

# Will Asia Fully Respond to the Global Transition to Open Access?

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## ABSTRACT

A key feature of Open Science (OS) is the transparent and collaborative dissemination of research and data. At the same time, in Open Access (OA), it is the ease with which published content can be accessed. In light of the geographical disparity in the implementation of OA, the 8th Annual Meeting of the Asian Council of Science Editors (ACSE) featured a panel discussion on the topic, 'Will Asia Fully Respond to the Global Transition to Open Access?'. Discussions included OS taxonomy, significance, key players and barriers to OA and OS in Asia. During the panel discussion, the panelists, experts and the audience agreed that OA and OS would benefit the Asian research community by expanding the reach of their findings and thus, improving visibility. However, existing concerns about OA in the Asian continent must be addressed by the research community, governments and editorial organizations. Furthermore, OA is adopted differently by countries within Asia. Therefore, Asia should develop a strategy to overcome the current divide between the Global North (developed countries) and the Global South (least-developed and developing countries). By working together and taking advantage of their counterparts' existing OA infrastructure, Asian countries can create their own roadmap to transformation.

## KEYWORDS

Open access, transparency, collaboration, global transition, OS taxonomy

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## INTRODUCTION

Open Science (OS) allows research and data dissemination in a transparent and collaborative manner. Open Access (OA), on the other hand, enables easy access to published content. Although the concept is "trend-setting," it is difficult to implement globally in many parts of the world for various reasons<sup>1</sup>. Even though the OA movement started in 1971 with Project Gutenberg, three crucial initiatives in 2002 and 2003, namely the Budapest Open Access Initiative, the Bethesda Statement on Open Access Publishing and the Berlin Declaration on Open Access, have laid the principles and guidelines for OA<sup>2</sup>. Given the recent conversations and developments around OS and OA<sup>3,4</sup> (e.g., the geographical disparity in implementation and lack of OA infrastructure), the 8th Annual Meeting of the Asian Council of Science Editors (ACSE), held on 21 August, 2022, featured a panel discussion on the topic 'Will Asia Fully Respond to the Global Transition to Open Access?' This article captures the issues, challenges and opportunities explored in that panel discussion<sup>5</sup>.



**Highlights of the panel discussion:** The scholarly publishing fraternity has embraced OA in its research activities, as evidenced by the significant growth in the number of journals registered with the Directory of Open Access Journals (DOAJ) from its inception to today. In 2003, when DOAJ was established to support the OA movement, there were around 300 OA journals. Nevertheless, currently, the DOAJ has over 18,000 OA journals and 8 million articles from 130 countries and 80 languages. Interestingly, more than 12,000 journals do not charge Article Processing Charges (APC)<sup>6</sup>. According to Sam Mathew (an expert of the panel discussion), OA has been considered one of the significant movements in the last two decades in scholarly publishing.

OA has been promoted for various reasons, including accelerating scientific communication, preventing the financial crisis of publishing journals, reducing the digital divide, facilitating participation from different geographies and reducing the extent of disparities, said Zabta Shinwari (an expert of the panel discussion). However, while we embrace and promote OS, the outcome of OS should be made available to society, especially in medical research, where the benefits to the patient are essential. OA is, therefore, an important means to achieve this.

Traditionally, the publishing system in Asia is functionally 'open' or 'free' or can be called diamond open access if we use the current terminology in which authors and readers do not pay to publish and read a journal. Almost all these journals, published by societies and institutions, are published with small operating costs supported by the government or the host institutions, where almost all involved offer their services voluntarily<sup>7</sup>. Bangladesh<sup>8</sup>, Nepal<sup>9</sup> and Sri Lanka<sup>10</sup> show a continuation of this legacy. In such a scenario, the critical question is, whether Asia should take the concept of OA as it is being discussed and practiced in the Global North or should Asia contextualize or redefine OA. Although hundreds of journals from Indonesia, Iran, India and China are registered in DOAJ, Haseeb Irfanullah (an expert of the panel discussion) opined that policymakers and academic publishing leaders should align with the research community and streamline the process to benefit the community. For example, the embargo on the first couple of years of publication by some of the best journals from India should be revisited as it contradicts the country's OA Policy<sup>11</sup>.

While focusing on important factors such as OS taxonomy, key players in OS and the barriers to OS, it was concluded that the emergence of predatory journals and publishers, the cost of OA publishing and the quality of OA journals are important global concerns about OA publishing, which is more relevant and current in Asia (Fig. 1).

OA predatory or pseudo-journals have created chaos in the scholarly publishing community primarily because of its APC, unsolicited marketing emails and, ultimately, the publication of substandard research manuscripts. Data published in 2015 showed that around 38% of OA predatory journals are published from Asia, in which, India alone contributes a massive 27%. This data is particularly important considering that the country of origin could not be identified for around 27% of all predatory journals since some publishers quote addresses in several countries, for instance, often a combination of the USA or a Western European country with a country from Africa or Asia<sup>12</sup>.

