was the Pediatrician from Estonia who had the highest RG score of 29.03 [40].



Figure-2G: Nerin Bahceciler was the Pediatrician from Cyprus who had the highest RG score of 38.



Figure-2H: Najwa khuri-bulos was the Pediatrician from Jordan who had the highest RG score of 37.41



Figure-2I: Simon Denny was the Pediatrician from New Zealand who had the highest RG score of 37.19



Figure-2J: Marcela Ferrés was the Pediatrician

from Chile who had the highest RG score of 37.08



Figure-2K: Celia DC Christie was the Pediatrician from Jamaica who had the highest RG score of 35.85



Figure-2L Ragnar Bjarnason was the Pediatrician from Iceland who had the highest RG score of 34.99

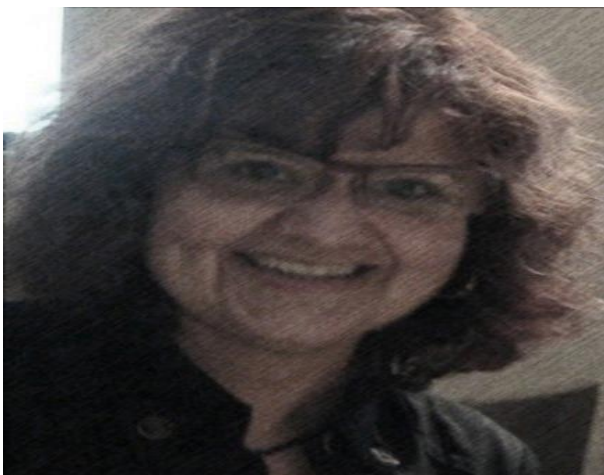


Figure-2M: Sertac Arslanoglu was the

Pediatrician from Turkey who had the highest RG score of 34.88



Figure-2N: Choe Cheah was the Pediatrician from Malaysia who had the highest RG score of 32.13



Figure-2O: Svetlana Sharapova was the Pediatrician from Belarus who had the highest RG score of 29.89



Figure-2P: Tiina Talvik was the Pediatrician from Estonia who had the highest RG score of 29.03

Discussion

This study showed that during the last week of December, 2021, there were six pediatricians having an RG score of 40 or higher from 146 developing countries in the world. Aamir Jalal Al-Mosawi was the pediatrician who had the highest RG Score of 41.13 among the pediatricians from 146 countries.

In 2019, a bibliometric study concluded that Aamir Jalal Al-Mosawi was perfectly regarded as the undisputable pioneer of pediatric nephrology in Iraq. The paper emphasized that in 2008, the web site “Medical talks” (Figure-3) listed Aamir Jalal Al-Mosawi with the famous physicians in history for describing a new model for the treatment of chronic renal failure [10].

The study analyzed papers published by Iraqi pediatricians in the field of pediatric nephrology that were retrieved during the 22nd ad 23rd of August, 2019 from “Web of Science” and “PubMed”. Papers published by researchers other than pediatricians such urologic surgeons, and basic sciences researchers were not included in this study.

The study found a total of 53 papers published in a total of 11 journals including Pediatric Nephrology, Therapy (Clinical practice), Journal of Tropical Pediatrics, Journal of Nephrology and Renal Transplantation, Urology, Clin Exp Nephrol, American Journal of Medical Genetics A, The Open Urology & Nephrology Journal, and Acta Paediatrica, Archives of Disease in Childhood, and Saudi Journal of Kidney Disease and Transplantation. The vast majority of papers, 49 (92.4 %) were published by Aamir Jalal Al-Mosawi. Only four other papers [Etiological and clinical patterns of childhood urolithiasis in Iraq (2005), .Profile of renal diseases in Iraqi children: A single-center report. (2015) ,Hypertension in hemodialyzed children (2016), The predictive factors for relapses in children with steroid-sensitive nephrotic syndrome (2016)] were published by authors other than Aamir Jalal Al-Mosawi, and were carefully examined and found to include unreliable, non-authentic and largely misleading information [10].

The study also emphasized that the work of Aamir Jalal Al-Mosawi represented the authentic reliable source about childhood renal disorders in Iraq.

