



JAMDA

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Editorial

The Impact of the COVID-19 Pandemic on Scientific Publishing

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The novel coronavirus (COVID-19) pandemic has had an extraordinary impact on health, health care, medical sciences, and many aspects of scientific research. Post-acute and long-term care organizations were especially impacted and rapidly became epicenters of the coronavirus epidemic and its response. A study of COVID-19 mortality across 12 countries conducted in July 2020 found that mortality rates for older persons in long-term care were 24 times those of community-dwelling older persons and 664 times higher than those of community-dwelling younger persons.¹

In response, the practice of long-term care medicine changed rapidly. Recommendations for full personal protective equipment (PPE), which beforehand had been rarely used, became commonplace. Employee and resident screening and visitor restrictions were implemented,² accompanied by logistical challenges and resident and family stress.³ Telemedicine, which before 2020 had been rare,⁴ suddenly became commonplace, as long-intrenched policies by regulators and insurers melted away in response to the need to limit in-person medical assessments in locked-down long-term care settings.⁵ On-site laboratories, which had entirely disappeared from most nursing homes, saw a minor resurgence as homes needed to rapidly retool to manage on-site COVID-19 testing.⁶ Nursing home infection control activities, which had been modestly bolstered by recent regulations,⁷ were found inadequate for the task of dealing with such an unprecedented unanticipated onslaught,⁸ and calls were put forth to attend to assisted living in the time of COVID-19.⁹ In response to these and other challenges, collaboration between long-term care organizations and other health care sectors—particularly health departments and hospital systems—mushroomed.^{10,11} Indeed, the world of post-acute and long-term care was thrust into the limelight and turned inside out and upside down during 2020.

Impact on Academic Research and Writing

The COVID-19 pandemic hijacked not just the world of long-term care but the entire world of basic and clinical science, with unprecedented shifts in funding priorities worldwide and a boom in medical publishing,¹² accompanied by an unprecedented increase in the number of publications.¹³ A PubMed search in early 2021 for papers

published in the prior year identified 111,403 publications (including preprints) with a key word of COVID-19, SARS-COV-2, coronavirus, or pandemic, compared with—by way of example—19,256 on the human immunodeficiency virus, 14,084 on Alzheimer's disease, and 11,996 on myocardial infarction. The total number of 2020 publications indexed by PubMed was more than 1.64 million, a 10% increase over 2019.

As part of this rapid shift in priorities, the world of academic publishing also changed. The timeline from data collection to publication quickened, particularly for papers about COVID-19.¹⁴ Reports about the novel coronavirus and COVID-19 disease were prioritized, with the goal of getting them into the literature as quickly as possible.¹⁵ Reviews of COVID-19-related papers were frequently accelerated, and the practice of providing online availability of preprints, often before final editing and author approval, became commonplace.¹⁵ The move toward increased open access publishing accelerated as well, with many academic journals (including *JAMDA*) making all COVID-19-related papers freely available online.¹⁶ These changes in publishing, plus the continued growth of online journals (many of which are not indexed), combined with the boom in coronavirus-related research, resulted in an overall increase of published papers.¹³

This accelerated pace of academic publishing has had its drawbacks. Concerns have been raised about the quality of much of the research, and that the practice of releasing preprint articles aggravates this concern. One recent article in the *Journal of Medical Ethics*, for example, noted that by May 2020, ClinicalTrials.gov had registered more than 1200 COVID-related trials and expressed concern that practices of good research, such as reflection on methods, quality checks by researchers and their supervisors, and robust ethics reviews, were being compromised.¹⁷ Concerns about the quality of peer review have been raised as well, because of resource limitations from increased article submissions and reviewer stress from new clinical and at-home obligations. Such fears were bolstered by an increase in retractions of scientific studies, particularly about COVID-19.^{17–19}

The COVID-19 pandemic has been stressful for scientists and academic authors and affected their ongoing research efforts. Many clinical trials, particularly those involving older populations such as persons with Alzheimer's disease or residing in long-term care settings, were disrupted or terminated entirely because of concerns about safety risk for participants and research staff.^{20,21} Laboratory research suffered, too, and the work of early career investigators was

