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D1 - Combination prevention programmes

MOAD0405

Efficacy of combined sexual and injection risk reduction interventions for female sex workers on the Mexico-US border: differential effects in the presence of a community-wide structural intervention

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Background: We evaluated brief combination interventions to simultaneously reduce sexual and injection risks among female sex workers who inject drugs (FSW-IDUs) in Tijuana (TJ) and Ciudad Juarez (CJ) Mexico during 2008-2010, when harm reduction was expanding in TJ, but not CJ.

Methods: FSW-IDUs ≥18 years reporting recently sharing injection equipment and unprotected sex with clients participated in a randomized factorial trial comparing four brief, single-session combinations of active motivational-interviewing and didactic interventions focused on negotiating safer-sex in the context of drug use and safer-injection skills. The injection intervention included a video made by FSW-IDUs. Women underwent quarterly interviews and testing for HIV, syphilis, gonorrhea, *Chlamydia* and *Trichomonas*. Poisson regression with robust variance estimation and repeated measures ordinal logistic regression via GEE examined effects on HIV/STI incidence and receptive needle sharing frequency, respectively.

Table 1. Intervention effects on HIV/STI incidence after 12 months, excluding women who were HIV-positive or had active STIs at enrollment, Tiujana

Predictor	Adjusted Relative Risk	95% CI
Intervention Group (ref-Didactic Sex Rick intervention-Diadactic injection Risk intervention)		
Active Sex Risk Intervention and Didactic Injection Risk Intervention	0.41	0.18, 0.91
Active Injection Risk and Didactic Sex Risk Inetevention	0.84	0.38, 1.84
Active Sex Risk Intervention + Active Injection Risk Intervention	0.36	0.15, 0.85
= of unprotected sex acts with non-regular clients for month poor to enrollment	1.01	1.01, 1.02
Anested during the six months poor to enrollment	2.61	1.38, 4.91

Table 2. Intervention effects on HIV/STI incidence after 12 months, excluding women who were HIV-positive or had active STIs at enrollment, Ciudad Juarez

Predictor	Adjusted Relative Risk	95% CI
Intervention Group (ref-Didactic Sex Rick intervention + Diadactic injection Risk)		
Active Sex Risk Intervention and Didactic Injection Risk Intervention	0.44	0.19, 0.99
Active Injection Risk and Didactic Sex Risk Inetevention	1.15	0.58, 2.28
Active Sex Risk Intervention + Active Injection Risk Intervention	1.12	0.56, 2.25
Amount earned per unprotected sex act (USD)	1.02	1.00, 1.05
Used cocaine the months poor to enrollment	1.66	0.98, 2.80

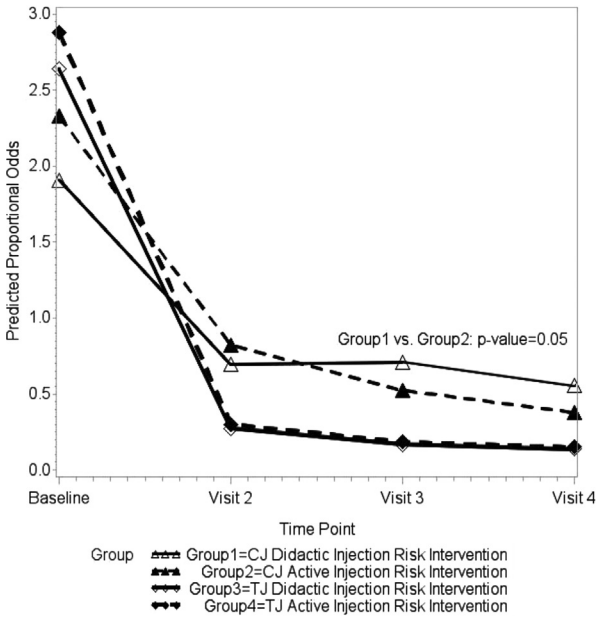

Figure 1. Plot of proportional odds of higher receptive needle sharing for intervention group by visit.

Results: Of 599 initially HIV-negative FSW-IDUs (TJ: N = 296; CJ: N = 303), quarterly retention was ≥90%. After 12 months, HIV/STI incidence decreased >50% in the active vs. didactic sex intervention (TJ: AdjRR:0.41, 95%CI: 0.18–0.91, p = 0.03; CJ: AdjRR: 0.44, 95%CI: 0.19–0.99, p = 0.05)-*see tables*.

In CJ, women receiving active vs. didactic injection risk interventions decreased receptive needle-sharing by 84% vs. 71%, respectively (p = 0.05); in TJ, receptive needle-sharing declined by 95%, but was similar in active vs. didactic groups (p = 0.54). TJ women reported significant increases in access to syringes and condoms, but CJ women did not-*see figure*.

Conclusion: In both cities, a 30-minute intervention promoting safer-sex in the context of drug use significantly reduced HIV/STI incidence with sustained effects at 12 months. Expanding free access to sterile syringes coupled with brief, didactic education on safer injection was both necessary and sufficient in achieving dramatic, sustained injection risk reductions in TJ. In the absence of expanding syringe access in CJ, the injection risk intervention still achieved significant, albeit more modest reductions, suggesting that community-level interventions incorporating harm reduction are more powerful than individual-level interventions for reducing injection risks.

MOAE0202

Is treatment as prevention the new game-changer? Costs and effectiveness

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Background: The results of the HPTN 052 study, which showed antiretroviral treatment (ART) is highly effective in reducing HIV transmission, have been hailed as a ''game-changer'' in the fight against HIV, leading to calls for significant scaling up of treatment-as-prevention (TasP). But it is unclear how TasP could be financed, given flat-lining support for global HIV programs. We assess if TasP is indeed a game-changer against HIV, or if comparable benefits can be obtained at a lower cost by scaling up existing interventions such medical male circumcision (MMC). We also assess the impact of TasP in combination with MMC. Since MMC is currently being scaled up in many countries in sub-Saharan Africa, the effectiveness of TasP in conjunction with MMC is a highly policy-relevant question.

Methods: We formulate a new mathematical model to overcome challenges in predicting the effectiveness of untried mass interventions (lack of a historical epidemic trajectory) and in predicting the combined effectiveness of different prevention interventions. Our model uses simple behavioral assumptions to estimate new HIV infections instead of estimating parameters by fitting a curve to a disease history.

