

Authorship position as a proxy for contextual knowledge: a preliminary case study

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Abstract

Current health sciences literature is predominantly disseminated by, through and for Western scholars, resulting in underrepresentation of contextual knowledge in health policies worldwide. Commonly, this literature is evidence-based, build on principles of universality, neglecting and disregarding the importance of contextual and local expertise. Using a global health research question applied to three countries, Maastricht University Library's collection was evaluated to explore the extent of contextual knowledge by authorship positions. Preliminary results showed that while Dutch articles had more local authors on first and/or last authorship positions compared to Bangladesh and Tanzania, they had no Dutch authors in middle positions, as opposed to Bangladesh and Tanzania (23% and 16%). This indicates a need for further understanding of geographic authorship position customs.

Key words: global health; information dissemination; information sources; health information exchange; diversity, equity, inclusion.

Introduction

Based on positivist paradigms, health policies worldwide apply principles of universality that are often criticised for having strong colonial roots (1, 2). In general, knowledge from Western evidence-based methods, distributed through western-based peer-reviewed journals are assumed to be of higher value than local knowledge disseminated in local journals and other informational exchange (News, WhatsApp, local blogs, story-telling etc.) (3). The emphasis on Western knowledge disregards valuable local or contextual knowledge, which, in turn can lead to ineffective interventions. Misinterpretation occurs when non-local experts publish in peer-reviewed scientific journals, as their understanding and assessment of local conditions differ and are less accurate than local experts' understanding (3-5). Yet it appears that the majority of publications on lower- (LIC) and middle-income (MIC) countries are disseminated by Western authors (6-9). Abimbola (2019) emphasises the experts' "gaze" and "pose" ("gaze": write for and "pose": position/standpoint of the writer) play a crucial role in the knowledge production (3). While a "foreign gaze to foreign pose" can be seen as universal, a "for-

eign gaze to local pose" as consequential; as it is written from a foreign perspective, a "local gaze and foreign pose" may even become corruptible; as the local writers standpoint is clouded by the foreign standpoint (3). Opposed to a "local gaze to local pose", which can be seen as ideal and contextual (3). Current culture of the dominant foreign author publications can therefore be seen as a culture of colonial/supremacy dissemination of knowledge.

This culture of colonial/supremacy dissemination of medical and health knowledge is also visible in current medical and health sciences curricula; such as global health. While students' are advised to be aware of the value of and need to incorporate contextual knowledge, this needs to be improved, when searching literature, as actual locally relevant knowledge is hardly available. Therefore, it is time to decolonise the universities curricula and its libraries (1). University libraries and their librarians play a crucial role in making this contextual knowledge accessible, as well as in teaching the students search strategies to find these sources of contextual knowledge. Which results in a students' understanding of what true local/contextual knowledge

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and practice entails from the point of view of a "local gaze to a local pose" as opposed to a "foreign gaze to a local/foreign pose" (3).

The aim of this project is to identify current sources of local/contextual knowledge (by author affiliation and position) in the current information databases (academic literature) provided by an academic library such as the Maastricht University Library. Moreover, information literacy techniques to develop guidelines/analysis tools to discover local/contextual knowledge, both academic and non-academic, will be developed for our universities' students, researchers and clinicians. Here we present our preliminary findings on the analysis of current local/contextual knowledge practices for an example research question; what impact does climate change have on neonatal and maternal health? Literature was collected for three separate countries; Bangladesh, Tanzania and the Netherlands. Our authorship affiliation criteria include: 1) first/last author from the discussed country ("local gaze to local pose"), 2) all authors from the country ("local gaze to local pose"), 3) local authors in middle positions ("local gaze to foreign pose"), or 4) no authors from the discussed country ("foreign gaze to foreign pose").

Methods

PsycINFO (EBSCO), CINAHL (EBSCO), Scopus, Embase (Ovid), Medline (OvidSP), Web of Science (WoS) and Pubmed were used to select papers on the following research question: what impact does climate change have on neonatal and maternal health? Exemplary countries were Bangladesh, Tanzania and the Netherlands. The following search concept were used to build a systematic search strategy; Neonatal Health, maternal health, climate change and the country of interest (Bangladesh, Tanzania and the Netherlands). Full search strategy information can be found in the supplementary materials (*Table S1-S18, available online as supplementary material*). Literature was collected on 10-5-2023. Paper references from the individual database were exported to EndNote 20.6 software. These full references with author affiliation and position data were then exported from EndNote 20.6 to Excel 2016 software. Articles were assessed to which degree sources contained contributions by local experts (criteria only authors' local affiliation, first and/or last authors' local affiliation; middle authors' local affiliation, no local affiliation). This assessment was conducted for all mentioned databases separately and collectively (*Figure S1-3, available online as*

supplementary material). Data processing and statistical analyses were performed in Excel 2016 software.