Following the success of OA journals with APCs, larger publishing houses also started cutting corners by implementing minimal peer review, in which they only scrutinize the scientific integrity and ethics of the research. Furthermore, they assume that the reader decides the importance, generalization and applicability of the results<sup>13</sup>. This business model has led to larger publishers publishing journals with a low impact factor or quality compared to their primary journals. While OA intends to make the research data free for researchers, it is actually not free for authors (based on the OA business model). Furthermore, although the actual intent of APC is to recover publishing expenses, in many cases, it varies from

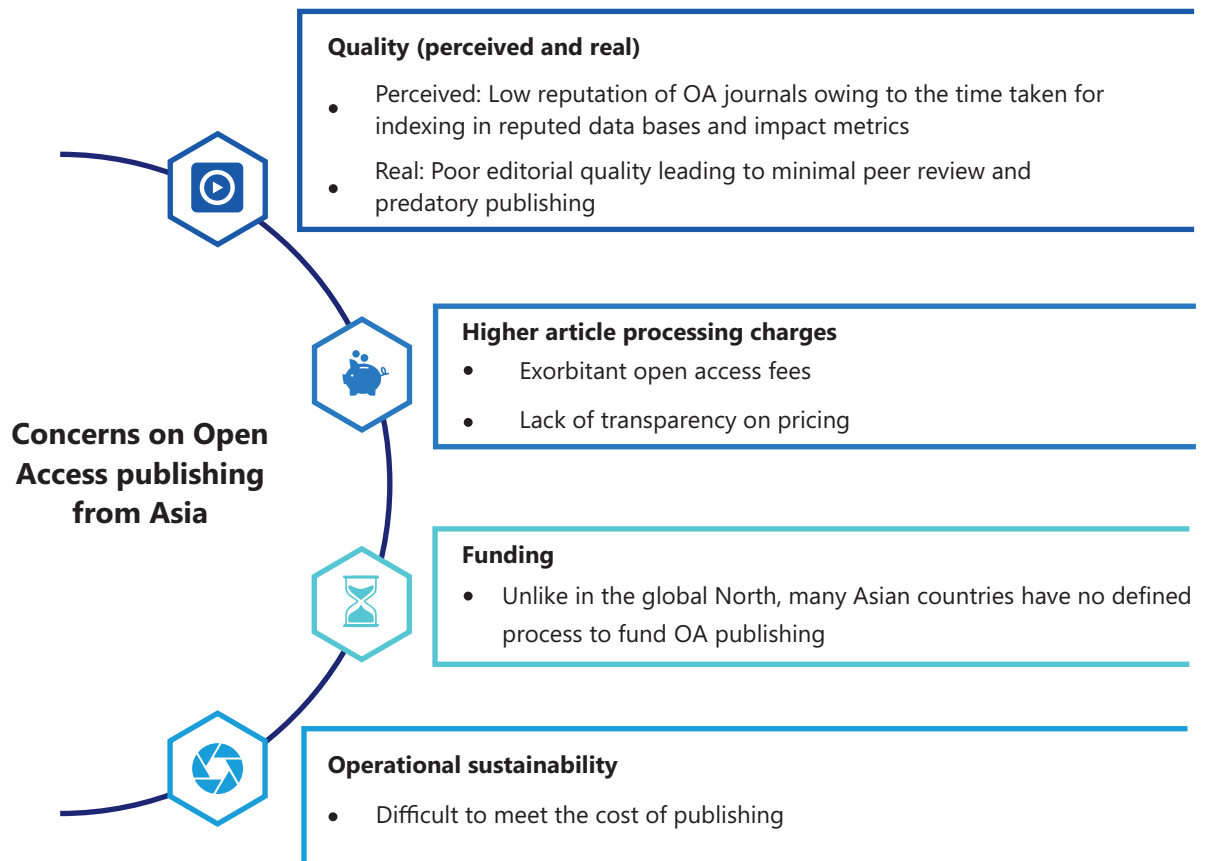


Fig. 1: Main concerns on open access publishing from the Asian continent

US\$50-5000 or even higher, which is exorbitant and not justifiable<sup>14</sup>. Therefore, there should be some guidelines in place to control the APC. The Committee on Publication Ethics (COPE) has the opportunity to ensure compliance with these guidelines for member journals.

During the 8th Annual Meeting of the ACSE<sup>5</sup>, the participants raised an important concern about the adaptation of the commercial model of publishing (OA). Most of them thought that large publishing houses had hijacked the OA movement by double-dipping, that is, gaining income from two streams from the same customers the publishing houses charge subscription fees and APCs, which are barely affordable in resource-limited settings. This has not only affected the journal's acceptance but also discouraged the contribution of researchers and reviewers to such journals.

