A systematic review and theory synthesis for the impact of foreign aid on HIV/AIDS in Sub-Saharan Africa.

Madison T. Little[1], Bethany Larsen[1,2], Lucie Cluver[1,3], & David K. Humphreys[1]
[1]Department of Social Policy & Intervention, University of Oxford, Oxford, UK
[2]Saïd Business School, University of Oxford, Oxford, UK
[3]Department of Psychiatry & Mental Health, University of Cape Town, Cape Town, South Africa

Background.
Despite billions of dollars invested in the global HIV/AIDS response, the disease remains an epidemic throughout much of Sub-Saharan Africa. However, no literature has comprehensively explored the causal mechanisms between input of foreign aid and changes in HIV/AIDS outcomes. Understanding these pathways remains vital for improving the effectiveness of foreign aid programmes. This review advances this knowledge by investigating: *How does foreign aid impact on HIV/AIDS outcomes in Sub-Saharan Africa?* It aimed to construct a meta-theoretical framework, which facilitated identifying gaps in the evidence-base.

Methods.
A systematic review was conducted following PRISMA guidelines on 17 databases and 24 grey literature sources. The search strategy combined terms for foreign aid, implementation, evaluation, theory, and HIV/AIDS. Included studies had to be published after 1997 and contain theory-based and process-level discussions of how foreign aid impacts on HIV/AIDS in Sub-Saharan Africa. Studies were appraised for risk of bias in study design and theoretical rigour; high-quality studies were used to construct the initial framework and remaining studies were considered case-by-case for potential contributions to a generalisable framework. Theory synthesis was conducted using thematic analysis in order to map the pathways between aid input and changes in HIV/AIDS outcomes.

Results.
Of the 2423 unique articles identified, 45 records were screened at full-text for eligibility. From the 15 included studies, four themes emerged. First, there exists a clear, linear causal pathway between aid input and improved treatment coverage; however, there remain weak theoretical linkages connecting foreign aid to other HIV/AIDS outcomes. Second, no evaluation fully-captures the influence of the physical environment or the multitude of factors in the social environment acting as structural determinants of HIV/AIDS outcomes. Third, the determinants of aid allocation limit the generalisability of the framework to countries that have a baseline government capacity to address the epidemic. Fourth, there remains no evidence-base in the conceptual understanding of foreign aid's impact on HIV/AIDS outcomes in vulnerable populations, including sex workers, the LGBTQ+ community, and children.

Conclusions.
The synthesis demonstrated that there is a complex pathway from foreign aid input to changes in HIV/AIDS outcomes. It also highlighted the breadth and diversity of pathways through which aid may impact on core and intermediary outcomes. Due to limited empirical analysis evaluating system-level complexities on the topic, the framework remains reliant on a spare evidence-base. The framework provides a starting point for considering where resources should be directed to explore under-researched areas.