Results: For South Africa, a combination of high ART coverage at CD4 < 350/ml and circumcision coverage provides approximately the same HIV incidence reduction as TasP (defined as universal ART for all HIV-infected persons) at a cost ~ $5 billion less over 2009–2020. Circumcision outperforms high ART coverage at CD4 < 350/ml (and TasP) significantly in cost per infection averted—$1096 compared to $6790 per infection averted. Further, circumcision increases in cost-effectiveness over time and becomes cost saving after 2040.

Conclusion: The preventive benefits of ART are largely reaped with high ART coverage at CD4 < 350/ml. Expanding circumcision coverage first is most cost effective, and then scaling up ART under current guidelines is more cost-effective for preventing HIV infections than scaling up TasP.

WEAD0302

Total Control of Epidemic (TCE) program of Humana People to People: a community driven response to the fight against AIDS

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Background: The Total Control of Epidemic (TCE) Program of Humana People to People aims to reduce spread of HIV and its impact by systematically engaging individuals and communities to take control of their own risk factors, while increasing access to prevention, treatment and support services. Implemented in close partnership with respective Ministries of Health and National AIDS Councils across Sub-Saharan Africa and Asia, TCE has made major impact in HIV control.

Methods: The TCE model works through two primary strategies:
a) *Individual HIV Counselling to Prevent New Infections*: Every person in target areas was provided with counselling for behaviour change and was assisted to develop individual risk reduction plans. Home-based testing consistent with country guidelines was conducted as an integrated part of the process.
b) *Community Mobilization to Change Social Norms*: To change social norms across the full range of HIV related issues (stigma, discrimination etc.), community-wide mobilization was carried out with local leaders, activists, PLHIV to project them as role models for others along with intensified promotion of existing services.

Results: Since the first TCE pilot in Zimbabwe in 2000, 11 million people were covered in 11 countries. 28 million individual HIV counselling sessions were delivered. As a result, 2 million people were tested for HIV and received their results. Over 500,000 women attended PMTCT services. More than 600,000 community activists were trained and engaged in community mobilization activities. In Blantyre District of Malawi, 4 times increase of PMTCT utilization within 3 years and in Ehlanzeni District of South Africa, 6 times increase of PMTCT utilization within 4 years after TCE implementation were observed.

Conclusion: With an average cost of U$ 2/person/year, the TCE model represents a cost effective community-based intervention for HIV control and care with proven results, that should be replicated across the most HIV affected countries.

WEAD0303

Phenomenal woman: the development of a program with the dual goals of HIV and substance abuse relapse prevention

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Background: Traditional HIV Prevention Programs have not adequately addressed the issues of women in substance abuse recovery.

In response, Greenhope Services for Women, Inc developed ''Phenomenal Woman'', an HIV prevention program for women recently released from prison and/or mandated to receive residential substance abuse treatment.

Methods: The target population for ''Phenomenal Woman'' is African-American and Latina women demonstrating relatively high HIV risk behaviors receiving residential substance abuse treatment at Greenhope. The development of ''Phenomenal Women'' involved incorporating key components from ''SISTA'', other HIV prevention programs, the ''Helping Women Recover'' curriculum, and newly created components. Formative research including: three focus groups, one key informant interview and two pilot cohorts were conducted to identify and pretest curriculum components and participant retention strategies.

Results: ''Phenomenal Woman'' is comprised of 5 group sessions and a booster session held 45 days after program completion. Its primary aims include: enhancing women's sense of self, increasing HIV/STI knowledge, as well as attitudes, self-efficacy, and behaviors related to sexuality, safe and sober sex practices, and spirituality. Utilizing the formative feedback received (n = 42 participants), the program creatively uses tangible objects (music, affirmation sheets, and meditation rocks) to reinforce the key messages of strength, resilience, and making healthy decisions regarding safe and sober sex behaviors. The program was implemented with 76 participants with retention rate of 100% across the five initial sessions and 72% at the booster session.

Conclusion: Greenhope's ''Phenomenal Woman'' is an example of effectively developing and delivering curricula through the adaptation of evidence-based curricula and the creation of new components to address a target population's needs for HIV prevention and substance abuse relapse prevention. Through high levels of administrative support, participant retention rates were maximized. Accordingly, ''Phenomenal Woman'' holds considerable promise for dissemination to other agencies with similar target populations.

D2 - Behaviourial and social research on risk reduction interventions

TUAD0302

HIV prevention needs of transgender sex workers in Serbia

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Background: Research among transgender persons is rare in Serbia. The emergence of HIV infection led to an increase in stigma and discrimination, but not to an increase in professional interest. Sex work in Serbia is illegal and sex workers are highly discriminated against, especially those of 'different sexual orientation'.

This paper presents research of HIV prevention needs of transgender sex workers in Serbia. The research study is meant to be a baseline study for designing special prevention strategies for this population group.

Methods: By snowball sampling methodology, 250 sex workers were incorporated into the research study, of those 40 were transgender, 55 male and 155 female.

Results: A high level of multiple stigmatization and marginalization is the result of a combination of the following characteristics: gender, ethnicity (mainly Roma), very low education levels and high levels of auto-stigma. Moreover there is a statistically significant difference between transgender sex workers and male/female sex workers in terms of being victims of violence much more frequently, perpetrated by their peers, clients, police and citizens. Transgender persons differ also in terms of low levels of prevention knowledge, the presence of misconcepotions about HIV and inadequte assessments of risk to themselves.

Clearly, the preventive needs of this group cannot fully be met through programs designed for sex workers in general (such as outreach work, drop-in centers, mobile medical units, etc).

Conclusion: It is necessary to develop additional preventive strategies, such as:

- Behavior Change commmunication interventions, which are aimed at increasing self-efficacy, self-confidence which should result in an increase in visibility and affirmation of the transgender identity.
- raising public awareness about human rights regardless of gender differences.
- education of health care workers about the needs of this group.

WEAD0301

Behaviour change and associated factors among female sex workers in Kenya

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Background: Initiatives aimed at behaviour change of key populations such as the female sex workers (FSWs) are pivotal in reducing the transmission of HIV. A 5-year implementation research to establish the predictor factors of behaviour change among FSWs in Kenya was initiated by the African Medical Research Foundation (AMREF) with Sida and DfID support, whose follow up results are presented in this paper.