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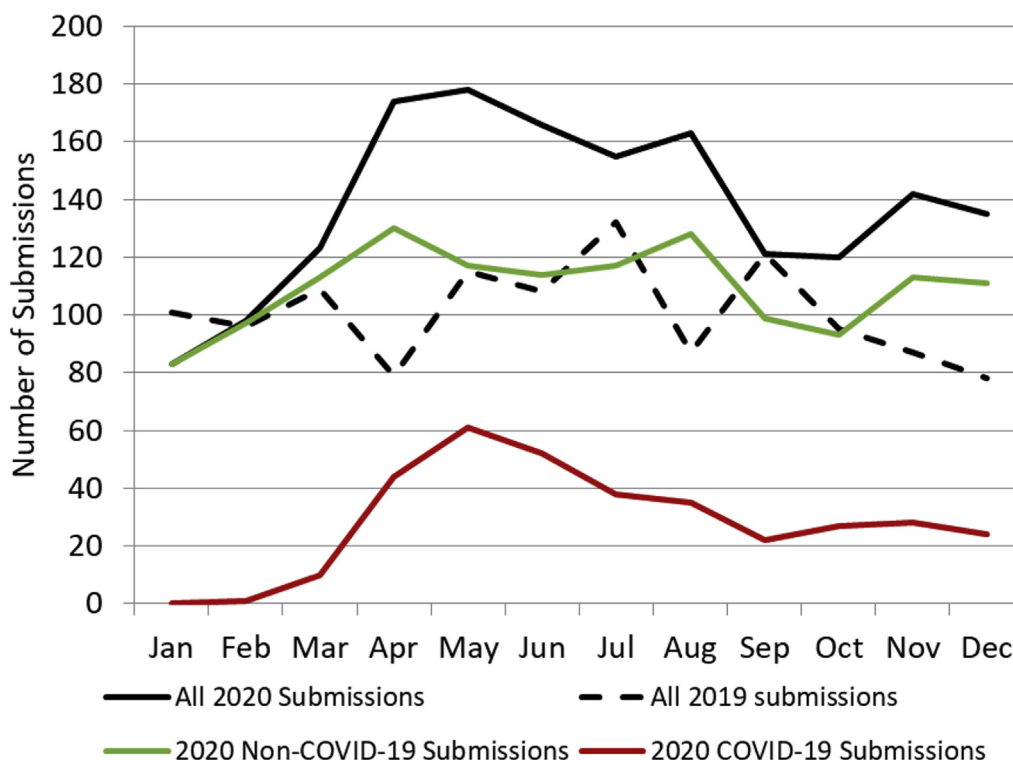


Fig. 1. Monthly manuscript submissions to *JAMDA* in 2019 and 2020. Similarity between the dotted line (2019 submissions) and green line (2020 Non-COVID-19 submissions) suggests that the large volume of 2020 COVID-19 submissions (red line) supplemented rather than supplanted ongoing research, leading to the overall 37% increase in manuscript volume (black line, all 2020 submissions).

noted to have been especially impacted.²² Clinician-scientists were additionally affected because many were pressed into extra duty to assist in the pandemic response, and some became ill with the disease. Particularly impacted were women with small children, because the transition of many schools to in-home, virtual teaching and the closing of many day care centers reduced available work time.^{23–25}

Impact on Publications in Post-Acute and Long-Term Care Medicine

Until 2020, *JAMDA*'s submissions had been growing at approximately 10% to 15% per year. In 2020, we received 1658 article submissions, a 37% increase over 2019. Most (76%) of this increase consisted of papers about COVID-19. As has been the case in scientific publishing overall, publications related to this new disease have not been associated with a reduction but rather an increase in publications in other areas as well. [Figure 1](#) displays these trends. Although impressive, *JAMDA*'s submission increase is no greater than that experienced by many other journals, despite the disproportionate burden it has placed on long-term care populations.^{12,13} This point speaks well about the commitment of those engaged in research related to post-acute and long-term care medicine.

[Figure 1](#) indicates that 2020's non-COVID-19 submissions (shown by the green line), were relatively similar to overall 2019 submissions (shown by the dotted line), indicating that the large volume of 2020 COVID-19 submissions (red line) *supplemented* rather than *supplanted* ongoing research, and that in 2020, the amount of non-COVID-19 research did not change markedly compared to the previous year. Those figures are good news, because all of the issues relevant to post-acute and long-term care that existed pre-COVID-19 remained during COVID-19.

One cannot help but wonder, however, the extent to which the impact of the non-COVID-19 papers published in 2020 will be

affected by the thirst for data on COVID-19 that same year—at least in the short run. Is it any surprise that of the top 15 downloaded *JAMDA* articles in 2020, 13 (87%) related to COVID-19? Just as there has been concern regarding delay or avoidance of medical care due to COVID-19,²⁶ attention paid to other pressing needs has been postponed, which may affect citations in the short run. Researchers in many fields may be disappointed by the importance of their work being temporarily overlooked, but fortunately, the operative word is *temporarily*. In 2021, *JAMDA* will summarize some of the non-COVID papers published during 2020 that merit renewed attention.