The work of Aamir Jalal Al-Mosawi provided a comprehensive knowledge about childhood renal disorders in Iraqi children. The papers of Aamir Jalal Al-Mosawi in the field of nephrology included 12 research papers, 2 case report, one case series, three

review articles, and at least 31 conferences’ abstracts [10].

The papers of Aamir Jalal Al-Mosawi included descriptions of the patterns of various childhood disorders including acute glomerulonephritis, chronic renal failure, and renal tubular disorders including nephropathic cystinosis, oculo-cerebro-renal syndrome, and Hinman syndrome. He described the challenges in the treatment of chronic renal failure in Iraq and in the developing world



Figure-3: In 2008, the web site “Medical talks” listed Aamir Jalal Al-Mosawi with the famous physicians in history for describing a new model for the treatment of chronic renal failure

.Aamir Al-Mosawi described a new model for the management of chronic renal failure, and reported six-year dialysis freedom in a girl with end-stage renal disease. This new model has become increasingly known as dietary on intestinal dialysis. Aamir Al-Mosawi also described a new conservative management for childhood urolithiasis, and also a new therapeutic approach for the treatment of refractory vitamin D-resistant rickets.

He also described ocular abnormalities in childhood chronic renal failure, and reported the association of renal agenesis with Coffin Siris syndrome. Aamir Al-Mosawi also described the new association of idiopathic hyperuricosuria, hypercalciuria and infantile renal stone disease and suggested a therapeutic approach for its treatment [10].

Recently, the world class pioneering researches of Aamir Jalal Al-Mosawi that have the potential of conferring the greatest benefit to humankind have been highlighted. These researches including curing autism researches, multi-factorial therapies for mental retardation, and brain damage including cerebral palsy and brain atrophy, and intestinal dialysis [41].

Autistic disorders have become increasingly known as pervasive developmental disorders since the 1980s. They have been recently called autism spectrum disorder mostly by the American Psychiatric Association. The five autistic disorders are chronic conditions associated with marked early impairment in socialization, communication, and behavior. These disorders remained without curative therapy or therapies for decades. They continued to be regarded as life long disorders.

However, pioneering therapeutic experiences treated autistic disorders with a new therapeutic approach which included injectable cerebrolysin as the main therapeutic component. Marked improvement or disappearance of autistic features in these disorders has not been reported with any therapy before. The new approach aimed at improving the cardinal features of autistic disorders which include impairment of social interaction which is mostly manifested by poor responsiveness to their name, and infrequent engagement with others manifested by poor eye contact and infrequently looking to faces. Almost all the treated patients experienced some improvement and lessening of the autistic features during the follow-up period. Treatment was also associated with initiation of speech and improvement of repetitive behaviors. It was possible to document complete disappearance of the main autistic features in twenty patients [41].

In these pioneering experiences emphasis was made, that the patients who achieved complete disappearance of the main autistic features will need an intensive learning especially of speech to abolish the effect of the time when they were under the effect of autistic behavior, and to push them toward a possible cure of their illness [41].

The incidence of chronic renal failure has been increasingly reported as rising during the previous decades and has been increasingly viewed as a worldwide public health problem. More than one million patients with advanced dialysis in the world are generally expected to be on maintenance dialysis.

This number is expected to increase significantly in a decade. Economically disadvantaged countries are struggling to improve the basic level of their health services rather than to offer expensive therapies that affect relatively a smaller number of the population that are increasingly reported to have a disappointing outcome. Such low-income countries are increasingly struggling to find alternative therapeutic measures to traditional renal replacement therapies for the care of patients with chronic renal failure.

The lack of effective renal replacement therapies in many areas in the world should not mean that patients with advanced chronic renal failure are left without other suitable care, and leaders in the field should pave the way for introducing an alternative robust rather than advanced sophisticated expensive technology when resources are limited. A novel paradigm for the management of such patients is increasingly demanded to help in providing the best quality of care possible in such situations [41].

There has been accumulating evidence confirming that intestinal (dietary) dialysis which was introduced by Aamir Jalal Al-Mosawi can be useful option for many patients with chronic renal failure during the course of their illness [41].

A recently published study showed that Aamir Jalal Al-Mosawi during the last four days of August 2021 was the Iraqi academic medical leader who had the highest RG Score of 40.46. [42]. The study emphasized that Aamir Jalal Al-Mosawi has been pioneering several fields of clinical pediatrics in Iraq including pediatric nephrology, pediatric neuropsychiatry, and clinical genetics.