Methods: This cross-sectional survey interviewed 156 female sex workers (FSWs) identified through snowball sampling. The measurement of behaviour change was based on: the consistent use of condoms with both regular and non regular clients, reduced number of clients, routine checks for STIs, and involvement in alternative income generating activities. The adjusted odds ratios at 95% confidence interval computed during binary logistic regression analysis was used to determine the behaviour change predictor factors.

Results: Most FSWs (84%) had participated in AMREF's integrated intervention programme for at least one year, with 4.4 years as the average duration. The results indicated that 59.1% had gone through behaviour change during the project's life cycle. The adjusted odds ratio showed that the FSWs with secondary education or more were 2.23 times likely to change behaviour, protestants were 4.61 times, being in sex work for > 4 years were 2.36 times, FSWs with good HIV prevention knowledge were 4.37 times, and those engaged in alternative income generating activities were 2.30 times more likely to change their behaviour compared to respective counterparts.

Conclusion: Behaviour change among FSWs was possible and is associated with the level of education, religious affiliation, number

of years in sex work and one's level of HIV prevention knowledge. A re-orientation on the peer education programme to focus on HIV preventive measures beyond use of condoms is emphasized.

WEAD0304

Determinants of condom use in South Africa

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Background: Condom use as a means to prevent HIV infection has significantly increased over the past decade among all age groups in South Africa. However, little is known about what motivates the behaviour in South Africa. This study investigated the prevalence and demographic, psychosocial, and behavioural determinants of condom use among people aged 15 years and older in South Africa who were sexually active over the 12 months prior to the survey.
Methods: Data from the 2008 national HIV population-based survey was used. This was a cross-sectional survey which was conducted using a multi-stage stratified sampling approach. Univariate analysis and multiple logistic regression were used to identify factors associated with condom use at last sexual intercourse. A total of 5072 respondents, 46.0% males and 54.0% females, who indicated having had sex in the last 12 months were involved in the study.
Results: Overall, there was no gender difference found in condom use: males (64.6%) vs females (60.4%). The multiple logistic regression analyses indicated that youth aged 15–24 years and students' learners were more likely to use condoms at last sex. (AOR = 2.2528, AOR = 2.4358, $p < 0.05$). Whites, Coloureds and Indians were less likely than Africans to use condoms (AOR = 0.2125, AOR = 0.3000, AOR = 0.4511, $p < 0.05$). Likewise, married people and those whose current relationships exceeded a year were less likely to use condoms (AOR = 0.2782, AOR = 0.3239, p = 0.00). Finally, having only one regular sexual partner significantly reduces the odds of condom use (AOR = 0.2855, p = 0.021).
Conclusion: It is important to understand more about the nuances of condom use so that programmes can target those at greatest risk of infection such as African adults and people in stable relationships, especially those that might also be involved in other risky behaviours such as multiple concurrent sexual relationships.

THAD0301

Framing HIV testing messages for urban and rural audiences: evidence from field experiment in northwest Ethiopia

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Background: Given their epidemiological and socio-ecological differences, urban and rural contexts may require differently designed prevention messages. Utilizing messages framed in terms of the benefits (gains) or costs (losses) associated with a particular HIV/AIDS-related behavior could be one viable strategy to address urban-rural differences.
Methods: Based on relevant literature, urbanity vs. rurality, experience with HIV testing and concern about and information needs on HIV/AIDS were tested as moderators of framed HIV testing messages' effectiveness. Gain- vs. loss-framed brochures were distributed to 394 participants (199 Urban: 46.2% male, 53.8% female; 195 Rural: 79% male, 21% female). Through pretest-posttest measures of intention to test for HIV, the relative persuasiveness of gain- and loss-framed messages was determined.
Results: Urbanity vs. rurality, experience with HIV testing and concern about and information needs on HIV/AIDS significantly moderated the effects of gain- vs. loss-framing on Intention to Test for HIV, $F(1, 385) = 9.28$, $p < 0.01$, $n2 = .02$; $F(1, 385) = 17.20$, $p < 0.001$, $n2 = .04$; and $F(1, 385) = 18.97$, $p < 0.001$, $n2 = .05$, respectively. While urbanites, participants with more experience with HIV testing and those with higher concern about and information needs on HIV/AIDS were motivated by gain-framing, ruralites and those with lower concern about and information needs on HIV/AIDS were motivated by loss-framing. Both gain-framing and loss-framing led to similar outcomes among individuals with low levels of experience with HIV testing, with a slight advantage for the loss-framed message.
Conclusion: Urbanites and ruralites are motivated by differently framed prevention messages. It was also noted that to the extent recipients are concerned about HIV/AIDS and are familiar with HIV testing, gain-framing is more advantageous, suggesting a possible construal of HIV testing as more of a prevention than a detection behavior in such situations.

Table 1. Zero-order bivariate correlations

Variable	1	2	3	4	5	6
Gain vs. Loss Treatment	1					
Urbanity vs. Rurality	.000	1				
Baseline Intention to Test for HIV	−.040	.241**	1			
Post-intervention Intention to Test for HIV	−.049	.201**	.880**	1		
Concern about & Information Needs on HIV/AIDS	.228**	.612**	.239**	.239**	1	
Experience with HIV Testing	.142**	.624**	.405**	.399**	.653**	1

**Correlation is significant at the 0.01 level (2-tailed).

THAD0302

'AIDS is gone. That's what they think' College and university youth in Botswana share their thoughts on HIV, risk, behaviours, needs and interventions

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Background: Botswana's HIV prevalence is 17.6% among the general population and the incidence rate is 2.9%. In 2009, Botswana's

Table 2. Regression Coefficients

	Gain		Loss	
Parameter	***B***	***SE***	***B***	***SE***
Gain vs. Loss	.065	.041	−.065	.041
Urbanity vs. Rurality	.119*	.037	−.076	.052
Baseline Intention to Test for HIV	.950**	.029	.950**	.029
Concern about & Information Needs on HIV/AIDS	.100**	.029	−.085*	.031
Experience with HIV Testing	.180**	.038	−.034	.036
G/L X Urbanity vs. Rurality	−.195*	.064	.195*	.064
G/L X Concern about & Info Needs on HIV/AIDS	−.185**	.042	.185**	.042
G/L X Experience with HIV Testing	−.214**	.052	.214**	.052

Tertiary Education Council, recognizing that HIV interventions for College/University (tertiary) students were few/fragmented, conducted a study to understand student behaviours, needs and gaps in services. Born in the 1990s, this generation of youth is the first of its kind-a generation who has grown up with HIV-infected, heavily affected and message-fatigued.

