

Insights – 36, 2023

OA public health research publication in Africa | Dominic Dankwah Agyei, et al.



Open access publication of public health research in African journals



PublicHealth.Africa and LIBSENSE



LIBSENSE
STRENGTHENING OPEN SCIENCE IN AFRICA

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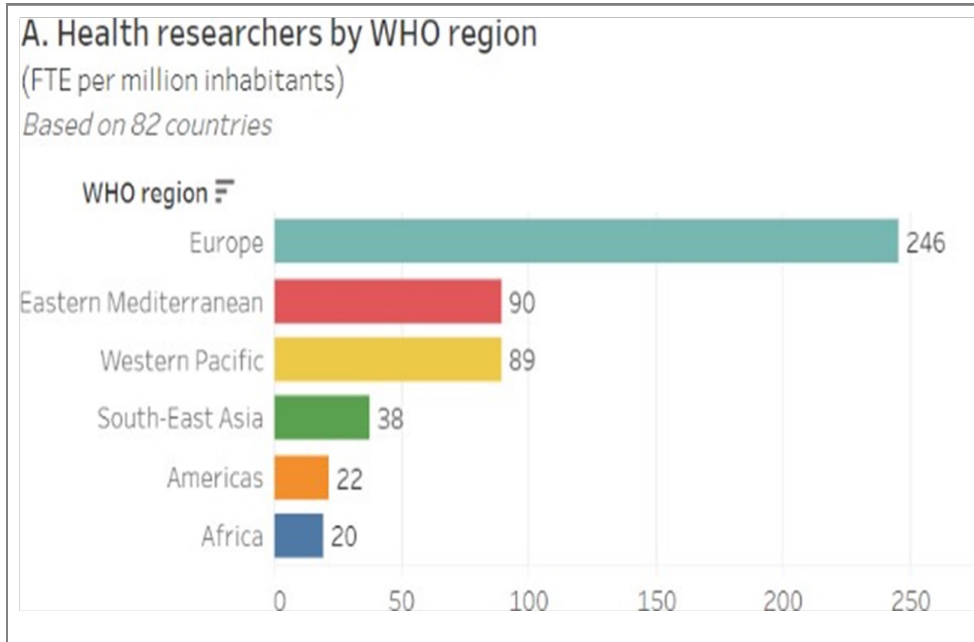
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Introduction



- *Relative lack of research capacity in the Global South*
- *Lack of research with local relevance to populations in the South*
- *Difficulty in publishing high-quality research in an open access format so that it is readily available and the results can be applied where they are needed*
- *Open Access papers have drastically fewer lead authors from low-income regions*
- *Article Processing Charges (APC) is a barrier to Open Access publication for scientists from the Global South*



What proportion of African journals, in the broad field of Public Health, publish articles in various categories of open access?

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- The background is a light blue gradient with a faint, stylized illustration of a library or study area. It shows several people in red shirts and dark pants, some standing and some sitting at tables, interacting with books and documents. There are also floating book icons and a large, curved white shape that resembles a bookshelf or a path.
- ***Identifying the journals expected to publish articles in the area of Public Health:***
 - ***Search for journals published in each country using AJOL (African Journals Online), AIM (African Index Medicus), local knowledge***
 - ***Country journals investigated: 13 countries***
 - ***Ghana, Kenya, Malawi, Mali, Namibia, Nigeria, Rwanda, South Africa, Sudan, Tanzania, Uganda, Zambia, Zimbabwe***
 - ***Data collected by country investigators and validated by an expert librarian to standardise results***

Country journals:

- **173 journals explored with numbers varying from 1 to 85 in each country.**
- **78 published by universities and 95 by learned societies (some jointly)**
- **89 published twice a year or annually.**
- **Median per capita GDP of the 13 countries: \$3342**
- **7 Countries at or below median: GDP 2574; 28 journals (median of 5 per country)**
- **6 Countries above median: GDP 5440; 145 journals (median of 10 per country)**
- **111 of the 173 journals (64%) were open access and available for free download**
- **68 (39%) used a Creative Commons licence**
- **22% were indexed in PubMed, 8% on MEDLINE, 28% on DOAJ, but 67% on AJOL**
- **Article Processing Charges: APC: 93 (54%)**
- **Of these, 32 (34%) fully or partially waived**
- **Difference in full APC between journals from countries above median GDP and median GDP or below: 59% vs 29%; Chi-square 8.52; p=0.004**