Impact on Peer Review and Publication Metrics

With the increased volume and drive to process manuscripts quickly, *JAMDA*'s editors were intent to obtain high-quality reviews at a time when our reviewers—particularly clinician-reviewers—were often overwhelmed by extra duties. An especially reliable reviewer wrote this as part of an apologetic decline of a review request: “I am up to my eyeballs. ... I have no more bandwidth.” Even getting the virus under control did not always make life easier. One trusted reviewer from a country that had finally begun to control the virus wrote the following when reminded about an overdue review: “Sincere apologies for my delay. ... With the lockdown [here] coming to an end and our research activities re-starting, these times have been extremely busy.”

Despite the increased volume and demands on reviewers, *JAMDA*'s metrics have remained excellent. Our average time to a first decision on a paper decreased from 22.4 days in 2019 to 17.6 days in 2020, and, for papers undergoing full review by multiple reviewers, the average time increased only slightly from 7.3 to 7.7 weeks.

JAMDA's editorial team is always grateful for the time and thoughtful input of our reviewers, and especially so in 2020. We

recognize the contributions of these reviewers, listed in The Appendix, during a most challenging year.

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Appendix Table 1

JAMDA Reviewers During Year 2020

Eeva Aartolahti	Marie Boltz	Alfonso J. Cruz-Jentoft	Margaret Helton
Giulia Abate	Alice Bonner	Dulce M. Cruz-Oliver	Anne Hendry
Angela Marie Abbatecola	Marcus Kiiti Borges	Paolo Marcello Cunha	Bridget Hiedemann
Katherine M Abbott	Anne-Marie Bostrom	Maureen C. Dale	Sarah Hilmer
Anne-Bahia Abdeljalil	Pieterella C. Bots-Vantspijker	Javier Damián	Matthias Hoben
Siti Azdiah Abdul Aziz	Nathan Adam Boucher	Francisca De Leeuw	Sophie Hogeveen
Samia Ahmed Abdul-Rahman	Raymond E Bourey	Anton De Spiegeleer	Iva Holmerova
Wilco P. Achterberg	Chad Bousman	Bart De Spiegeleer	A. Jay Holmgren
Maayan Agmon	John Bowblis	Linda Decherrie	Ickpyo Hong
Davide Agnoletti	Kathryn H. Bowles	Anja Declercq	M. Bryant Howren
David Alberto Aguilar	Nicole Brandt	Howard Degenholtz	Cassandra Hua
Maritza Aguirre	Carol Brayne	Mary Ellen Dellefield	Xudong Huang
Nayeon Ahn	Timothy Brearly	Oddom Demontiero	Carmel Hughes
Cecilia Albala	David Brechtelsbauer	Jacopo Demurtas	Kathy Hyer
Steven M. Albert	Christian Brettschneider	Shawkat Dhanani	Kinda Ibrahim
Jennifer Albrecht	Ken Brummel-Smith	T.S. Dharmarajan	Jasminka Ilich
Rosa María Alfonso Rosa	Olivier Bruyere	Tatiana Danai Dimitriou	Mikel Izquierdo
Gilles Allali	Gwendolen T Buhr	Debra Dobbs	Jeremy Michael Jacobs
Theresa Anne Allison	Julia Burgdorf	David Dosa	Tessa Jansen
Bader Almoshelli	Eduardo Cadore	Paul Joseph Drinka	Olin Janssen
Reza Amini	Shubing Cai	Trisha Dunning	Barbara Ellen Janssens
Atul Anand	Yun Cai	Gustavo Duque	Jenefer M. Jedele
Sharon Dorothy Anderson	Amaia Calderón-Larrañaga	Angelique Egberts	Dylan Jester
Barbara Angel	Monique Caljouw	G. Paul Eleazer	Jonas Johansson
Niquille Anne	Riccardo Calvani	Julie Ellis	Kim G. Johnson
Raquel Aparicio-Ugarriza	Ian Cameron	Carole A. Estabrooks	Natali Jokanovic
