HPTN 071 (PopART)

LESSONS LEARNED FROM A MAJOR UNIVERSAL TEST AND TREAT HIV PREVENTION STUDY: AIDS 2016 PRESENTATIONS

The HPTN 071 (PopART) study is evaluating the impact of a combination prevention strategy – anchored in universal household HIV testing and linkage to immediate antiretroviral treatment initiation – to reduce HIV incidence. Carried out in 21 large communities reaching nearly one million individuals, in Zambia and South Africa, this study will provide answers to questions regarding how best to combine HIV prevention interventions in different populations and settings for maximum impact while also assessing cost effectiveness.

In addition to strengthening all current routine HIV prevention and treatment services in the communities randomly allocated to receive the intervention, a novel cadre of staff have been recruited from within the study communities and trained to carry out the household intervention: Community HIV-care Providers or CHiPs. Approximately 640 CHiPs have been deployed in the intervention communities to perform household-based HIV counseling and testing, linkage to HIV care and prevention services, and tuberculosis testing. HIV incidence will be assessed through a research cohort of randomly-selected adults from all study communities (about 42,000 individuals) to be followed for three years.

The HPTN 071 (PopART) research team has identified and overcome a number of challenges with delivering a universal test and treat (UTT) intervention at this scale (more than 600,000 individuals in the intervention communities). These critical findings have strengthened the intervention delivery in this study and provide critical insights for future large-scale, community-based and UTT studies and programs.

Lesson #1: CHALLENGES DELIVERING HOME-BASED HIV TESTING

Discrepancies between ‘my address’, ‘where I live’, and ‘where you might find me’ – qualitative lessons for HIV data capture in expanding HIV clinic services to community based services (H. Myburgh Poster #WEPEE645, Poster Exhibition Area)

In order to successfully deliver the intervention, including linkage to care, it is critical to have information about where individuals dwell. In southern Africa, HIV-related healthcare services face the challenge of an increasing patient burden (including expanded eligibility for antiretroviral treatment (ART)) and a fiscally constrained global economy. Greater task-shifting to lay healthcare workers and decentralization of services into communities hold promise for the continued upscale of HIV care and treatment. Currently, capturing patient addresses is primarily considered an administrative detail; their potential value for ensuring quality care is not emphasized. In highly mobile or migrant places especially, greater emphasis should be placed on accurately capturing not just a client ‘home’ address but alternatives also.
Measures to assure quality and accuracy of community-based HIV testing on a large scale
(C. Phiri Poster #THPEC205, Poster Exhibition Area)

A challenge of implementing HB-HCT by hundreds of field workers in geographically dispersed communities in Zambia and South Africa is ensuring quality of HIV testing. Because the HIV testing undertaken as part of the study is not within routine health care facilities, in addition to current department of health approaches to HIV test kit quality assessments, the site teams have had to develop quality assurance (QA) plans to ensure proper execution of testing by staff and to assure the integrity of test kit performance.

Examples from Zambia include:
- Training and certification of HIV testing counsellors in finger prick rapid HIV testing
- Annual proficiency testing of all staff in providing HIV rapid testing performed at the site office - both an intramural QA program and in an external QA program
- Monitoring and field supervision of staff’s provision of HB-HCT in the field
- Temperature monitoring of test kits in the field and in storage, with QA testing of kits when storage temperatures exceed recommendations
- Routine QC of HIV rapid test kits for sensitivity and specificity upon receipt and while in storage

Bar graph 1:
HB-HCT uptake among men: Weekday shifts versus Saturday shifts

Bar graph 2:
HB-HCT uptake comparison based on shift schedules

Working evening and weekend schedules is effective in reaching more men for home-based HIV testing (B. Yang Poster #WEPEC216, Poster Exhibition Area)

In HPTN 071 (PopART), field teams have been challenged to find men at home to receive home-based HIV counseling and testing (HB-HCT) and other components of the PopART study intervention. The South African study site implemented non-standard work hours (late shifts and Saturday shifts) for field workers over 14 weeks in 2014 and found that late shift schedules (until 7pm) and Saturday shifts significantly improved HB-HCT uptake among men.