Methods: Between 2009–2010, TEC conducted a study of 10% of tertiary students using self-administered surveys (N = 4312). Classes were randomly selected from 32 institutions and surveys were augmented by 28 post-survey FGDs. Participation was voluntary, anonymous and counselling was offered. Survey questions were qualitative and quantitative.

Results: 57.0% of participants were female and 63.0% were aged 20–24. HIV knowledge was high (over 90% responded correctly to 9/11 knowledge questions) but satisfaction with current HIV interventions was low (44.9%) and 38.5% said condoms are never available on campus. 82.5% were sexually active and 45.0% had already engaged in unprotected sex. 53.9% knew their HIV status and 49.4% knew their partner´s status. 33.7% reported that they were engaging in MCP. Key findings from the FGDs include: a) campuses are sexualized spaces b) students are involved in transactional relationships c) students do not perceive themselves to be at risk for HIV and d) campus interventions are few and irrelevant.

Conclusion: Irrespective of increased knowledge and impact from AIDS deaths within their families while they were young children, the sexual practices that gave rise to the current HIV epidemic in Botswana persist among tertiary youth. The study raises serious reservations about the assumption that youth are making behaviour changes. It also exposes gaps in service provision and questions the strength and relevance of current interventions to youth in a country with a staggering incidence rate.

FRLBD01

Effect of a national social cash transfer program on HIV risk behavior in Kenya

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Background: Cash transfer programs may reduce the risk of HIV transmission among young people from poor households by providing economic security. The Cash Transfer for Orphans and Vulnerable Children (CT-OVC) is the Government of Kenya's flagship social protection program, reaching 150,000 poor families with OVC age 17 or below. Households are provided a flat unconditional cash transfer of US$25 per month. The objective of this study is to assess whether the CT-OVC reduces HIV related behavioral risk among adolescents.

Methods: We use data from the third wave of the impact evaluation of the CT-OVC collected in 2011. The design is a cluster-randomized trial. 1912 households in seven districts across Kenya were part of wave three; two-thirds were in the program and the remaining third were randomized out at baseline in 2007. Data on sexual behavior and other risk related behaviors were collected in wave 3 only for residents age 15-25. We analyze data for residents age 21 and below who had not had sexual intercourse at baseline (N = 1516, Females = 41%). We use multivariate analysis with controls for age, sex, Nairobi residence, and relationship to household head.

Results: Main study findings indicate that the CT-OVC has reduced the probability of sexual debut by 6.73 percentage points off a proportion of 0.37 who had ever had sex after the program began in 2007. This result appears to be driven by males. The program has also reduced the proportion of adolescents with 2 or more partners in the last 12 months, by 7.2 percentage points , and reduced the probability of 2 or more unprotected sex acts in the last 3 months for females (p = 0.10).

Conclusion: A large scale, national cash transfer program may prevent HIV among adolescents by postponing sexual debut, reducing the number of partners and reducing the number of unprotected sex acts.

MOPDD0101

A pilot South African worksite-based parenting program: preliminary effects on parent-child communication about sex and HIV

Table 1. Main Results Age < = 21

	Had sex?	Age at first sex	Forced at first sex	Condom used at first sex	First partner 10+ years older	2+partners last 12 months	2+unprotected sex acts last 3 months
Impact	−0.0673**	0.121	−0.0179	−0.0129	−0.00978	−0.0723**	−0.100
N	1,516	611	594	609	583	430	115

Sample is individuals who had not had sex at baseline in 2007. OLS regressions controlling age, sex, Nairobi, child and grandchild of head. All regressions are linear probability models except for 'age at first sex'. 'Impact' coefficient indicates difference between intervention and control group. Statistically significant coefficients (P <.10) denoted by **.

Table 1. Effects of Intervention on Parent & Child Outcomes

	Adjusted Coefficients	Intervention Pre M (SD)	Intervention Post M (SD)	Control Pre M (SD)	Control Post M (SD)
Comfort Talking to Child about Sex (Parent)	0.98 (0.39), p = .20	3.39 (1.84)	5.01 (1.70)	4.07 (2.15)	4.32 (1.91)
Number of Sex & HIV Topics Discussed (Parent)	3.26 (1.12), p = .005	7.79 (4.84)	12.38 (4.27)	8.34 (5.75)	9.28 (5.68)
Number of New Sex & HIV Topics Discussed Since Baseline (Parent)	2.85 (0.80), p < .001	_____	5.91 (4.74)	_____	2.75 (3.58)
Condom Use Self-Efficacy	0.60 (0.21), p = .007	3.79 (1.04)	4.57 (0.76)	4.13 (1.00)	4.08 (1.01)
HIV Knowledge (Parent)	.060 (0.32), p = .07	6.62 (1.54)	7.32 (1.30)	6.84 (1.95)	6.88 (2.00)
HIV Knowledge (Child)	0.85 (0.43), p = .05	6.32 (1.74)	6.65 (1.86)	6.22 (1.75)	5.72 (2.26)

