# **OPINION**

# Sibling anesthesiologists suggest clinical logbooks to counterbalance research publications and mitigate disparity between research output and clinical output

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#### **ARTICLE CYCLE**

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#### **ABSTRACT**

The question is which medical specialties are most commonly performing biomedical research. The question is which medical specialties are most commonly receiving research funding. The question is which medical specialties are most commonly suffering research addiction. Considering that delivery of healthcare for humanity is closely intertwined with innovation in science for humanity, clinicians benefitting professionally by creating public records of their clinical logbooks may be able to mitigate disadvantaged disparity in professional growth secondary to clinical output as compared to professional growth secondary to research output.

#### **OPINION**

Every medical specialty is different and so is each medical specialty's research output. Every medical specialist is different and so is each medical specialist's research output. Sometimes, productive medical researchers work in medical specialties which are not able to provide conducive conditions for research output. Sometimes, research-resourceful specialties work with clinical specialists who are not able to translate research-conducive conditions into enriching research output.

Rephrasing the sibling authors' earlier questions (1-3), which medical specialties are most commonly performing biomedical

research (4-5)? Is high ranking in their research-resourcefulness secondary to their natural inclination to mandate practitioners to be well-verse in paperwork management (6), whether for clinical, administrative, education or innovation purposes? Is there a vicious cycle where the research funds may be getting channelized to the already research-resourceful specialties (7-10), thus maintaining the status quo for medical specialties already marginalized by their multifactorial-low research output? Are disproportionately allocated research funds discomposing research scholars of researchresourceful specialties with research addiction as if age-old work addiction amalgamating with

new-age information addiction via round-theclock internet connectivity available on smartdevices (11-19)?

Maybe medical specialties marginalized by their multifactorial-low research output can get inspired from 2003 biographical book "Moneyball - The Art of Winning an Unfair Game" and its Academy Award-nominated screenplay for adapted 2011 "Moneyball" (20-21). This book and its movieadaptation have chronicled how a Major Baseball team pioneered the Moneyball Strategy so that marginalized cashstrapped baseball teams can put up winnable fights in professional sports leagues (22). Maybe anesthesiology would need to think out of the box to overcome its low profile in terms of funding by the funding agencies whether they are public funders or private funders and whether they are government-based payors or industry-based payors.

Anesthesiology research is sometimes not even represented in major multidisciplinary journals (23). Sometimes, superior research aptitude among the applicants is not even the prerequisite to enter residency programs of anesthesiology (24).Interestingly, compared to other medical specialties, anesthesiologists spending less time in management paperwork could be misinterpreted that they have sufficient time for administration, education and innovation (25). However, this may not be true. The apparent lagging of anesthesiology compared to other medical specialties in research-resourcefulness could be multifactorial. As complexity of patients' multimorbidity varies among medical specialties (26), is the avenue of clinical anesthesiologists' round-the-clock management of multimorbidity in patients who belong to multispecialty surgical departments deterring clinical anesthesiologists from evolving as research anesthesiologists? Is the avenue of even administrative and education responsibilities of clinical anesthesiologists moving to operation rooms-theaters for sandwiching administrative and education responsibilities perioperatively precluding clinical anesthesiologists from innovating as research anesthesiologists? Is the rarity of even dedicated office desks for anesthesiologists precluding the opportunities of even desk research (27), which may have limited but definite role in medical specialties aiming to innovate and excel? Is time-intensive perioperative clinical management accentuated work-life imbalance conflicting with time-intensive perioperative anesthesia research worsened work-life imbalance? For future growth of not only the medical specialists but also their medical specialties, isn't the quality of research output more timeintensive than the quantity in research output? Shouldn't the quality and quantity of clinical output tread shoulder-to-shoulder with the quality and quantity of research output? Shouldn't medical specialties prevent their specialist researchers from descending into the rabbit hole of irreversibly imbalanced workresearch-life?

Essentially, to mitigate disparity between research output and clinical output, it is time for clinicians to begin documenting their clinical logbooks on a daily basis (28-32), which should be in the public domain and thus accessible to peers and patients profiling their clinical acumen's evolution. This would be analogous to researchers updating their research vita on a regular basis in the public domain (33), because peers and experts are expecting to profile their research aptitude's evolution.

