

Symposia Presentations

S01 – PROGRAM SCIENCE/ IMPLEMENTATION SCIENCE METHODS: MOVING BEYOND THE TRADITIONAL RCT

Monday, July 15, 2019
10:45 AM – 12:15 PM

S01.1 MUST THE EVALUATION OF COMPLEX INTERVENTIONS BE COMPLEX? LEARNING FROM THE IMPACT EVALUATION OF DREAMS

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By nature, complex interventions – with their multiple interacting components, lengthy causal pathways and feedback loops, and ‘real-world’ implementation with frequent heterogeneity – are not conducive to evaluation by elegant trial design. This is particularly true in the absence of randomisation, control groups, and standardisation (‘different forms in different contexts’). Are we right then, to attempt to emulate a target trial in our impact evaluation of ‘DREAMS’ – a large investment by PEPFAR and private sector partners in a (very) complex intervention for HIV prevention? DREAMS promotes an extensive package of interventions to address the multi-dimensional nature of HIV risk. It is being scaled across purposively chosen places and populations; it targets the most vulnerable adolescent girls and young women in priority districts of sub-Saharan Africa. To evaluate DREAMS’ impact on HIV risk and other outcomes, we are analysing longitudinal observational data in ways that aim to mimic a randomised trial, by controlling for ‘confounding by indication’, so as to achieve more reliable causal inference. We will share the challenges, risks and rewards of this approach. As we grapple with an evolving intervention, revolving-door participation, time-varying confounders, and alternative causal contrasts, we face burgeoning complexity. This grows further as we seek to understand the intervention itself (what does it mean to be a DREAMS beneficiary?) and how the intervention package works; for this, we draw on process and qualitative data to elucidate the roles of mediators, mechanisms and context. There is much to learn from this large complex intervention, and we are employing emerging methods to maximise learning opportunities. There is no single or simple approach, but as complexity of the evaluation mounts, we strive to resist ‘The fascination of what’s difficult’* and maintain a pursuit of elegance and clarity. That too is work in progress. *WB Yeats, 1916

Disclosure No significant relationships.

S01.2 HPTN 071 (POPART): FINDINGS AND LESSONS FROM A NON-TRADITIONAL RCT

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The HPTN 071 (PopART) study was one of four large community-randomized trials carried out in sub-Saharan Africa to determine the impact of universal testing and treatment (UTT) on HIV incidence at population level. At a time when HIV incidence globally is falling too slowly to meet UNAIDS targets, UTT has been promoted as a potential key strategy to achieve steep reductions in HIV incidence.

All four of the UTT trials have now reported their primary results. This talk will summarize the results of the HPTN 071 (PopART) study, the largest of the four trials and the last to be completed. It will explore possible explanations for the findings, and also discuss the conclusions of the study alongside the results from the other three UTT trials.

Finally, we will discuss some of the key challenges in designing and implementing a community-randomized trial of this ambition and scale, and review some of the main lessons learned during the study.

S01.3 USING MULTIPLE DATA SOURCES FOR PROGRAMME EVALUATION: INTEGRATION OF PROGRAM MONITORING DATA WITH OTHER RESEARCH STUDIES

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Background Integration of program monitoring data with focused research studies can be a powerful approach to program evaluation and outcome assessment. This paper draws on examples from a large HIV prevention program in Karnataka, India implemented by the University of Manitoba, and funded by the Bill & Melinda Gates Foundation.

Methods Data sources included (1) routine program data to monitor coverage (2) semi-annual assessment of behavioural outcomes using rapid, unlinked anonymous methods called Polling Booth Surveys (PBS) (3) Integrated Behavioural and Biological Surveys (IBBS) and (4) mathematical modeling of HIV transmission dynamics.

Results The program monitoring data indicated that the monthly coverage of the estimated female sex workers (FSWs) increased from 68% to 76% and the monthly clinical attendance increased from 19% to 27% over a one year period. PBS demonstrated that the condom use among FSWs in last sex with any client increased from 64% to 73% over four years. IBBS indicated that HIV prevalence among the FSWs declined from 25% at baseline to 13% at end line. The mathematical modeling which used parameters from these data sources suggested that a total of over 80,000 infections were averted by the Karnataka program. The monitoring and evaluation teams were embedded within the program, independently carrying out the design, data collection, analysis and feedback.

Discussion The embeddedness of program monitoring and evaluation enabled regular feedback to program implementation in terms of which geographies to focus, which sub-groups to prioritize etc. Special intervention packages were implemented for the young and high-volume FSWs.