

Why Bother? The Vital Role of New Research in a World of Millions

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In an era where over two million scientific papers are published annually¹, one may wonder if the world truly needs more research. With databases overflowing and research shelves crowded, the question arises: Is the continuous production of studies a sign of saturation, or is it the natural evolution of science? While some might argue we are reaching a point of oversaturation, the reality is more complex. Research is not just a numbers game—each new study contributes to our understanding, refines our knowledge, or questions outdated assumptions.

Each scientific publication is more than a statistic; it represents a pursuit of truth, a response to local needs, and a potential catalyst for change. For smaller nations like Brunei Darussalam, research is not just a measure of academic engagement—it is a vital tool for policy, innovation, and societal progress. Scientific and technical journal articles—spanning fields from biomedical research and engineering to earth sciences and clinical medicine—contribute to the scaffolding of informed decision-making, particularly in healthcare systems shaped by unique cultural, demographic, and epidemiological profiles.

In comparison to its regional neighbours, Brunei's research journey has experienced growth in its scientific output. According to Knoema, Brunei published 293 scientific and technical journal articles in 2020. With an estimated population of 437,000 that year, this translates to approximately 670 articles per million people *. By 2022, Brunei's output rose to 414 articles, reflecting a 23.6% increase from the previous year and an 80% increase since 2019, when the nation's research output had experienced a decline.² A PubMed search using Brunei as search word showed that publications have been increasing exponentially in recent time, though a slight decline in recent time (**Figure 1**). Compared to the other ASEAN countries, Brunei Darussalam ranked 9th in output (**Table I**).

These figures, though modest on the global scale, indicate a renewed and deliberate national focus on research and academic contribution. These growths are in part due to more healthcare providers doing research either as part of personal interest, recognition of the importance of and commitment to produce local data, or as part of professional development and studies, and the

* Articles per Million People = (Total Articles/Population in 2020) X 1,000,000. This equates to (293/437,000) x 1,000,000 = 680 articles per million people.

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Figure 1: Trend of publications involving Brunei through PubMed search (12th May 2025).

research conducted by academic institutions such as Universiti Brunei Darussalam (UBD). In health research, the Institute of Health Sciences (IHS), Pengiran Anak Puteri Rasidah Sa'adatul Bolkiah (PAPRSB), UBD has and continues to contribute to the output since its inception.

When contextualised within the region, Brunei's per capita research output is higher than that of Malaysia (646 per million) and Indonesia (118 per million) yet remains far behind Singapore's 2,149 per million.³ While Brunei's per capita publication rate is significantly higher than Indonesia and Malaysia, it lags far behind Singapore, underscoring the gap in research productivity in the region. One key aspect to consider when comparing Brunei's output to global figures is that the nation's research may be under-represented in major international databases. This under-representation may be due to factors like smaller publication volumes or limited indexing in global platforms. For example, Brunei does not appear in the dataset of *Our World in Data* for scientific publications per million people.³ This absence could be indicative of the challenges smaller nations face in gaining visibility in global bibliometric databases.

This under-representation underscores the role of local and regional publishing platforms increasingly significant. The Brunei International Medical Journal (BIMJ), established in 1999 (breaks 2001-2002, 2004 and 2006-2009) and now in its volume 21, serves to promote local and regional medical research. BIMJ

Table I: Comparisons of publications outputs in the ASEAN countries through PubMed search (12th May 2025).

	Countries	Publications
1	Singapore	164,660
2	Thailand	136,199
3	Malaysia	112,515
4	Indonesia	57,664
5	Vietnam	45,974
6	Philippines	30,012
7	Cambodia	8,382
8	Myanmar	7,691
9	Brunei	2,509
10	Lao PDR	1,725

provides a vital avenue for Bruneian healthcare professionals to publish research pertinent to the nation's unique healthcare context. To date, the BIMJ has published a total of 907 articles, of which 52.8% had been from researchers based in Brunei. BIMJ is now a fully online only open access journal that is currently hosted in the Ministry of Health website (<https://moh.gov.bn/category/journals-and-publications/>).

Historical analyses of Brunei's presence in indexed literature, such as its contributions to the *Science Citation Index Expanded* from 1973 to 2016⁴, highlights the nation's research trajectory over the decades.⁴ Such analyses emphasise the need for continued support and development of local research initiatives to ensure

Brunei's healthcare strategies are informed by relevant and timely evidence.

It is also important to note the limitations when presenting the count of these publications, which may vary in the methodologies and databases used, leading to differences in reported figures. For instance, the National Science Foundation's¹ estimates are based on the Scopus database, which may have different coverage compared to other databases like Web of Science or PubMed. Therefore, while the exact number may fluctuate depending on the source, the overarching trend indicates a substantial and growing body of scientific work being published annually. Regardless, this limitation does not diminish the value of what is being produced.

Despite these challenges, platforms like the BIMJ, are crucial in fostering and promoting local research. The BIMJ offers a vital space for Bruneian healthcare professionals to publish research that reflects the nation's unique healthcare context. Since its inception, the journal has provided an essential platform for original research, clinical audits, and case reports relevant to Brunei and Southeast Asia. The BIMJ has helped transform some of the research emerging from the Ministry of Health into peer-reviewed publications, turning smaller studies into accessible evidence.

Although Brunei's research output might appear modest when compared to global giants, its value is inextricably linked to the nation's specific needs. Local evidence is indispensable for crafting healthcare policies and delivering services that are culturally relevant and contextually appropriate. Without such evidence, we risk relying solely on global data that may not accurately reflect Brunei's unique healthcare landscape. What is applicable to the West, even when published in prestigious journals such as *New England Journal of Medicine* (NEJM) or the *Lancet*, may not necessarily be applicable to our local setting. This is also generally true for other countries due to unique differences between populations.

While not every research yield groundbreaking discovery, each study plays an essential role in a nation's

development. Research shapes policy, drives innovation, and advances healthcare delivery. Brunei Darussalam's steadily growing research output—though modest in volume—adds meaningful value to the global scientific landscape. In a world awash with publications, the demand for local, context-specific evidence has never been more urgent. Brunei's research is not merely about contributing to numbers; it is about ensuring that the nation's healthcare is guided by insights grounded in its own realities. In the end, it is not the quantity of research that defines impact—but its relevance. And in that, Brunei's voice is not just necessary—it is indispensable.

Declarations

Conflict of interests

The authors declare no conflict of interests.

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