Robert Applebaum	Cameron Camp	Jonathan M. Evans	Robert Jorissen
Hidenori Arai	Irene Campbell-Taylor	William Evans	Pornchai Jullamate
Laurie Archbald-Pannone	Paul K. Canavan	Connie J. Evashwick	Robin Jump
Mary Elizabeth Arensberg	Marco Canevelli	Amil Fakha	Hye-Young Jung
Wilbert S. Aronow	Chao Cao	Ryan Falck	Corrine Y. Jurgens
Mara Aronson	Gideon A. Caplan	Jason R. Falvey	Bllingsley Kaambwa
Damaris Aschwanden	Anthony James Caprio	Penny Feldman	Sarah Kabbani
Muhammad Salman Ashraf	Paula Carder	Fan Feng	Ellen W. Kaehr
Mylene Aubertin-Leheudre	Jennifer L. Carnahan	Mariana Gross Figueiro	Tomohiko Kamo
Robin R. Austin	Christy Carter	Gerda Fillenbaum	Marshall Kapp
José Alberto Avila-Funes	Carolina M. Casellini	Harriet Finne-Soveri	Jurgis Karuza
Roman Ayele	Nicole Casey	Steven Fisher	Morgan Jane Katz
Emmeline Ayers	Nicholas Castle	Tim Fleiner	Paul R. Katz
Domenico Azzolino	Roberto Carlos Castrejon Perez	Leon Flicker	Ruth Katz
Yoshihiko Baba	Angela Catic	Mauren Minuzzo Freitas	Heather H. Keller
Patricia Bach	Joaquim Cerejeira	Elizabeth Frentzel	Christine Khandelwal
Ramona Backhaus	Carmen Cervera	Erik Fromme	Rita Khoury
Nasim Baghban Ferdows	Matteo Cesari	Stefano Fumagalli	Kibum Kim
Amir Bagheri	Natalia Cezón-Serrano	Jon Paul Furuno	Bruce Kinoshian
Kevin T. Bain	April Chan	Christopher K. Gale	Heidi S. Kinsell
Debra Bakerjian	Helen Y.L. Chan	Elizabeth Galik	Christine E. Kistler
Anoop T. Balachandran	Joyce Y.C. Chan	Julie K. Gammack	Jennifer A. Knopp-Sihota
Philipe De Souto Barreto	Ariya Chantaramanee	Flavia Garcez	Sara Knox
Giulio Bartoli	John Cheeks	Luis Cuitlahuac García-Fabela	Gotaro Kojima
Ricardo Batista	Liang-Kung Chen	Joseph E. Gaugler	Taro Kojima
Juergen Martin Bauer	Li-Ju Chen	Chandler E. Gill	R. Tamara Konetzka
Amy W. Baughman	Ya-Mei Chen	Suzanne M. Gillespie	Thomas Robert Konrad
Allison A. Bay	Zhiguo Chen	Andrea L. Gilmore-Bykovskiy	Raymond T.C.M. Koopmans
Marc Bayen	Sheung-Tak Cheng	Judith Godin	Gunes Koru
Sabine Bayen	Antonio Cherubini	Goldberg A. Goldberg	Anastassia E Kossioni
Charlotte Beaudart	Wing Hoi Cheung	Marianne Thorsen Gonzalez	Eftychia Kotronia
Anne Marie Beck	Jagadish K. Chhetri	Adam L. Gordon	Nancy Kusmaul
Clemens Becker	Iris Chi	Anne Grace	Masafumi Kuzuya
Anna Song Beeber	Ippei Chiba	Tadeja Gracner	Timothy Kwok
J. Simon Bell	Anna Chodos	James Graham	Freddy Man Hin Lam
Jennifer Bellot	Leung-Wing Chu	Richard T. Griffey	Francesco Landi
Sverre Bergh	Verena Cimarolli	George Grossberg	Tyler Lantz
Christian Bergman	Andrew Clegg	Andrea Gruneir	Julie Lapenskie
Marla Berg-Weger	Hélio Coelho-Júnior	Steven Mark Handler	Andrew J. Larner
Máximo Bernabeu-Wittel	Catherine Crawford Cohen	Joseph T. Hanlon	Fulvio Lauretani
Mercedes Bern-Klug	Rose Milou Collard	Jeffrey Harman	Chiyoung Lee
Sarah Berry	Tracy Comans	Michael Harris-Love	Yunhwan Lee
Giulia Bertoli	Martin Joseph Connolly	Krista L Harrison	Bruce Leff
Christine Bishop	Clément Cormi	Tracie Culp Harrison	Natalie Elizabeth Leland
Hubert Blain	Andrea Corsonello	Karen Harrison Dening	Blake Lesselroth
Mario Bo	Axelle Costenoble	Christine Hartmann	Paula E. Lester
Faerella Boczko	Cynthia Cready	Philip R. Harvey	Roxanne H. Leung
Lauren E. Bode	Charles Creclius	Mengying He	Steven A. Levenson
Georg Bollig	Christopher J. Crnich	Jennifer Hefele	Cari Levy