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Background: In South Africa, adolescents are at high HIV risk, yet few prevention interventions have been effective. Parents can play a pivotal role in youths' healthy sexual development. We tested whether *Let's Talk!,* a pilot worksite-based parenting program, could improve parent-child communication about HIV and sexual health.
Methods: A small randomized pilot test was conducted at a large public worksite in Cape Town. The intervention consisted of five weekly two-hour group sessions for parents of children aged 11–15. Sixty-six parents [64% female, mean age 43 years (SD = 7), range 23–59] and their 64 children [41% girls; mean age 13 years (SD = 1)] completed surveys before and immediately after the intervention; surveys assessed HIV knowledge, comfort with talking about sex, communication about 16 HIV- and sex-related topics (e.g., steps of condom use, how to prevent HIV), and condom use self-efficacy. Thirty-four Black-African (Xhosa-language) and 32 Coloured (mixed-race; Afrikaans-language) parent-child dyads participated. Thirty-four parents were randomized to one of two intervention groups stratified by language, and 32 to one of two control groups.
Results: Multivariate regressions indicated that the intervention significantly increased parents' comfort with talking to their child about sex, b(SE) = 0.98 (0.39), p = 0.02, and the number of sex- and HIV-related topics discussed with their child, b(SE) = 3.26(1.12), p = 0.005 (Table 1). Compared to control parents, intervention parents were more likely to discuss new sex- and HIV-related topics that had not been discussed before the intervention, b(SE) = 2.85(0.80), p < .001. The intervention also significantly increased parents' self-efficacy for condom use, b(SE) = 0.60(0.21), p = 0.007, and showed marginally significant effects on parent and child HIV knowledge [b(SE) = 0.60(0.32), p = .066, b(SE) = 0.85(0.43), p = 0.052, respectively].
Conclusion: *Let's Talk!* holds promise for improving parent-child communication. Open communication about HIV and sex is a critical first step in educating youth and preventing HIV.

WEPDD0101

The relationship between timing of childhood sexual abuse and subsequent HIV risky behaviours in severely mentally ill adults

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Background: There is a general consensus that people with severe mental illness(SMI) are more likely to have a history of childhood sexual abuse and are at increased risk for HIV. For this study, we hypothesized that our homeless, mentally ill participants reporting CSA would be more likely to report current engagement in HIV-risky behaviors, history of STI's, and associated psychopathology than their non-CSA counterparts. Furthermore, we hypothesized that those who had experienced CSA in early to middle childhood (EMCSA) would be more likely to report these challenges than those who had experienced CSA in adolescence (ACSA).
Methods: As part of a NIH-funded RCT(1R01MH084696-01A2 PI Brady) primary and secondary prevention trial for adults with SMI at-risk for HIV transmission, ninety participants were administered an assessment battery which included the Structured Clinical Interview for DSM-IV, Demographic Inventory, and Timeline Followback. Chi-square analyses were used to test our hypotheses and analyze the relation between our variables of interest.
Results: There were no significant differences in current HIV-risky behaviors between CSA/non-CSA participants nor for EMCSA/ACSA participants. However, CSA participants were more likely to present with PTSD{χ2(1, 90) = 12.95, $p < .001$}, ASPD{χ2(1,90) = 13.78, $p < .001$}, and prior Chlamydia diagnosis{χ2(1,90) = 8.46, $p < .01$} than non-CSA participants. Also, a trend showed that EMCSA participants were more likely to report current PTSD symptoms{χ2(1,90) = 2.73, $p < .10$} than ACSA participants. Interestingly, EMCSA participants were more likely to report being HIV positive{χ2(1,45) = 4.82, $p < .05$} than ACSA participants.
Conclusion: CSA was associated with an increased likelihood of presenting with associated psychological sequelae and STI's, namely Chlamydia. Further, EMCSA participants were more likely to present with HIV disease than AMCA participants. Our research contributes to literature outlining the pernicious impact CSA has on physical and mental health in the severely mentally ill homeless population. Future studies should identify potential moderators of the CSA-health risk relationship (e.g., gender).

WEPDD0303

Street-based adolescents: actual emphasis on HIV prevention

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Background: The numbers of street children vary from 30,000 to 100,000 in Ukraine. Their vulnerability to health-related risks, including HIV/AIDS, substance and drug abuse, was a subject of the baseline study in 2008. Based on its findings, UNICEF implemented a comprehensive approach to HIV-service delivery in four pilot cities and repeated the survey to assess the effectiveness of interventions in 2011.
Methods: Behavioral survey among street-based adolescents (N = 805, age 10–19, 565 boys, 240 girls) was conducted using location-based network and convenience sampling. Data were disaggregated by age and gender. Comparative data analysis was applied to learn the behavioral and knowledge changes. The client satisfaction questionnaire was used to define the service access barriers.
Results: Street adolescents are highly vulnerable to HIV-infection: 22% injected drugs, 65% of girls provided commercial sex services; 7% of boys had sex with men; only 13% always used condom with casual sexual partners. Social vulnerability factors hinder access to medical and social services: two-thirds of respondents didn't have a permanent place of residence and were not covered by medical services. 46% didn't have an ID, 54% didn't have an education certificate. The piloted interventions caused the positive behavioral change and knowledge increase: a share of those, who correctly identified the ways of HIV transmission, has increased for 10%; a share of those, who were tested for HIV during the last year and received the result, has almost doubled. The biggest increase in HIV-testing is among girls: every sixth tested in 2008, every third in 2011.
Conclusion: Study confirmed effectiveness and sustainability of implemented interventions and suggested a roll-out-strategy to the country. This is of critical importance as a significant number of street children remains uncovered by services and has a low level of knowledge about HIV/AIDS, HIV-service organizations and places, where support is provided and testing is available.

D3 - School-based sexuality education, life skills, gender equality education

THAD0304

Gender and HIV/AIDS education in the multi-cultural context of schools at Kakuma Refugee Camp in Kenya

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Background: This study investigated how gender, multicultural and multi-religious factors influenced the teaching and learning of HIV/AIDS education.
Methods: The qualitative case study utilised 6 primary schools from Kakuma Refugee Camp and its host community. The sample had 617 respondents from 9 nationalities, including 356 male and 160 female pupils. Interviews, observation, FGDs, documentary analysis and drawings generated data. The research proposal and tools underwent ethical review.
Results: Cultural and religious tendencies of same gender clustering denied Muslim Somali pupils an opportunity to work together as partners in addressing pertinent and effective strategies in HIV/AIDS education. Unlike the Christian Turkana and Ugandan girls who seemed open and outgoing in HIV/AIDS education activities, Somali and Ethiopian Muslim girls remained quiet, reserved and shy as a way of showing respect to the male, a behaviour that jeopardised HIV/AIDS education. Christian Sudanese and Turkana boys and girls interacted more freely, hence learnt better. Gender influenced perceptions of pupils on HIV/AIDS education content and pedagogy. While boys seemed vocal, uncontrolled and eager to discuss sex and condoms, girls preferred discussing love and care of people living with HIV/AIDS. Refugee boys produced culturally and linguistically diverse resource materials that were easily understood across the cultural groups while portraying males as innocent victims and females as potentially responsible for the spread of HIV. Notably, pupils received different and conflicting messages on similar topics depending on the teacher's religious background. While older teachers were perceived as 'parents', young male teachers were seen as having a hidden 'sex agenda'.
Conclusion: In conclusion, gender, culture and religion, influence the learning of HIV/AIDS education in refugee schools in a complex manner, which if not understood and controlled could have negative implications. The study recommends pre-service multicultural teacher education and training on how to make HIV/AIDS education gender-responsive.