- *African researchers wishing to publish public health research in local journals have varying opportunities*
- *Many face Article Processing Charges*
- *Research findings will be difficult to be found by others, as very few journals are indexed*
- *There is scope for improvements in open publishing of research in local African journals*





In order to encourage research with local relevance, and facilitate global discovery of research findings from the global south:

PublicHealth.Africa and LIBSENSE are creating structures to nurture open access publication in public health in Africa in the form of:

- ***A repository for public health preprints***
- ***A mentorship platform for authors, editors/publishes and reviewers in public health in Africa***

Open publishing of public health research in Africa: An exploratory investigation of the barriers and solutions *(In Press)*

**Ruredzo PIM, Agyei DD, Sangare M,
Heller RF**



Open science, particularly open access, is a good, transparent and credible way to share and drive scientific discoveries at a relatively low cost.

Covid-19 pandemic highlighted the benefits of open access publications and at same time exposed the challenges to achieving accuracy and validity of the scientific information.

The little but invaluable scientific contribution from Africa survived the pandemic.

However a major concern among the African Covid-19 manuscripts was that one in five publications did not have African authors while approximately 66% of the authors on manuscripts with research from African populations were not African nationals.

This demonstrates an urgent need to boost research production by African researchers and to support the publication of their research findings

- ***To respond to the urgent need to support open science in Africa, a consortium of PublicHealth.Africa and LIBSENSE was formed to explore open access publication of public health research and practices in Africa.***
- ***The investigation revealed the need to assist journals and researchers.***
- ***Based on the results, the group considered the need to offer an education or support programme to boost open publishing of public health research in Africa for researchers, reviewers and journal editors.***
- *This study was designed as a needs survey to identify knowledge of and barriers to open access research publication and the expressed need for a programme to boost capacity for open publishing of public health research in Africa*

METHODS

- *Quantitative survey instrument was used to collect data from 91 respondents.*
- *The retrieved data were descriptively analysed based on the objectives of the study. Descriptive statistics were reported as numbers and percentages.*

Fewer than half of the respondents had experience with open access publications in the previous three years, although 41% had been authors needing to pay an article processing charge (APC), 44% had been reviewers and 29% editors of an open access article

A majority, 56%, of the respondents might publish their manuscripts as a preprint and 31% to review as open review, while 19% would prefer the traditional publication process

Fewer than half of the respondents appreciated the benefits of ready availability, added visibility and citations and transparency of the open publishing model, while only 7% thought that research funding agencies had open publishing as a requirement

A major reason why respondents held on to the traditional funding model was that such journals are less likely to be predatory was the most common response (37%), while only 21% agreed that no APC is required.

Fewer than half of the respondents identified either opportunities for or threats to open access publishing in public health in Africa

- The greatest opportunities were thought to be in supporting African-led research and aligning publications with national or regional health priorities.***
- The largest threats were thought to be for poor peer review and that international agencies may not recommend open access journals***

In terms of perceived needs for training and mentoring,

- about 73% of the respondents would like access to free online courses of relevance to them,***
- and 68% would be interested in joining a mentoring programme***

Forty-three per cent identified themselves as advanced career researchers who would be interested in mentoring junior researchers

While there was interest in accessing online courses in how to review, edit, write and publish, relatively more respondents were interested in learning about research methods and public health

CONCLUSION

“Even though the method of identifying the study respondents affected the response rate, this exploratory study does indicate that there is still a need for education to help correctly identify barriers and solutions to open access publishing in Africa”

“The high proportion of respondents wishing to have access to online resources and to take part in a mentoring programme provides guidance for future action in these areas”

“Finally, the study notes a huge potential for equipping researchers in Africa with the skills to understand and use online publishing to make African research findings more readily available”