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Appendix Table 1 (continued)

Lene Levy-Storms	Weiwen Ng	Andreas W. Schoenenberger	Edgar Ramos Vieira
Yue Li	Joshua David Niznik	J.M.G.A. Schols	Beth A. Virnig
Adamanthia Liapikou	Alexandra Catherine Hayes Nowakowski	Claudia Schulz	Renuka Visvanathan
Gerdien Christiana Ligthart-Melis	Germaine Odenheimer	Laurence Seematter-Bagnoud	Amy Ann Vogelsmeier
Ka Keat Lim	Aaron Michael Ogletree	Dallas P. Seitz	Ladislav Volicer
Wee Shiong Lim	Kook Hwan Oh	Todd Semla	Dorothee Volkert
Julie Lima	Chukwuma Okoye	Akio Shimizu	Annika Von Heymann
Chih-Ming Lin	Dan Osterweil	Tetyana P. Shippee	Kamal C. Wagle
Sebastian Lindblom	Jorge Oliveira	Cornel Christian Sieber	Laura M. Wagner
Milta O. Little	Kenji Omae	Elena O. Siegel	Deborah Pease Waldrop
Raul López Antón	Graziano Onder	Susan Silva	Victoria Walker
Guillermo Felipe López Sánchez	Anthony Ong	Sandra F. Simmons	Huali Wang
Vivian W.Q. Lou	Nicole M. Orr	Adam Simning	Ruoxi Wang
James Alvin Low	Fábio Orsatti	Michael Simon	Yaogang Wang
Christine Loyd	Dan Osterweil	Eleanor Marie Simonsick	Gregg Warshaw
Madia Lozupone	Kenneth J. Ottenbacher	Jay Slotkin	Debra L. Waters
Judith Ann Lucas	Joseph G. Ouslander	Martin Smalbrugge	Rosie Watson
Jay S. Luxenberg	Alicia Padron-Monedero	David A. Smith	Kai Wei
Paula Peixe Alves Machado	Kyle Page	Eric Smith	Yu-Jung Jenny Wei
Caroline Madrigal	Naushira Pandya	Paulina Sockolow	Jane A. Weintraub
Wingyun Mak	Giuseppe Paolisso	Dan Song	Alicia M. Weissman
Hyuma Makizako	Stuart Parker	Yuting Song	Heidi J. Welberry
Arduino Aleksander Mangoni	Patricia Parmelee	A.R. Rita Sousa-Santos	Nathalie Isabelle Wellens
Rikki Mangrum	Matthew Parsons	Pinar Soysal	Beth Ann White
Kevin Manning	Marc Pepin	Richard G. Stefanacci	Elizabeth M. White
Finbarr C. Martin	Molly M. Perkins	Karl Steinberg	Heidi K. White
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Francesco Mattace- Raso	Steven L. Phillips	Jørund Straand	Christina R. Whitehouse
Donovan T. Maust	Stuart Phillips	Ken Sugimoto	Julie Whitney
Colleen Jean Maxwell	Marina Pinheiro	Sophia Sui	Timothy Wingert
Paolo Mazzola	Kaisu H. Pitkala	Shengyan Sun	Chang Won Won
Kathleen Mccauley	Tim F. Platts	Paul Y. Takahashi	Irene Wong
Rose Mccloskey	John S. Preisser	Edwin CK Tan	Jean Woo
Eleanor Mcconnell	Michael Pulia	Tomoki Tanaka	Kyungmi Woo
Ellen Mccreeedy	Martine T.E. Puts	Zhe Tang	Robert Woods
Ryan Mcgrath	Emma D. Quach	Francisco J. José Tarazona Santabalbina	Hans Wouters
John Mchugh	Patrick Quail	Helena Temkin-Greener	Bei Wu
Andrew Mckinnon	Anna Rahman	Joan Teno	Wenna Xi
Matthew Mcnabney	Marilyn J. Rantz	Kristine A. Theurer	Qin Xiao
René Melis	Sujan C. Reddy	Vittoria Tibaldi	Hanzhang Xu
Barbara J Messinger-Rapport	Nicholas Reed	Andrea Ticinesi	Baowen Xue
Luis Mieiro	Joann P. Reinhardt	Mark Toles	Qianli Xue
Toni Miles	Neal Reizer	Debbie Tolson	Yukari Yamada
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Nora Millor	Joana Rigor	Maxim Topaz	Ming Yang
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Arif Nazir	John F. Schnelle	Simone Vettoretti	
Jaakko Nevalainen	Daniel Schoene	Christina R. Victor	