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Letter to the Editor - Predatory Journals: Bad for All But Especially Authors from Low and Middle Income Countries

Carta ao Editor - Predatory Journals: Prejudiciais para Todos Mas Sobretudo para os Autores de Países de Baixo e Médio Rendimento

Keywords: Open Access Publishing; Publishing

Palavras-chave: Publicação; Publicação em Acesso Livre

In this issue, Joana Revés and colleagues¹ describe the rapid growth in so-called predatory journals (fake or fraudulent journals offering publication for payment without peer review or publishing services) and advise students on how to avoid the trap of publishing in them. Predatory journals are a blight on science, and something needs to be done to curtail these unethical publishers.

I became aware of predatory journals in 2014 while working in Bangladesh with scientists and doctors to enhance their capacity for writing and publishing in journals. The scientists and doctors were doing important global health research that needed to be disseminated, but some of their studies were being published in predatory journals. It is perhaps unsurprising that these relatively inexperienced researchers working in less developed research environments in low and middle-income countries (LMICs) are easy targets for the phishing emails that come from predatory publishers asking for submissions. I subsequently wrote two blogs in *BMJ* sharing my experience and offering tips on how to avoid predatory journals^{2,3} and co-wrote an editorial highlighting the problem and arguing that LMIC researchers and institutions are disproportionately affected.⁴ Since then we have come to understand much more about predatory publishing, which is now estimated to have an annual income of \$75 million.⁵

David Moher and colleagues⁶ scrutinised over 200 biomedical predatory journals and found that they included data from more than 2 million individuals and 8000 animals.

Some 15% of the corresponding authors of the 1907 articles in their sample were from the USA, showing that predatory journals are a global, not just an isolated, problem. And although the numbers are small – 9 articles from Harvard University, 11 from the Mayo Clinic – Moher's analysis shows how the most prestigious institutions are affected. Indeed, 41 of the articles reported funding from the US National Institutes of Health.

But the analysis of Moher and colleagues confirms that predatory journals are mainly affecting LMICs: a third of the predatory journals that gave their location were from India; and 61.5% of the 1881 articles that gave the institutions of their authors were from LMICs, with India, Nigeria, and Iran leading. An earlier analysis by Xia and colleagues showed that most authors in predatory journals were from India, Nigeria, and Pakistan⁷; similarly, Shen and Bjork's analysis of predatory journals found a predominance of authors and publishers from South Asia.⁵ India, with its growing research output and rank in legitimate journals publishing, is nevertheless a hotspot for predatory publishing.⁸

These reports outline the scale and geography of the problem but don't provide evidence on the motives of authors. Researchers may be unaware they are publishing in predatory journals, or they may be deliberately seeking easy publication for cash, padding their CVs, and knowing that they are unlikely to face censure. It's likely that researchers' motives include both ignorance and guile as they are under great pressure to publish, the numbers of predatory journals are growing (Moher and colleagues estimate there are 18 000), and institutions and funders often do not recognise the journals as predatory.

Because of my interest in promoting the work of individuals and institutions in LMICs, I want to consider the problem of predatory journals particularly from their point of view.

Global health is booming – between 1990 and 2010 donor funding to global health increased from US\$5.6 billion to \$26.9 billion.⁹ This has fuelled the development of research institutions across LMICs and the growth of their research output, which funders and donors are increasingly

keen to see disseminated. For LMIC scientists, this has meant increasing pressure to publish their research to meet dissemination goals, receive credit for promotion and career advancement, and attract new research funding. In some ways the rise of global health has amounted to a (contemporary) process of research and institutional 'development' in LMICs that mimics the historical one of high-income country institutions.

But in choosing journals, LMIC authors are likely to have far less training, mentorship, and support than those in high income countries to discern the legitimacy of available journals. With relatively less developed institutional structures (little or no formal training in writing and publishing, no in-house publication officers etc.), there is also less accountability for journal choices. Furthermore, while international funders and donors have vastly increased their financial support of LMIC institutions and expectations of research dissemination, they have not increased their governance and oversight of publications. In my experience, funders require progress reports but delight most at long publication lists, and have few if any rules about publishing.

The lack of mentorship, training, and accountability around publication that gives rise to research being 'lost' in predatory journals is a failure of institutions,¹⁰ and I agree this is worsened for LMIC researchers whose institutions – academic or otherwise – are relatively less developed.

If we can't look to institutions and funders, can we count on collaborators from high income countries to provide mentorship and support of their colleagues in LMICs to ensure the research is being published in the best journals? Possibly not. First, researchers in high income countries themselves fall short in meeting best publication practices –

numerous analyses show poor quality of reporting of clinical research, even of RCTs; and authorship criteria and ethics are often ignored.¹¹ Second, consider the historic 'extractive approach' whereby high income country researchers fly in to countries to do research and collect local data, flying out to do their analysis and write papers often without further collaboration or co-authorship with local LMIC colleagues.^{11,12} In this context it may not be reasonable to assume that LMIC researchers have or will receive mentorship and guidance from their high income country colleagues about legitimate journal choice.

So what are the solutions for LMICs?

In terms of demand, we have more research funded, more research output, a need for publication 'credit' for promotion, and increasing pressure from funders to disseminate the impact of the research they support. In terms of supply, we have a growing market of predatory publishers capitalising on the needs of researchers to publish; that this market seems mostly based in LMICs shows their sensitivity to local needs. That many predatory publishers are 'fly by night'¹³ suggests it will be hard to cut off supply especially in the absence of legal or regulatory controls.

So demand-side solutions will still be the best way to address the problem. This involves investment in and commitment to: enhancing understanding and skill among LMIC colleagues to discern legitimate journals; improving accountability of institutions and funders for the research and training they support; broadening notions of demonstrating research impact (beyond publication); and expanding or dismantling promotion systems that focus only on publication credit that counts quantity rather than ensures quality.

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