#### **AUTHORS CONTRIBUTION**

All authors have contributed equally.

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# **CONFLICT OF INTEREST**

There are no conflicts of interest.

# DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

## **REFERENCES**

- Gupta D, Gupta D. Sibling Authors Propose Bipolar Disorder Of Publishing Biomedical Research: With MEDLINE Footprint Imploding And Retraction Footprint Fudging, Can Pursuit For PubMed® Footprint Challenge Humane Human Imprinting By Physician Scientists?. Indian J Comm Health. 2023;35(3):375-384. https://doi.org/10.47203/IJCH.2023.v35i03.024 Last Accessed March 19, 2024
- Gupta D. Peer Pressure of Publishing or Perishing (PPPP). Indian J Comm Health. 2021;33(2):413. https://doi.org/10.47203/IJCH.2021.v33i02.037 Last Accessed March 19, 2024
- Gupta D. Mandatory Basic Life Support Training: Why NOT In India; Mandatory End-of-Life Care Policy: Why NOT In India; Mandatory Medical Research Requirements: Why SO In India!. Indian J Comm Health. 2017;29(1):129-131. https://doi.org/10.47203/IJCH.2017.v29i01.020 Last Accessed March 19, 2024
- Gehanno JF, Ladner J, Rollin L, Dahamna B, Darmoni SJ. How are the different specialties represented in the major journals in general medicine? BMC Med Inform Decis Mak. 2011 Jan 21;11:3. https://doi.org/10.1186/1472-6947-11-3 Last Accessed March 19, 2024
- Hallan DR, Mikhail D, Lu K, Henry A, Chiang K, Patterson M, Sakya SM. Residency Specialty and National Resident Matching Program Outcomes as Predictors of Academic vs Non-Academic Position as an Attending Physician. Cureus. 2020 Aug 4;12(8):e9548.
  - https://doi.org/10.7759/cureus.9548 Last Accessed March 19, 2024
- Manual Work Hours Spent by 23 Specialties for Paperwork and Administrative Tasks https://www.billingparadise.com/blog/23physician-specialties-and-the-number-of-hoursspent-on-paperwork/ Last Accessed March 19, 2024
- Schlafly A, Sebro R. Does NIH funding differ between medical specialties? A longitudinal analysis of NIH grant data by specialty and type of grant, 2011-2020.
  BMJ Open. 2022 Dec 30;12(12):e058191. https://doi.org/10.1136/bmjopen-2021-058191
  Last Accessed March 19, 2024
- 8. BRIMR Rankings of NIH Funding in 2023 https://brimr.org/brimr-rankings-of-nih-funding-in-2023/ Last Accessed March 19, 2024
- Marshall DC, Jackson ME, Hattangadi-Gluth JA. Disclosure of Industry Payments to Physicians: An Epidemiologic Analysis of Early Data From the Open Payments Program. Mayo Clin Proc. 2016 Jan;91(1):84-96. https://doi.org/10.1016/j.mayocp.2015.10.016 Last
  - https://doi.org/10.1016/j.mayocp.2015.10.016 Last Accessed March 19, 2024
- Open Payments data https://openpaymentsdata.cms.gov/datasets Last Accessed March 19, 2024
- Olson JA, Sandra DA, Veissière SPL, Langer EJ. Sex, Age, and Smartphone Addiction Across 41 Countries.
  Int J Ment Health Addiction. 2023.