On the other hand, during the recent COVID-19 pandemic, OA has played an essential role in facilitating data sharing and making research results beneficial to human beings. However, while promoting OS through OA, we must realize the importance and sensitivity of ethical considerations, particularly privacy and confidentiality, e.g., genomic data sets can be de-anonymized, which may result in a breach of privacy.

It is the need of the hour that we appreciate and accept the reality of the existence of lower, middle and high-income countries<sup>15</sup>. Over almost 360 years of journal publishing history, high-income countries or the Global North have led research and publication activities in general. However, one cannot just replicate what they have done but need to contextualize with respect to the Asian environment keeping in mind the current limitations and the economic transitions they are going through<sup>16</sup>.

Researchers from the Asian continent will continue to benefit from a 20-year-old initiative, Research4Life, which essentially offers US\$48 million in journal access to more than 10,500 institutions spread over

125 countries<sup>17</sup>. We can also capitalize on the free capacity development and mentoring activities offered by the Journals Online project facilitated by INASP, a UK-based charity<sup>18</sup>. As citizens of Research4Life eligible countries, we must also be aware of waivers and discounts of APCs offered by many medium and large publishing houses<sup>19</sup>.

During the last decade, Asia has shown remarkable growth in research activities, expenditure and publications. Data from the National Science Foundation show that the number of articles published by researchers in Asian countries increased from 452,000 in 2010 to 877,000 in 2020<sup>20</sup>. However, the share of journals published by Asian countries in international indexes, such as the Science Citation Index and Scopus, is relatively low. Therefore, OA is a good option for Asia to improve its visibility of research activities. Unfortunately, based on a 2018 report, not more than 1,400 journals from Asia (of 16,000 worldwide) are listed in DOAJ. In this itself, Indonesia is leading with 1100+ journals, followed by India and China<sup>21</sup>. The major contributor to this low representation from Asia could be the lack of availability of the OA infrastructure. Another vital contributor could be the 'fear of failure'. Most Asian publishers believe that APC or the cost of OA may not be affordable to Asian researchers, which is valid to a certain extent. Furthermore, lack of awareness of the benefits of OA and fear of predatory publishers due to inadequate understanding are some limitations in adopting OA publishing.

Although we are enthused about OS and OA, we should be aware of the inherent structural challenges that can potentially hamper all efforts around OS and OA. For example, the recruitment system for academic faculty had to change, as it should focus more on quality than the number of publications. Unfortunately, the latter often push young academics to become prey to predatory journals. We also need to be aware of a wide range of evolving issues, such as new university ranking systems, which guide how the research is being published<sup>22</sup>.

Another important point that should not be ignored is how to tackle the relatively low global visibility of local journals that publish vital country- or region-specific research data. Since these journals are not indexed in global databases due to the fewer citations inherent to the subject matter they publish, the visibility of these journals and research is low. Strengthening cooperation in the region and between the Global North and the Global South is an important factor that needs to be considered. To promote OA, the North and the South must "meet in the middle" by bringing all they could share for the benefit of both<sup>15</sup>.

The present-day academia in Asia is suffering from hyper-competition primarily due to the practice of using quantitative parameters in assessing research impacts, such as the number of papers, quantification of research impact merely by the number of citations and other metrics, such as H-index and impact factor. There is a need to revisit OS from the perspective of ethical standards<sup>23</sup>. While the appropriateness of such parameters is debatable, an alternative is non-existent. The peer pressure has resulted in duplicate and salami publications that bolstered the need for OA. The ethical practices in science can be incentivized to encourage researchers to embrace the highest ethical standards.

## **CONCLUSION**

Asia is one of the major contributors to global research and publishing activities. For the Asian context, embracing OS and OA is the most appropriate way to make the literature reusable, accessible and visible to the rest of the research community. Although the research community in Asia would benefit significantly from OA and OS, the research community, governments and editorial organizations should address the important concerns about OA pertaining to the Asian continent. Although the Global North and the Global South divide is a reality, Asia should devise its own strategy to overcome the current challenges. Even in Asia, there are differences in the way countries adopt OA. Asian countries can work

together and take advantage of their counterparts, who have already built OA infrastructure, to develop their own. Governments in Asian countries should support OA by financing researchers and helping publishers cover OA costs. More importantly, researchers should be encouraged to publish high-quality research in OA journals by creating awareness and demystifying perceptions of the quality of OA. Awareness about the publishing of OA should be created through empirical studies so that the authorities can form appropriate policies that will benefit researchers. In order to truly support the OA movement, it is important to change the perception of quality and impact, regardless of regional boundaries and commercial benefits of publications, to improve the social, economic and overall well-being of humans.

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