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Evaluating the acceptability of home-based testing as an approach towards achieving universal knowledge of HIV status (K. Sabapathy Poster #THPEC105, Poster Exhibition Area)

What are the reasons that some who are offered HB-HCT accept it, while others do not? This case-control study nested within the HPTN 071 main study, randomly sampled equal numbers acceptors and non-acceptors to investigate that question. Findings from 495 participants recruited from Zambian intervention communities are presented. None of the socio-demographic, behavioral and other factors which were hypothesized to influence uptake (such as age, marital status or education among others) were significantly different between the two groups, suggesting that home-based testing does not exclude sub-groups of the population who are encountered in the home. Differences were seen when test acceptors and non-acceptors were asked what they felt encouraged or discouraged testing.

Acceptors seem to be those who:
- Believe they are negative and want to confirm it
- Accepted CHiP advice to test
- Liked the convenience of testing at home

Non-acceptors seem to be those who:
- Fear a positive result
- Recently tested and are avoiding testing again
- Have a more negative view about treatment
Lesson #2: UNDERSTANDING COMMUNITY NORMS, PERCEPTIONS, AND DISCOURSE AROUND HIV

Taking on faith – a narrative analysis of discussions about HIV used by participants as a platform for contesting faith in 9 high HIV-burden communities in the Western Cape, South Africa (S. Nomsenge Poster Discussion #WEPDD0104, 20 July, 13:00-14:00, Session Room 9)

Acceptance of HIV counselling and testing is closely linked to individual and group belief systems, perceptions and what is considered acceptable to discuss with strangers. An analysis of HIV discourse in the 21 PopART sites revealed a core dilemma underpinning these participants’ narratives which we interpret as ‘charity versus justice’. This pits the moral obligation to care for people living with HIV against the moral failing of people living with HIV. These strong ideas about HIV in the context of faith may undermine the acceptance of HIV intervention implementation. Attempts to re-interpret this narrative (to facilitate faith-based participation in health messaging) should be further investigated.

Talking sex and interpreting HIV risk in South Africa and Zambia: an analysis of the influence of colloquial discourse on conceptualisations of sex, HIV-related risk and stigma (A. Thomas Poster #WEPED366, Poster Exhibition Area)

HIV-related health promotion is dependent on clear articulation of complex biological, epidemiological, and social facts about sex. In many southern African contexts, speaking about sex is often awkward, and sometimes taboo. Colloquialisms (such as metaphor, idiom, slang, and euphemism) are used in everyday talk to mitigate this awkwardness and create ways for people to talk about sex. We explored whether the way people talk about sex (including colloquialisms) influences the way they think about HIV risk. Our findings suggest that colloquial discourse should be engaged to discuss sex and to promote comprehension of HIV prevention messaging.

Lesson #3: ADDRESSING CHALLENGES AND STIGMA WITHIN THE HEALTH CARE SYSTEM

‘Patient-blame’ in the context of the roll-out of ‘Universal Test and Treat’ – an exploratory, conceptual analysis of cognitive processes (G. Hoddinott Poster #THPEE440, Poster Exhibition Area)

Successful implementation of UTT (to scale) requires responsive, resourceful Healthcare Providers (HCPs). We propose a conceptual model of the psychological processes that underlie a pattern of ‘patient-blame’ in high-burden contexts and then ask how can HCPs be best supported to expand ART access? We conclude with three recommendations. 1) Address HCP needs directly. 2) Training and health system strengthening should be implemented alongside UTT roll-out. 3) Reflecting on blaming processes should be an important part of anti-stigma interventions for HCPs.