- https://doi.org/10.1007/s11469-023-01146-3 Last Accessed March 19, 2024
- Stangl B, Kastner M, Park S, Ukpabi D. Internet addiction continuum and its moderating effect on augmented reality application experiences: digital natives versus older users. Journal of Travel & Tourism Marketing. 2023;40(1):38-54. https://doi.org/10.1080/10548408.2023.2199776 Last Accessed March 19, 2024
- The perils of work and research addiction https://www.kevinmd.com/2023/11/the-perils-ofwork-and-research-addiction.html Last Accessed March 19, 2024
- 14. Study introduces new internet addiction spectrum: where are you on the scale? https://www.surrey.ac.uk/news/study-introduces-new-internet-addiction-spectrum-where-are-you-scale Last Accessed March 19, 2024
- 15. Researchers track global smartphone addiction patterns in largest-ever study https://www.utm.utoronto.ca/mainnews/researchers-track-global-smartphone-addiction-patterns-largest-ever-study Last Accessed March 19, 2024
- 16. Problematic smartphone use across the world https://www.healthyscreens.com/map Last Accessed March 19, 2024
- 17. Healthy Screens: Our studies https://www.healthyscreens.com/studies Last Accessed March 19, 2024
- Are our brains addicted to information? https://www.medicalnewstoday.com/articles/3255 88 Last Accessed March 19, 2024
- Research is an addiction but help is available https://universityaffairs.ca/opinion/in-myopinion/research-is-an-addiction-but-help-isavailable/ Last Accessed March 19, 2024
- 20. Moneyball: The Art of Winning an Unfair Game https://wwnorton.com/books/9780393324815 Last Accessed March 19, 2024
- 21. Moneyball https://www.imdb.com/title/tt1210166/ Accessed March 19, 2024
- The Impact of Moneyball in MLE https://eutawstreetreport.com/the-impact-ofmoneyball-in-mlb/ Last Accessed March 19, 2024
- Table 1 Distribution in mean percentages and ranking of the first thirty occurrences of metaterms in the BMJ, JAMA, Lancet and NEJM for the years 1997, 2002 and 2007 cumulated https://bmcmedinformdecismak.biomedcentral.com/articles/10.1186/1472-6947-11-3/tables/1 Last Accessed March 19, 2024
- 24. Figure 1: Number of research experiences as a function of residency specialty matched into by 2018 U.S. medical students https://assets.cureus.com/uploads/figure/file/1265 97/lightbox\_ccc42950b96311ea9283c502436ad95a-fig1NEW.png Last Accessed March 19, 2024
- Gupta D. Payer for Administration, Education, and Innovation in Anesthesiology. ASA Monitor 2023;87:e3.

© 2024 JEFI 146

- https://doi.org/10.1097/01.ASM.0000935356.6552 7.d9 Last Accessed March 19, 2024
- 26. Tonelli M, Wiebe N, Manns BJ, Klarenbach SW, James MT, Ravani P, Pannu N, Himmelfarb J, Hemmelgarn BR. Comparison of the Complexity of Patients Seen by Different Medical Subspecialists in a Universal Health Care System. JAMA Netw Open. 2018 Nov 2;1(7):e184852. https://doi.org/10.1001/jamanetworkopen.2018.4 852 Last Accessed March 19, 2024
- Desk Research: Definition, Types, Application, Pros & Cons https://www.formpl.us/blog/desk-researchdefinition-types-application-pros-cons Accessed March 19, 2024
- McGinn R, Lingley AJ, McIsaac DI, Pysyk C, McConnell MC, Bryson GL, Dubois D. Logging in: a comparative analysis of electronic health records versus anesthesia resident-driven logbooks. Can J Anaesth. 2020 Oct;67(10):1381-1388. English. https://doi.org/10.1007/s12630-020-01761-x Last Accessed March 19, 2024

- Barbieri A, Giuliani E, Lazzerotti S, Villani M, Farinetti A. Education in anesthesia: three years of online logbook implementation in an Italian school. BMC Med Educ. 2015 Feb 11;15:14. https://doi.org/10.1186/s12909-015-0298-1 Last Accessed March 19, 2024
- Paydar S, Esmaeeli E, Ameri F, Sabahi A, Meraji M. Investigating the advantages and disadvantages of electronic logbooks for education goals promotion in medical sciences students: A systematic review. Health Sci Rep. 2023 Dec 19;6(12):e1776. https://doi.org/10.1002/hsr2.1776 Last Accessed March 19, 2024
- Anaesthetics App The next generation of logbook https://anaesthetics.app Last Accessed March 19, 2024
- Logbook: Track your professional journey https://www.docthub.com/logbook Last Accessed March 19, 2024
- 33. ResearchGate https://www.researchgate.net Last Accessed March 19, 2024