Results

Bangladesh

For Bangladesh, we found 3 in PsycINFO (EBSCO), 6 in CINAHL (EBSCO), 65 in Scopus, 35 in Embase (Ovid), 26 in Medline (OvidSP), 49 in WoS, and 32 papers in PubMed (*Figure 1A*). When these articles were assessed on the degree of involved contributions by authors of local affiliation, we found percentage of local authorship only ranging from 0 to 9% and percentage of first and/or last local authorships ranged from 17 to 67%. When looking at local affiliation on middle authorship position, we found percentages ranging from 0 to 34%. While, 33 to 71% of the papers had no local affiliation authors. When combining the papers of the different databases, after deduplication, this results in 9, 25, 23 and 43% of all articles found for only, first and/or last, middle or no local affiliation (*Figure 1D and S1 available online as supplementary material*), respectively. Full list of references can be found in supplementary information.

Tanzania

For Tanzania, we found 2 in PsycINFO (EBSCO), 28 in Scopus, 18 in Embase (Ovid), 13 in Medline (OvidSP), 17 in WoS and 15 papers in Pubmed (*Figure 1B*). No articles were found in CINAHL (EBSCO). When these articles were assessed on the degree of involved contributions by authors of local affiliation, we found percentage of local authorship only ranging from 0 to 15% and percentage of first and/or last local authorships ranged from 0 to 46%. When looking at local affiliation on middle authorship position, we found percentages ranging from 8 to 50%. While, 38 to 50% of the papers had no local affiliation authors. When combining the papers of the different databases after deduplication this results in 9, 31, 16 and 44% of all articles found for only, first and/or last, middle or no local affiliation (*Figure 1D and S2 available online as supplementary material respectively*). Full list of references can be found in supplementary information.

The Netherlands

For the Netherlands, we found 11 in Scopus, 4 in Embase (Ovid), 5 in Medline (OvidSP), and 5 in WoS, and 4 papers in Pubmed (*Figure 1C*). No articles were