According to the study, the work of Aamir Jalal Al-Mosawi represented the authentic reliable source about childhood renal disorders in Iraq, and it provided a comprehensive knowledge about pediatric kidney diseases in Iraqi children. The publications of Aamir Jalal Al-Mosawi provided pioneering descriptions of the patterns of various pediatric kidney diseases including acute glomerulonephritis, chronic renal failure, childhood urolithiasis, renal tubular disorders (including nephropathic cystinosis, oculo-cerebro-renal syndrome), and Hinman syndrome.

Aamir Jalal Al-Mosawi described the challenges in the treatment of chronic renal failure in the developing world and in Iraq. He described a new model for the management of chronic renal failure, and reported six-year dialysis freedom in a girl with end-stage renal disease. The new model has become known as intestinal dialysis and sometimes was called dietary dialysis [42].

Aamir Al-Mosawi also described a new conservative management for childhood urolithiasis and a new therapeutic approach for the treatment of refractory vitamin D-resistant rickets. He also described the pattern of ocular abnormalities in childhood chronic renal failure, and reported the association of renal agenesis with Coffin Siris syndrome. He described the new association of idiopathic hyperuricosuria, hypercalciuria and infantile renal stone disease and suggested a therapeutic approach for its treatment. He also reported the occurrence of the case 41 of crossed unfused renal ectopia in an Iraqi child [42].

The study also emphasized that Aamir Jalal Al-Mosawi has also been pioneering the fields of clinical genetics and dysmorphology as he has more than 50 publications contributing to these fields. In addition to providing the first description of the pattern of genetic diseases in Iraq, he reported a very large number of rare genetic disorders that have not been reported from Iraq before. He also described the novel occurrence of dysmorphic syndromes and association.

Aamir Jalal Al-Mosawi has also been pioneering the fields of pediatric neurology and psychiatry with more than 50 publications contributing to these fields.

In addition to providing the first descriptions of the patterns of the major neuropsychiatric disorders in Iraq including cerebral palsy, mental retardation, and autism disorders, Aamir Jalal Al-Mosawi introduced new curative therapies for neuropsychiatric disorders including cerebral palsy, kernicterus, mental retardation, autism disorders, and other disorders such as agenesis of corpus callosum and myelomeningocele. He also documented the occurrence of rare neurological disorders in Iraq that have not been reported from Iraq before such as childhood Seeligmüller Strümpell Philip disease.

The contribution of Aamir Jalal Al-Mosawi to non-genetic rare disorders cannot be ignored. He described many of the rare non-genetic diseases that have not been described in Iraq before and new clinical syndromes including the sixty fourth case of pediatric Churg Strauss syndrome in the world, the second case of pediatric unilateral Vogt Koyanagi Harada syndrome in the world, the twenty eighth case of congenital Chevalier Jackson syndrome in the world, and other rare disorders,

In addition to pioneering many clinical fields in Iraq, Aamir Jalal Al-Mosawi has been pioneering many medical non-clinical fields including continuing

medical education and the practice of evidence based medicine, professional training and development, medical editorship, medical leadership and healthcare system studies [42].

The study also emphasized that Aamir Jalal Al-Mosawi founded the first Iraqi international medical journal which was the first Iraqi medical journal to be included in Scopus. He conducted the first accredited training courses in Iraq in several fields including medical and healthcare leadership, training of the trainer (TOT) courses, instruction methods for physician courses, and child psychiatry courses [42].

In addition, a study published during September, 2021 reported that during the last two days of August, 2021, Aamir Jalal Al-Mosawi was the only Iraqi pediatrician who had H-index of 15 or more at Google Scholar Citation. The H-index and the corrected H-index of Aamir Jalal Al-Mosawi were both 16 as he didn't have and published paper that he was not among the first three authors.

According to the study, Aamir Jalal Al-Mosawi was the only uncontroversial academic leader of pediatrics in Iraq, and assessing his academic productivity confirmed that he has been pioneering and leading several pediatric fields including pediatric nephrology, pediatric neuropsychiatry, clinical genetics and clinical dysmorphology [43].

