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BACKGROUND

- Ecohealth is an emerging field (1-3), which looks at the complex linkages between humans, animals and environments (biological, physical, social, economic) in order to improve the health and wellbeing of people, animals and ecosystems (4).
- In 2012, Charron, an influential figure in Ecohealth, proposed six main principles of Ecohealth: systems thinking, transdisciplinary research, participation, sustainability, gender and social equity, and finally, knowledge to action (3).
- At the 2014 annual Ecohealth conference, three themes were singled out as important for Ecohealth scholars to engage with: a) drivers of change to health, ecosystems and society from global to local scales, b) innovations in theory, methods and practice and c) moving between research and action to benefit health, ecosystems, and society (5).
- Global health is defined as collaborative, trans-national research and action for promoting and improving health and health equity for all by using public health and health promotion strategies that are directed at the underlying social, economic, environmental and political determinants of health (6).
- The themes within the field of Ecohealth are well aligned with those of Global Health, particularly the global scale, the attention to environmental and social determinants of health, the knowledge to action approach, and the key theme of equity (3-8).
- Given the similarities in focus, it is of interest to analyze how the term Ecohealth is used in Global Health discourse and to examine how Global Health is framed within the academic Ecohealth literature.

PURPOSE OF THE STUDY

- To ascertain how the terms “global health”, “international health” and “world health” have been covered in the academic literature that explicitly uses the term “Ecohealth”, and how the term “Ecohealth” has been covered in journals that have “global health”, “international health” and “world health” in the title.
- To determine if there are potential linkages and synergies between the communities that explicitly use the terms “Ecohealth” and “global health”, “international health” or “world health”.

METHODS

Step 1: We searched four academic databases of different focuses (EBSCO All, Scopus, Science Direct and Web of Science) for articles that had the term “Ecohealth” in the article title, article abstract, article keywords or in the journal title. A total of a 648 academic articles were downloaded as PDFs, uploaded into ATLAS-ti©, and then analysed inductively for the content linked to the terms “global health”, “international health” and “world health”.

Step 2: The same four academic databases (EBSCO All, Scopus and Web of Science) were searched for the terms “global health”, “international health” and “world health” in the journal title as well as the term “Ecohealth” anywhere in the text. After the elimination of all duplicates, there were 33 articles that were downloaded into ATLAS-ti© and a content analysis of the coverage of Ecohealth was performed.

FINDINGS

Table 1: The number of times each term appeared (row 1) and the number of articles they appeared in (row 2) for the 648 Ecohealth articles (see Step 1 methods) using ATLAS-ti© software.

	Global Health	International Health	World Health
ATLAS-ti© Hit Count	163	88	538
ATLAS-ti© Article Count	77	51	205

We found little relevant data when searching for the terms “global health”, “international health” and “world health” in the 648 downloaded articles.

Global Health

- The term “**global health**” showed up **163 times in the 648 downloaded articles**, however 70 of which were an institution, department, database or a reference name.
- The term “global health” was frequently used to refer to factors that are problematic or threatening to global health (n=13) including greenhouse gases, malaria, H5N1, emerging infectious diseases, climate change and wildlife trade.
- A central argument that was made in the Ecohealth literature was the need for sustainability in order to increase Global Health (n=4).
- Terms such as health promotion, education or upstream risk-factors were mentioned as areas to address or positively change Global Health.

International Health

- The term “**international health**” showed up **88 times in the downloaded Ecohealth literature**, however 78 of the hits were international health journals, departments and a conference.
- Of the other 10 hits, the term “international health” was used to talk about International Health Regulations (n=4) and international health policy (n=3) as well as international health goal, specialist, program, community and assessments.

World Health

- The term “**world health**” had **538 hits in the 648 articles** in ATLAS-ti©, although 510 were false positives for the terms World Health Organization and Bulletin of the World Health Organization.
- Other related terms (n=24) including World Health Statistics, World Health Report, World Health Assembly and World Health Surveys were found in the references section.
- There were 4 relevant quotations, looking at First world health care (n=1) and World Health Day (n=3).

Table 2: The number of articles with the terms “global health”, “international health” and “world health” in the journal title and the term “Ecohealth” anywhere in the article according to the four academic databases.

	Global Health (Journal Title) + Ecohealth (Anywhere in the article)	International Health (Journal Title) + Ecohealth (Anywhere in the article)	World Health (Journal Title) + Ecohealth (Anywhere in the article)
EBSCO All	18	15	11
Scopus	28	17	0
Science Direct	2	0	0
Web of Science	0	0	0

We also found little relevant data when searching the four academic databases for the presence of the term “Ecohealth” within journals that contain “global health”, or “international health” or “world health” in the title (Table 2).

- Of the 33 downloaded articles that mentioned the term “Ecohealth”, 24 of them mentioned the term “Ecohealth” in the references section or other non-relevant sections of the articles.
- Only nine articles had relevant content, six of which mentioned “Ecohealth” once, while three of which mentioned “Ecohealth” more than n=1 times.
- Of the three articles that mentioned “Ecohealth” more than n=1 times, the first article talked about re-defining health in an ecosystem context, Ecohealth’s role in considering human responsibility for the global biosphere, and the potential for Ecohealth to become a positive agent of change in the global health promotion movement (9).
- The other two articles mentioned the Caribbean Ecohealth program (10), and the successful application of an Ecohealth approach to dengue prevention and control respectively (11).

DISCUSSION

- Our findings suggest that the academic Ecohealth literature did not engage with the terms “global health”, “international health” or “world health” in a substantial fashion and vice versa. This is a missed opportunity for both fields.
- The Ecohealth field uses as system approach to analyse the relationship between humans, animals and the environment and how that influences health (4). This approach and expertise could help the Global health field attain better health for all.
- If the field of Ecohealth had more engagement and higher visibility within the Global Health discourses, this would expose those involved in Global Health to the field of Ecohealth. The Global Health concept and community could make Ecohealth’s concepts and goals more visible to the global community, broadening Ecohealth’s global reach and collaboration.

CONCLUSION

We submit that there is an immense opportunity for both the Global Health community and the Ecohealth community to create a powerful synergy that can help both fields in attaining the goals that they seek to attain.

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