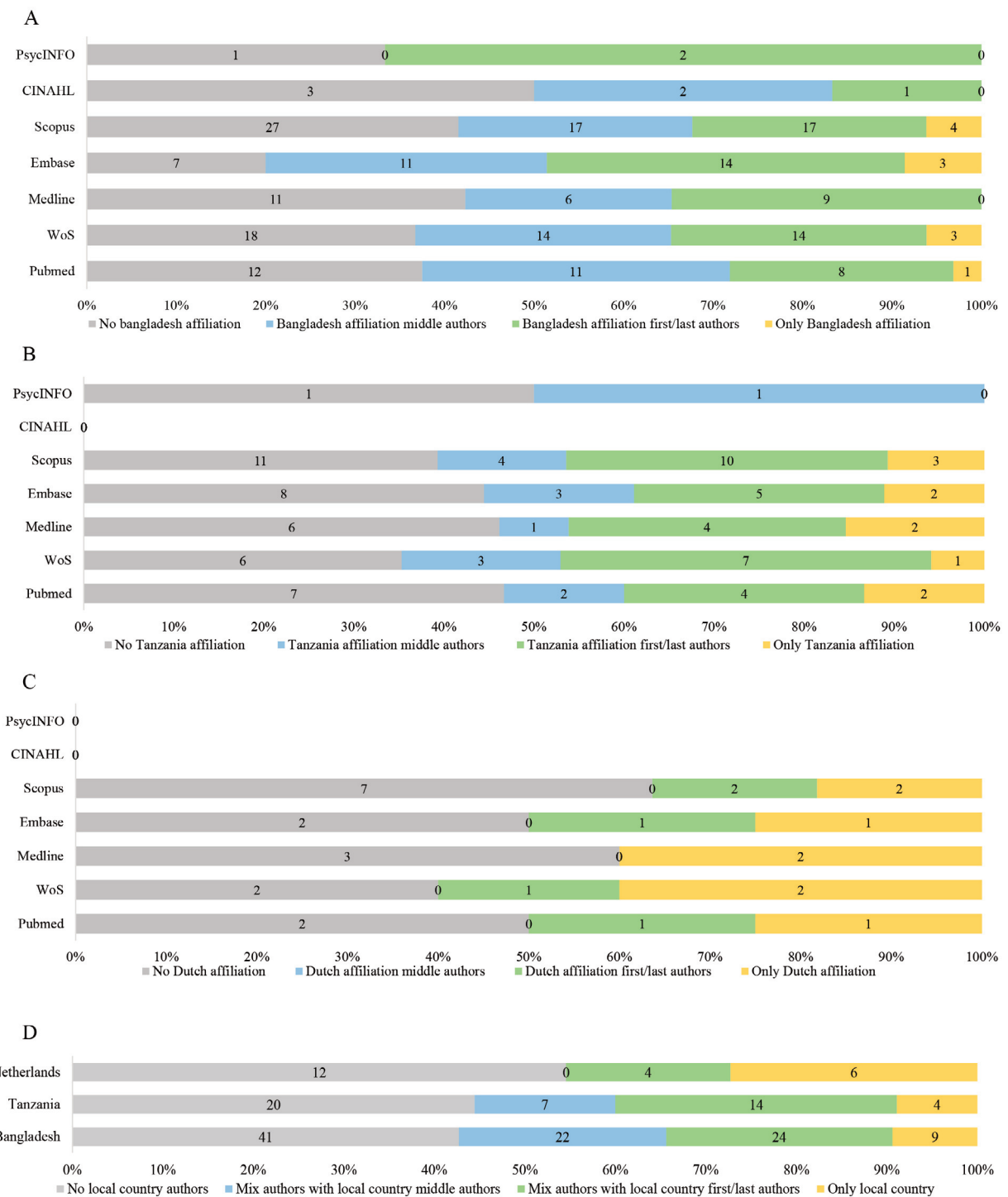


Fig. 1. Number of articles per database (PsycINFO (EBSCO), CINAHL (EBSCO), Scopus, Embase (Ovid), Medline (OvidSP), Web of Science (WoS) and Pubmed) found for the three different countries, A) Bangladesh, B) Tanzania and C) the Netherlands. Number of articles are defined in the four different author affiliation criteria; only local author affiliation (in yellow), first and/or last local author affiliation (in green), middle local author affiliation (in blue) and no local authors (in grey). D) Articles from different database were combined and de-duplicated. This dataset was again defined into the four different author affiliation criteria.

found in CINAHL (EBSCO) and PsycINFO (EBSCO). When these articles were assessed on the degree of involved contributions by authors of local affiliation, we found 18 to 40% had only local authors. 0 to 33% of the articles had authors of local affiliation on the first and/or last position. When looking at local affiliation on middle authorship position no articles were found that suit this criteria. This leaves 40 to 66% of the articles with no local affiliation authors. When combining the papers of the different databases after de-duplication this results in 27, 18, 0 and 55% of all articles found for only, first and/or last, middle or no local affiliation (*Figure 1D and S3 available online as supplementary material*), respectively. Full list of references can be found in supplementary information.

Discussion

Decolonisation is an increasing topic in the health literacy. Underrepresentation of local/contextual authors has been found in evidence-based articles in western journals (2, 9-11). When applying the above mentioned authorship order as proxy (expression of) for local or foreign gaze/pose, our case study also suggests underrepresentation of the literature obtained in the available databases. Bangladesh and Tanzania articles on the effect of climate change on maternal and neonatal health showed a low number of only local authors and a higher number of articles with shared authorships in both the first and/or last and middle position in the authorship list. Which goes in line with previously published works on authorship positions within the community health workers (12), infectious diseases (8), statistics and epidemiology (11) and African health research (7). When we compare our results to the literature of the high-income country (HIC) the Netherlands, the number of only local affiliation is significantly higher (27%), compared to 9% for both Tanzania and Bangladesh. Interesting, when we look at the percentage of no local authors' affiliation, the Netherlands has 55%, compared to 44 and 43% for Tanzania and Bangladesh, respectively. The practice of writing from a foreign gaze seems therefore not exclusive for LIC and MIC countries, as may be the common perception. However, if we look at the percentage of contextual knowledge combined (only and first and/or last local authors' affiliations), the Netherlands still has a higher percentage (45%) of contextual knowledge compared to Tanzania (40%) and Bangladesh (34%). Moreover, no middle author posi-

tions of local authors' affiliation were found when looking at literature discussing the country the Netherlands. While, both Bangladesh and Tanzania showed publications with authors of local affiliation in the middle position. This may indicate an authorship assignment practice of placing MIC countries authors within authorships list when research is mainly conducted by foreign funding and experts (7, 12, 13), which demonstrates a shift in the academic health research towards a more collaborative culture. However, when local experts work closely from a foreign gaze their own sense of reality and writing can be clouded; while their contextual viewpoint is silenced (3). We can therefore argue that middle authorship positions cannot be seen as contextual knowledge, but a "local pose with a foreign gaze" and therefore consequential (3). It is important to note, that this study is exploratory by nature, based on a narrow research question employing small datasets, therefore, these findings need to be substantiated with bigger datasets. Moreover, here we used authorships affiliation and position as indications (proxies) for contextual knowledge. However, literature suggest that the income of the country will greatly affect the collaboration, geographical funding and research output; and therefore different author position results (5, 12). Moreover, in the Netherlands, as in many other HICs, last authorship position typically is reserved for the head of the research department with the research fellow or PhD candidate as first author. In contrast, in some LICs and MICs, first authorship positions are taken up by the head of the research department (6). Research authorship assignment customs are therefore also contextual to the country in question. The criteria set to determine contextual knowledge in this study are based on the western-based custom of authorship affiliation. More clarity on geographic authorship assignment customs needs to be provided first in order to further evaluate the criteria of authorship position on determining contextual knowledge.

Conclusion/Future work

As librarians, we strive to make our library collection as inclusive as possible by providing a variety of academic databases and other informational resources. Here we discussed a possible analysis to define contextual knowledge by author affiliation and position in the author list when screening databases within library collections or possible purchases. The initial results sug-

gest a difference in database collection and access to local/contextual knowledge depending on the country of choice. However, bigger datasets need to be included, and diverse authorship customs and research conventions need to be further explored before criteria to define contextual knowledge can be established, and before training modules for students and search technologies can be developed. Here at the Maastricht University Library, we will take up the challenge of developing a context sensitive way to identify contextual knowledge as basis for an open access tool for other librarians to use to analyse and diversify their collection.

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