Nicky Hayes (Figure-4) and Robert J. Sternberg (Figure-5) have recently emphasized that scientific academic book authorship is a special form of teaching that actually targeting thousands of readers including students that can not be taught at a personal level. They suggested that scientific academic books including e-textbooks help people with their studies, and can possibly transform their understanding, inspire them, and sometimes can directly help the readers including students in their everyday lives and work [44].



Figure-4: Nicky Hayes an educator in psychology



Figure-5: Robert J. Sternberg, professor of Human Development at Cornell University

This study showed that Aamir Jalal Al-Mosawi was the only Iraqi physician who has more than 100 scientific academic books in the field of medicine published in languages other than Arabic including English that are included in the German National Library (Deutsche Nationalbibliothek). Actually, many of the academic scientific and books published by Aamir Jalal Al-Mosawi were translated to several languages including German, French, Italian, Spanish, Dutch, Portuguese, Polish, and Russian [44].

Nicky Hayes and Robert J. Sternberg emphasized the presence of a vast research and academic experience and the academic value of book authorship [44].

Many of the books of Aamir Jalal Al-Mosawi included in the German National Library (Deutsche Nationalbibliothek) have already proved their high academic values and their scientific strength:

“The Pattern of cerebral palsy in Iraqi children” was included in Bookauthority’s [Box-1] best Neurology books of all time (Figure-6) .

Box-1:
<https://bookauthority.org/about>

Bookauthority:
 Bookauthority is the most important book recommendations site that provides recommendations by experts and intellectuals in various fields. Bookauthority identifies and rates the best books using a variety of methodologies. They feature only **the very best books**.

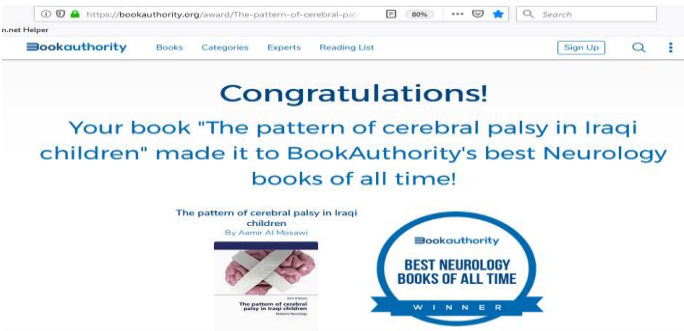


Figure-6: “The Pattern of cerebral palsy in Iraqi children” was included in Bookauthority’s best Neurology books of all time

“The pattern of pervasive developmental disorders in Iraqi children” was included in Bookauthority’s Best Psychiatry Books of All Time.

“Medical leadership” was the second best book in Boove’s Book list of the 20 best medical leadership nooks to read in 2020 (Figure-7) [44].