High levels of self-reported personal accomplishment amongst three cadres of health workers (V. Bond Poster #TUPED388, Poster Exhibition Area)

Key to the HPTN071(PopART) intervention is the delivery of community wide HIV testing, treatment and linkage to care by community health lay workers called CHiPs. Their understanding, enthusiasm and passion for their work is a critical component that could underpin some of the success of the entire study. The support of other health facility workers is equally critical. A component of a self-administered survey on HIV stigma, sought to explore work satisfaction amongst a group of consenting health care workers, including CHiPs teams, to assess their evaluation of their work. Health workers are vulnerable to high levels of job-related stress and burnout in settings with high disease burden and limited resources yet the survey results at baseline (2014-15) reveal surprisingly low levels of job stress in these high burden contexts. Whilst this is encouraging, additional research is needed to understand the effectiveness of quantitative measures of stress and explore if high levels of personal accomplishment may build resilience and offer a protective effect from burnout.
Earlier research identified that a barrier to community residents receiving HIV testing or ART in government clinics was the potential exposure to stigma if a participant was seen receiving these services at the clinic. Further analysis has identified five specific factors contributing to these fears and experiences. These factors are: physical infrastructure, material items, patient flow, relationships within the clinic and personal HIV and social individual identity. For example, clinic layout may not permit private conversations or groups clients for HIV-related services on specific benches, and clinic materials such as visit cards or referral slips that are different colors for HIV-related services. People living with HIV (PLWH) who are closer to diagnosis and/or belong to a group assigned a more marked identity are more vulnerable to fears of being seen at the clinic. Hence, stigma within health facilities can be considered ‘the elephant in the room’ of HIV service delivery. PLWH sometimes ‘feel’ uncomfortable in ways that are not immediately obvious. Similarly, stigma is both anticipated and experienced in ways that are not always either intended or immediately discernible.

Health care worker perceptions of stigma (S. Krishnaratne Poster #TUPED389, Poster Exhibition Area)

Stigma (experienced or anticipated) can be a barrier for people to receive HIV testing or care at health care facilities. Health care workers (HCWs) at the 21 clinics in the HPTN 071 (PopART) study participated in an assessment of their attitudes--and their perceptions of the attitudes of their community and fellow HCWs— toward three key population groups: men who have sex with men, female sex workers, and young women who became pregnant before marriage. The HCWs interviewed perceived that stigmatizing attitudes toward these groups were prevalent in general, but that the interviewees themselves and their co-workers were less likely to treat people in these groups poorly or to hold stigmatizing attitudes toward them. Overall, interviewees in Zambia reported greater levels of perceived stigma than the interviewees in South Africa.

ORAL PRESENTATIONS AT AIDS 2016

Additional lessons learned from this important study will be shared by the research team during the following oral sessions:

**S. Fidler: Update from the HPTN071(PopART) study**
Session title: UN 90-90-90 Target Workshop
Where/When: Session Room 2 on Sunday, 17 July 2016, 13:00-14:20

**K. Shanaube: Measuring the First and Second 90s with Routine Data in Zambia**
Session title: Knowing your Epidemic and Knowing Your Response - Maximising Routinely Collected Data to Measure and Monitor HIV Epidemics in sub-Saharan Africa
Where/When: Session Room 13 on Monday, 18 July 2016, 14:45-16:45

**V. Bond, G.Hoddinott and J. Seeley: Overview of Social Science in HPTN 071 (PopART)**
Session title: Exploring Critical Social Science Questions for the Implementation of ‘Universal Test and Treat’ Approaches to HIV Prevention and Care in sub-Saharan Africa
Where/When: Session Room 12 on Monday, 18 July 2016, 17:00 - 19:00

**S. Nomsenge: Stigma and the roll-out of ART regardless of CD4-count: initial insights from HPTN 071 (PopART)**
Session title: Removing Human Rights Barriers to HIV Prevention, Care and Treatment: Using Data to Drive Action Globally
Where/When: Session Room 12 on Tuesday, 19 July 2016, 14:30 - 16:00

**R. Hayes: Adapting Global and National Guidelines in a Large Implementation Science Study HPTN 071 (PopART)**
Session Title: Optimizing the HIV Care Continuum Through Implementation Science Research
Where/When: Session Room 2 on Wednesday, 20 July 2016, 11:00 - 12:30