THAD0305

Uncomfortable silences: narratives of four educators teaching about HIV/AIDS in a high school near Montréal

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Background: From 2005, the Québec Ministry of Education cut what was five (5) hours of sex education (STIs, HIV/AIDS, gender, sexual diversity, etc.) per year from the secondary school curriculum. Consequently, in the context of the education reform, teachers holding specializations in English and Art, Science & Technology and Moral and Religious Education were persuaded to integrate sexuality in their course.
Methods: Being highly sexualized sites, high schools act as a channel for sexual initiation and exploration. Thus, teachers can be catalysts to providing valuable and life altering information around HIV/AIDS to their students. Through a qualitative case study, teacher narratives were collected to identify their classroom structure; strategies; awareness of HIV/AIDS; and the challenges encountered when discussing the subject in their classroom. Overall, implicating communication processes were an essential factor in uncovering the subtle, yet, uncomfortable silences found in this study.
Results: The surface-level understanding around HIV/AIDS and a lack of consistent training and access to accurate resources identified how teachers understood and valued HIV/AIDS information. Ultimately, such familiarity corresponded to how their students comprehended the virus and viewed the marginalized communities most affected.
Conclusion: Theoretical frameworks connected to Paulo Freire's *Engaged Pedagogy* and Nel Noddings's *Pedagogy of Care*, were considered as tools for empowering teachers when imparting knowledge on HIV/AIDS.

THAD0306

Rethinking the 'teacher' in school-based, teacher-led sexuality education programmes in rural and urban Tanzania

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Background: School-based, teacher led Sexuality Education (SE) is effective in promoting and protecting young people's sexual health. In sub-Saharan Africa, much of SE is provided through school-based, teacher-led programmes. The aim of this study was to find out what topics in Comprehensive Sexuality Education (CSE) were acceptable and not acceptable to the teachers.
Methods: This study was part of an assessment of the status of Sexual and Reproductive Health and Rights in three regions (Tanga, Singida and Iringa) in Tanzania. Respondents were purposively obtained from 6 purposively selected primary and secondary schools in three purposively selected wards. A total of 45 teachers participated in Focus Group Discussions and Group Interviews. Data were analyzed using Nvivo software.
Results: Six topics in CSE were consistently rejected by teachers. These are homosexuality, masturbation as an alternative to sexual intercourse, condom use, sexual pleasure and enjoyment, sexual behavours other than intercourse and appropriate and inappropriate touching. Three major reasons were given to why they rejected these topics. First, they explained that if students are taught about these topics, they may practice them and that would fuel sexual activity among them. Second, since they have to teach practically, teachers explained that demonstrating these topics would be an embarrassment to them and to the students. Third, they reported that these topics are against sexual norms of the communities where they (teachers) and students come from.
Conclusion: With these findings, it is important to rethink the position of teachers in the delivery of CSE. Being ''teachers'' does not exclude individuals from abiding by sexual norms of their community. The rejection of these topics indicates that teachers still adhere to sexual norms of their communities. In order to strengthen CSE programmes, programmes need to work on sexual norms that may hinder the delivery and success of CSE in schools.

D4 - Community, social and political mobilization and building of social capital

THAD0303

Promoting sexual and reproductive health (SRH) in adolescent girls through traditional initiation in the coast region of Tanzania

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Background: Coastal people of Tanzania practice a rite of passage (*unyago*) for girls when they enter puberty (*wali*). Unyago is conducted by respected, mature women (*manyakanga*) who use local art forms and idioms to address family life and sex education.

Pre-training test		Post-training test		
Score	Persons	Score	Persons	Difference (+/−)
100%	4	100%	12	+8
>50%	17	>50%	14	−3
<50%	7	<50%	2	−5

Pre- and post-training differences.

Unyago is sometimes faulted for encouraging early sex, teenage marriage, early child-bearing, and multiple concurrent partnerships (MCP).
Methods: We conducted a participatory learning-and-action exercise with *manyakanga* in the Coast region. We assessed: 1) *manyakanga's* knowledge of SRH and 2) *manyakanga´s* potential to serve as promoters of SRH. In 2011, 28 *manyakanga* (who were involved in small-scale pilot activities since 2008; about 50% of the manyakanga at the program sites) received a five-day training. PAYODE (a community-based organization) conducted eight monthly forums, and FHI 360 provided 28 person-days of on-site technical assistance.
Results: Training improved *manyakanga's* knowledge of SRH.

Eight months after training, *manyakanga* had initiated 450 *wali* (about two girls per *manyakanga* per month). Parents, elders and non-program *manyakanga* who were initially suspicious of the modified *unyago* reported a preference for it. Pregnancy, MCP and school withdrawals are less common among *wali* who have been in the program. All-night celebrations for *wali* (associated with alcohol, drug use and sex) have been discontinued in the program areas.
Conclusion: Harmful aspects of a traditional practice can be modified to promote positive behavior. Training and advocacy that involves community leaders (such as *manyakanga*) can produce a sustainable system of effective change agents. The modification of socio-cultural norms should be locally appropriate, incorporate the purpose and beneficial aspects of a practice, demonstrate added value, and be led by custodians of that practice.

TUPDE0105

Social capital and AIDS competent communities: evidence from eastern Zimbabwe

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Background: Interpersonal communication has been implicated as a key factor in HIV declines in Zimbabwe (Halperin et al., 2011), but little is known about the social networks through which it might have taken place. In the quantitative component of a World Bank sponsored study, Gregson (2012) found associations between community group memberships and HIV avoidance. Our qualitative component elaborates on these findings through mapping out possible psycho-social pathways between group participation and more effective community responses to HIV/AIDS.