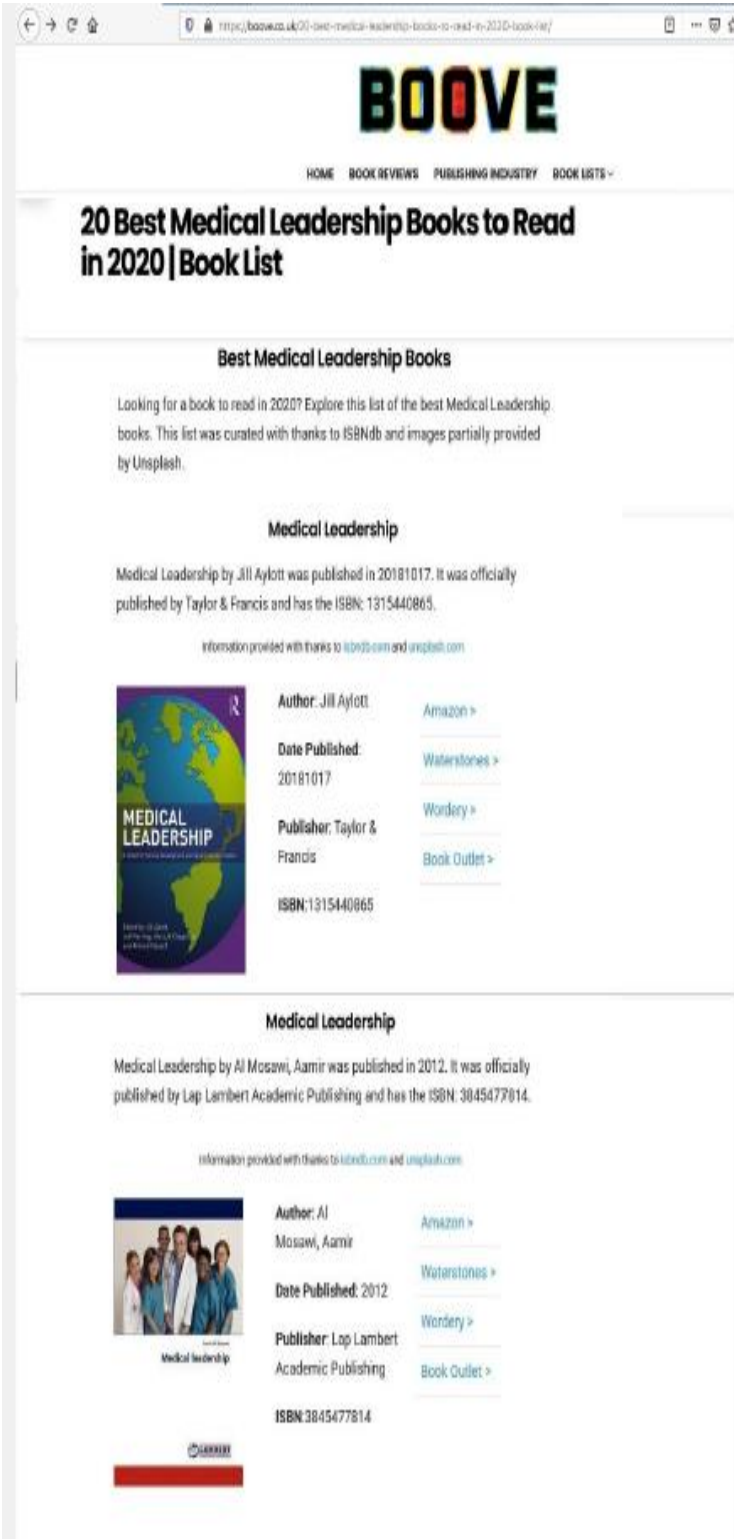


Figure-7: “Medical leadership” was the second best

book in Boove's Book list of the 20 best medical leadership nooks to read in 2020

Many of the books of Aamir Jalal Al-Mosawi (Atlases, course books ,course textbooks, and case studies books) included in the German National Library (Deutsche Nationalbibliothek) have primary educational purposes and were used in teaching a large number of learners during medical training courses [44].

Conclusion

During the last week of December, 2021, there were six pediatricians having an RG score of 40 or higher from 146 developing countries in the world. Aamir Jalal Al-Mosawi was the pediatrician who had the highest RG Score of 41.13 among the pediatricians from 146countries.

Aamir Jalal Al-Mosawi has been pioneering several clinical medical fields in Iraq including pediatric nephrology, clinical genetics and dysmorphology, and neuropsychiatry. He also has been pioneering several non-clinical medical fields including continuing medical education and the practice of evidence based medicine, professional training and development, medical editorship, medical leadership and healthcare system studies.

Aamir Jalal Al-Mosawi founded the first Iraqi international medical journal which was the first Iraqi medical journal to be included in Scopus. He conducted the first accredited training courses in Iraq in several fields including medical and healthcare leadership, training of the trainer (TOT) courses, instruction methods for physician courses, and child psychiatry courses.

The findings in this study confirm that researchgate is more appropriate for academic medical leadership as it reduce to some extent the influence of misleadingly high H-index that is not relevant to academic leadership deterioration resulting from joining large number of collaborative studies.

Acknowledgement

Some of the figure in this book were published in previous author's publicatio, but the author has their copyright.

Conflict of interest: None.

References

- 1-Al-Mosawi AJ. Our Experience with continuing medical education (CME) programme. The CME center, University Hospital in AL-Kadhimiyia. The N Iraqi J Med 2005; 1(3): 8-9.
- 2-Al-Mosawi AJ. The Practice of evidence based

medicine. The N Iraqi J Med 2006; 2(1):8-10.

3-Al-Mosawi AJ. Continuing Medical education: Principles, concepts, and standards. The N Iraqi J of Medicine 2007; 3 (2): 32-35.

