From principles to practice: a mixed-methods study on research integrity and fairness in global health research

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Introduction

- Over the past decade, the ideals of research integrity and research fairness have gained considerable momentum in the global health research arena.
- Research integrity emerged in the late 2000's as a response to the reproducibility crisis in science.
- Research fairness initiatives aim to ensure increased ownership of research agendas and research outputs where the research involves partners with unequal powers, decision making and resource capacities, thereby maximising on the local health research priorities.
- While both areas have been the subject of intense academic debate, there is little empirical data on practices related to integrity and fairness specific to global health.

Methods

- This study combined an online frequency survey (quantitative research component) with online in-depth key informant interviews (qualitative research).
- The quantitative component focused on the frequency of practices by assessing whether health researchers follow norms and guidelines of research integrity and research fairness. We randomly selected participants from global health research networks (two-stage cluster sampling)
- The study's qualitative component aimed to provide context and to explore determinants. We interviewed people who had participated in the online survey

Figure 1. Geographic distribution of survey participants' country of origin

Conclusion

- Study participants across all settings reported good adherence to research integrity and fairness principles but structural and systemic barriers sometimes prevent them from following such "ideal" practices
- Our study also confirms that there are more synergies than trade-offs between research integrity and research fairness as they share similar determinants
- There is ample scope to align both integrity and fairness agendas in global health increasing the research quality and maximizing the societal benefits of research.

Results:

- Of the 1,717 researchers contacted to take the online survey, 145 (8.4%) responded and 10 agreed to a follow-up in-depth online interview
- In the online survey some behaviours were frequently reported (transparent reporting of studies, seeking local ethical approval) while others less (engagement with affected populations, engagement with local decision makers, adherence to Open Science), with little variation between responses from Global North and Global South.
- However, there are some small yet significant differences in specific practices (individual questions of the survey), with Global South researchers generally more likely to report the following practices, such as: giving sufficient attention to skills and expertise, sufficiently mentoring their junior co-workers, consulting representatives of affected populations, consulting end-users of research, having clear decision making processes agreed upon, having clear and fair data ownership agreements, and experiencing strategies in place to encourage secondary analyses.
- The qualitative research component identified several structural, institution and individual factors associated with these patterns, such as an inflexible donor landscape, research institutions' investments in relationship building, guidelines and mentoring, as well power differentials and competition between researchers

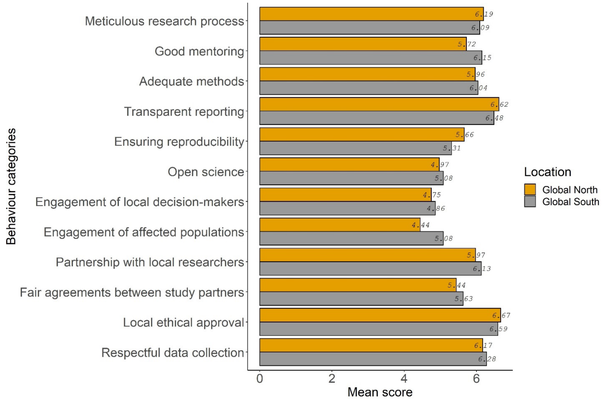

Figure 2: Research integrity and research fairness frequency scores, by domain and location

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