Methods: We used Nhamo's (2010) conceptualisation of the 'HIV competent community' to frame thematic analysis of the Manicaland Project's qualitative dataset. 481 people participated in 30 children's draw-and-write, 100 interviews and 55 focus groups exploring local responses to HIV/AIDS. These included people on ART; healthcare workers; workers; community group members; sex workers and clients; and participants in cash transfers, home-based care, support groups and peer education.
Results: Community group memberships are often associated with lower HIV incidence amongst women, and higher incidence amongst men. Group memberships impact *directly* through facilitating or hindering healthy behaviours, and *indirectly* through impacting service access, and the effects of peer education, home-based care and cash transfers. Gendered group communication styles often make women more likely to engage in positive health-related dialogue, and to entrench macho stereotypes and health-damaging behaviours in men, although this is not always the case.
Conclusion: Growing evidence suggests indigenous community groups could become a useful focus for enhanced HIV/AIDS prevention, care, treatment and impact mitigation. Efforts might focus on enhancing the beneficial effects of groups (mostly on women) and limiting their damaging effects on men. Parallel efforts should facilitate contexts that are supportive of beneficial group effects, including a wider comprehensive response with empowering support from funders and community partnerships with supportive service providers.

WEPDD0301

Reducing children's vulnerability in a regions with HIV prevalence with an integrated livelihoods, protection and psychosocial support (PSS) package

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Background: In Western Uganda, high HIV prevalence, poverty, and abuse/exploitation threaten children's wellbeing and can contribute to high HIV transmission risk for vulnerable children. A comprehensive approach is needed to address the key drivers of vulnerability and improve child welfare for highly vulnerable children. World Education (WEI)'s Western Uganda Bantwana Program (WUBP) builds the capacity of nine community-based organizations (CBOs) to provide comprehensive services and referrals strengthening to 3,100 vulnerable children and their families to improve child welfare.
Methods: Using the following methods, Bantwana and local partners gathered evidence suggesting that an integrated package of psychosocial support (PSS), livelihoods, and child protection (CP) interventions can effectively contribute to reducing child vulnerability and improve children's overall wellbeing:

- *Child profiling baseline and follow-on survey:* of 132 children, measuring child wellbeing across a range of internationally accepted vulnerability indicators;
- *CP case study*: focus group discussions with districts, children, schools, and other protection stakeholders to assess school and community child protection interventions;
- *PSS assessment*: interviews/focus group discussions with volunteers, caregivers, CBO partners and children, exploring effects of a household approach to PSS on child wellbeing; and
- *Qualitative evaluation study (with Columbia University)*: of 247 households, to determine benefits of livelihoods/protection interventions on child wellbeing.

Results: Preliminary results from the Columbia study suggest that an integrated protection/livelihood intervention can improve outcomes in child wellbeing. The CP case study and PSS assessments reveal that strengthening linkages among CP stakeholders (school, community, government and household)—improves child protection outcomes, while the child profiling survey reinforces the importance of a household approach.
Conclusion: Preliminary evidence suggests that an integrated package of PSS, livelihoods, and CP intervention may reduce vulnerability and improve child wellbeing which could have implications for HIV prevention approaches for vulnerable children in regions with high HIV prevalence.

THPDC0206

Increasing transgender community capacity to impact HIV prevention and health care services: Coalitions in Action for Transgender Community Health (CATCH)

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Background: The Center of Excellence for Transgender Health (CoE) has been mobilizing transgender (trans) community throughout the United States utilizing a coalition building approach since 2007. The CoE along with its National Advisory Board (NAB) has identified and supported community leaders, health departments and key stakeholders in engaging the transgender community, identifying gaps and developing strategies for addressing identified unmet needs in the U.S. The CoE supports local community efforts in organizing conferences, symposiums, and summits that are focused on transgender specific health and well being.
Methods: In the CATCH model, with support from staff of the CoE, local coalitions guide the community mobilization process and lead data collection and analysis efforts, prioritize HIV prevention and health care needs, develop a comprehensive plan to strengthen community access to and utilization of HIV prevention and health care services, and decide how to evaluate these efforts.
Results:

- Community mobilization is a very empowering process that can provide participants with a sense of control, self esteem, self determination and increased capacity for changing systems to be transgender inclusive.
- Both providers and community members are able to create meaningful, sustainable linkages for capacity building and increasing access to services.
- Social networks created through CATCH are sustainable and increasingly multiplying.
- CATCH is a groundbreaking national network that ensures that community members have a voice in the transgender HIV and human rights movement through a coordinated effort.

Conclusion: CATCH increases transgender community capacity to access services by supporting advocacy efforts, creating networking opportunities, and increasing visibility of trans HIV prevention and health care needs.

D7 - Child care, infant feeding, pre-chewing of food (premastication)

MOPDD0303

Determinants of infant feeding intent and appropriateness of choices for formula feeding in the Djoungolo Prevention of Mother-To-Child Transmission of HIV programme, Yaounde, Cameroon

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Background: The dilemma of infant feeding in HIV context of poor resource setting remains unresolved and the practice of replacement feeding may happen to be a curse by lowering child survival. Appropriate infant feeding counseling can reverse such risk as well as limiting spill-over (WHO, 2010.)
Objective: to describe infant feeding intents of HIV positive women and determine the appropriateness of choice of those opting for formula-feeding after the counseling process.
Methods: Routine infant feeding counseling of HIV positive mother offered by short-course trained counselors during the pregnancy or in the early-post partum. Intents were assessed using a generic acceptable, feasible, affordable sustainable, secure (AFASS) score composed of 7 variables grading from 0 to 2:type of energy, source of water, kind of latrines, disclosure to the partner, monthly income, ability to prepare bottle feeding and to give a reason for non breastfeeding. An AFASS score above 10/14 was considered as appropriate for formula feeding.
Results: 950 women were included for cohort characteristic. Among 924 women counseled, 63% intended to formula feed their babies while 37% planned to breastfeed. The AFASS criteria >10 was met by 87% who intent to practice formula-feeding compared to 57% of those who intent to breastfeed. Women counseled during post-partum were more likely than others to opt for artificial feeding ($p < 0.001$). Formula-feeding choice was more appropriate in women counseled during pregnancy vs after delivery ($p = 0.02$). The determinants of choosing replacement feeding were tertiary education ($p < 0.001$), no previous exclusive-breastfeeding, HIV-status disclosure ($p < 0.001$) and AFASS score >10 (OR: 5; 95% CI: 3–6).
Conclusion: in Djoungolo, after infant feeding counseling, replacement feeding intent is mostly appropriate fitting mother's environment and livelihood. In addition, the desire to breastfeed remains real as more than 1/2 women who choose to breastfeed met the conditions to practice formula feeding.