4-Al-Mosawi AJ. Medical leadership.1st ed., Saarbrücken; LAP Lambert Academic Publishing: 2012 (ISBN: 9783848405008).

5-Al-Mosawi AJ. Medical and healthcare leadership: A training course. 1st ed., Saarbrücken; LAP Lambert Academic Publishing: 2016 (ISBN: 978-3-659-85373-9).

6-Al-Mosawi AJ. Leadership in medicine and healthcare: An accredited training course. 1st ed., Saarbrücken; LAP Lambert Academic Publishing: 2017 (ISBN: 978-3-659-92501-6).

7-Al-Mosawi AJ. Leadership in medicine and healthcare: an overview of the emerging concepts and principles. Lupine Online Journal of Medical Sciences 2019; 4(1): 344-351. Doi: 10.32474/LOJMS.2019.04.000179.

9-Al-Mosawi AJ. The scientific productivity and academic output of elite Iraqi pediatricians: h-index reliability indicators. International Journal of Research Studies in Medical and Health Sciences 2019; 4(8): 3-6.

10-Al-Mosawi AJ. Scientific publication productivity and research activities of Iraqi pediatricians in the field of pediatric nephrology: a bibliometric analysis to identify pioneers. Advancements in Journal of Urology and Nephrology 2019; 1(1): 1-10.

11-Al-Mosawi AJ. Researchgate activity of elite pediatricians from ten Arab countries .1st ed., Saarbrücken; LAP Lambert Academic Publishing: 2020 (ISBN: 978-620-0-53215-2).

12-Al-Mosawi AJ. Academic Medical Leadership: An overview of the emerging concepts and ideas. Clinical medical reviews and reports: Open access 2020; 2(3):1-3. Doi:10.31579/cmrr.2020/014

13-Gast KM, Kuzon WM Jr, Waljee JF. Bibliometric indices and academic promotion within plastic surgery. Plast Reconstr Surg 2014 Nov; 134(5):838e-844e. PMID: 25347660.

14-Dotan G, Qureshi HM, Gaton DD. Chairs of United States Academic Ophthalmology Departments: A Descriptive Analysis and Trends. Am J Ophthalmol 2018 Dec; 196:26-33. PMID: 30121244.

15-Lopez J, Susarla SM, Swanson EW, Calotta N, Lifchez SD. The association of the h-index and academic rank among full-time academic hand surgeons affiliated with fellowship programs. J Hand Surg Am 2015 Jul; 40(7):1434-41. PMID: 26026351.

16-Pagel PS, Hudetz JA. Scholarly productivity of United States academic cardiothoracic anesthesiologists: influence of fellowship accreditation and transesophageal echocardiographic credentials on h-index and other citation bibliometrics. J Cardiothorac Vasc Anesth 2011 Oct; 25(5):761-5. PMID: 21546271.

- 17-Ence AK, Cope SR, Holliday EB, Somerson JS. Publication Productivity and Experience: Factors Associated with Academic Rank Among Orthopaedic Surgery Faculty in the United States. J Bone Joint Surg Am 2016 May 18; 98(10):e41. PMID: 27194503.
- 18-Al-Mosawi AJ. A Corrected H-Index for Academic Leadership Determination: A Bibliographic Research .Archives of Health Science (ISSN 2641-7456) 2020 August 29; 4 (1):1-7.Doi:10.31829/2641-7456/ ahs 2020-4(1)-119
- 19-Al-Mosawi AJ. A corrected H-index for academic leadership determination .1st ed., Saarbrücken; LAP Lambert Academic Publishing: 2020 (ISBN: 978-620-2-67787-5).
- 20-Al-Mosawi AJ. Исправленный H-индекс для определения академического лидерства: Исследование в области медицинского образования (Russian Edition).Scienia Scripts July, 2020 (ISBN-10: 6202623470, ISBN-13: 978-6202623476).
- 21-Al-Mosawi AJ. Ein korrigierter H-Index zur Bestimmung der akademischen Führung: Forschung in der medizinischen Ausbildung (German Edition). Verlag Unser Wissen: October, 2020 (ISBN-10: 6202 622806, ISBN-13: 978-6202622806).
- 22-Al-Mosawi AJ. Um índice H corrigido para a determinação da liderança acadêmica: Pesquisa em educação médica (Portuguese Edition). Edições Nosso Conhecimento October, 2020 (ISBN-10: 6202622865, ISBN-13: 978-6202622868).
- 23-Al-Mosawi AJ. Activité de recherche des pédiatres d'élite de dix pays arabes. (French edition) Editions Notre Savoir: 2020 (ISBN-13: 978-620-2-57901-8, ISBN-10:6202579013).
- 24-Researchgate profile: Aamir Al-Mosawi https://www.researchgate.net/profile/Aamir_Al_Mosawi [Accessed during the last week of December, 2021].
- 25-Researchgate profile: Martin M Meremikwu <https://www.researchgate.net/profile/Martin-Meremikwu> [Accessed during the last week of December, 2021].
- 26-Researchgate profile: Ricardo Alberto Guillermo Russo <https://www.researchgate.net/profile/Ricardo-Russo-3>
- 27-Researchgate profile: Rose-Mary N Boustany. <https://www.researchgate.net/profile/Rose-Mary-Boustany-2> [Accessed during the last week of December, 2021].
- 28-Researchgate profile: Pekka Lahdenne <https://www.researchgate.net/profile/Pekka-Lahdenne-2> [Accessed during the last week of December, 2021].
- 29-Researchgate profile: Adekunle Adekile. <https://www.researchgate.net/profile/Adekunle-Adekile> [Accessed during the last week of December, 2021].
- 30-Researchgate profile: Mi Jung Park <https://www.researchgate.net/profile/Mi-Jung-Park> [Accessed during the last week of December, 2021].
- 31-Researchgate profile: Nerin Bahceciler <https://www.researchgate.net/profile/Nerin-Bahceciler> [Accessed during the last week of December, 2021].
- 32-Researchgate profile: Najwa khuri-bulos. <https://www.researchgate.net/profile/Najwa-Khuri-Bulos> [Accessed during the last week of December, 2021].
- 33-Simon Denny-Researchgate profile: <https://www.researchgate.net/profile/Simon-Denny-2> [Accessed during the last week of December, 2021].
- 34-Researchgate profile: Marcela Ferrés <https://www.researchgate.net/profile/Marcela-Ferres> [Accessed during the last week of December, 2021].
- 35-Researchgate profile: Celia DC Christie <https://www.researchgate.net/profile/Celia-Christie> [Accessed during the last week of December, 2021].
- 36-Researchgate profile: Ragnar Bjarnason <https://www.researchgate.net/profile/Ragnar-Bjarnason-2> [Accessed during the last week of December, 2021].
- 37-Researchgate profile: Sertac Arslanoglu <https://www.researchgate.net/profile/Sertac-Arslanoglu> [Accessed during the last week of December, 2021].
- 38-Researchgate profile: Choe Cheah <https://www.researchgate.net/profile/Choe-Cheah> [Accessed during the last week of December, 2021].
- 39-Researchgate profile: Svetlana Sharapova <https://www.researchgate.net/profile/Svetlana-Sharapova> [Accessed during the last week of December, 2021].
- 40-Researchgate profile: Tiina Talvik <https://www.researchgate.net/profile/Tiina-Talvik-2> [Accessed during the last week of December, 2021].
- 41-Al-Mosawi AJ. World Class Pioneering Clinical Innovations: Nobel Prize Committee's Failures. Journal of Biomedical Research & Environmental Sciences 2020 Oct 30; 6(10): 246-248. Doi: 10.37871/jbres 1150
- 42-Al-Mosawi AJ. ResearchGate RG score in the determination of modern pioneers of medicine. LAP LAMBERT Academic Publishing: 2021 (ISBN-13: 978-613-9-84645-0, ISBN-10: 6139846455).
- 43-Al-Mosawi AJ. The H-index and the corrected H-index in the determination of academic leaders in pediatrics from Iraq. Journal of Urology and Research (ISSN: 2379-951X) 25 October, 2021; 8 (1): 1-11.
- 44-Al-Mosawi AJ. The Contribution of Iraqi Physicians to International Book Authorship. LAP LAMBERT Academic Publishing: December, 2021 (ISBN-13:978-620-4-72822-3, ISBN-10: 6204728229).