D8 - Prevention with HIV-positive people

WEAD0305

Effect of a values-based prevention curriculum on HIV-positive couples from four regions in Ethiopia

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Background: Although evidence reveals that most heterosexual HIV transmission in sub-Saharan Africa takes place within marriage or cohabitation, approaches for people living with HIV (PLHIV) focus primarily on individuals. The Faithful House (TFH) is a couples-based, skills-building curriculum used with 45,000 couples in twelve countries, recently modified to address PLHIV issues. Research examined the effect of TFH on attitudes and behaviors to provide evidence for a couples-based approach for more holistic PLHIV programming.
Methods: Participants, using convenience sampling, from HIV programs in four regions of Ethiopia were randomly distributed between intervention and control groups. The intervention group participated in TFH workshop for PLHIV. Both groups completed surveys at baseline and three months post-intervention which was analyzed using STATA.
Results: The study surveyed 378 individuals with a mean age of 35.2. Most couples (88%) were either married or cohabitating. All participants had been tested for HIV with 90% testing positive. Intervention participants (193) reported significant changes ($p < 0.01$) in the quality of their relationship, including improved communication and joint decision-making about child care, finances and sexual negotiation. Intervention participants had statistically significant improvements in medication adherence (18% non-adherent at baseline versus 10% at three-months) and percentage diagnosed with sexually transmitted infections in the past three months (7.3% decreased to 4.7%). Of males with pregnant partners, 94% in the intervention group attended antenatal care visits compared with 36% in the control. Intervention participants also reported statistically significant decreases ($p < 0.05$) in violent behaviors including insulting, shoving, and forcing sex.
Conclusion: The modified TFH curriculum had a positive impact on attitudes and behaviors affecting the physical and relationship health of PLHIV couples. These preliminary results indicate potential for couples-based approaches for more holistic programming for PLHIV. Continued evaluations are critical in determining sustained impact on health status outcomes, attitudes and actual behavior change.

D9 - Counseling and testing (HIV counseling and testing (HCT) and voluntary counseling and testing (VCT)), social, psychological and behavioral aspects of HIV testing and counseling

WEPDE0202

Mapping spatial barriers and facilitators to HIV testing by work environments among sex workers in Vancouver, Canada

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Background: As part of a government-sponsored pilot initiative of 'treatment as prevention', recent efforts have been made to improve

access to HIV prevention and care, including HIV testing, to vulnerable sub-populations in Vancouver, Canada. This study assessed the association between geographic factors measuring access to HIV testing sites and having a recent HIV test among hidden street- and off-street sex workers(SWs) in Vancouver.
Methods: Baseline data were used, including an interviewer-administered questionnaire, HIV/STI testing and geographic location data, from an open prospective cohort of SWs recruited in 2010 in Metropolitan Vancouver (''An Evaluation of Sex Workers' Health Access''[AESHA]). Access was measured by density of testing sites within a catchment surrounding SWs' place of solicitation (radius = distance travelled in 15 minutes of combined bus/walking) and time to travel to nearest testing site. Bivariate and multivariable logistic regression was used to identify if density and time were independently associated with recent HIV testing (in the last year). Adjusted odds ratios and 95% confidence intervals were reported (AOR: [95% CIs]).
Results: In total, 291 seronegative SWs from Vancouver City were included, with 69.4% (202) reporting a recent HIV test. In bivariate analysis, having a recent HIV test was significantly associated with a higher density of testing sites ($p < 0.001$) and time to nearest testing site ($p = 0.05$). After adjusting for key confounders (recent injection drug use, age and sexual identity), having a recent HIV test was significantly associated with increased density of HIV testing sites: the probability of having a recent HIV test increased by 2% for each increase in one testing site (1.02[1.01–1.04]).
Conclusion: Our results highlight the importance of physical availability of HIV testing sites within sex work environments to facilitate use of HIV prevention and care among SWs. Increased mobile and safer-environment interventions that facilitate access to voluntary and confidential HIV testing at outdoor and indoor sex work venues remain a critical priority.

D10 - Other behavioural, social and structural interventions, including in the context of biomedical interventions

WEAD0505

Feasibility, acceptability and initial efficacy of the 'Unity workshop': an internalized stigma reduction intervention for African American women living with HIV

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Background: HIV/AIDS is a leading cause of death for African-American women in the United States between the ages of 25 and 34 years. Studies have suggested that HIV-related stigma impacts morbidity and mortality rates because it contributes to poor treatment utilization for various groups of people with HIV. Despite these findings, there are no intervention studies investigating stigma reduction strategies for African-American women living with HIV.
Methods: We implemented an adapted version of the International Center for Research on Women's HIV Stigma Toolkit for African-American women living with HIV, with intervention modules led by an African-American woman living with HIV. Twenty-four participants attended workshop sessions split across 2 weekday afternoons, discussed issues ''triggered'' by videos that were produced specifically for the intervention, learned stigma reducing mechanisms from each other, and practiced using these mechanisms in role plays. Participants completed a measure of internalized stigma before, immediately after, and 1-week after workshop participation.
Results: The intervention demonstrated feasibility and the women enthusiastically accepted the intervention. The women reported decreased stigma from the start of the workshop to immediately after ($p = 0.05$) and 1 week after workshop participation ($p = 0.07$).
Conclusion: Findings suggest that the Unity workshop holds promise for reducing internalized stigma for African-American women living with HIV.

MOPDD0105

Effectiveness of psycho-education in a family-to-family program on family relationships and emotional quotient of adolescents in HIV families in Thailand

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Background: This study examined the effectiveness of psycho-education in Family-to-Family Project on family relationship and emotional quotient (EQ) of adolescents in HIV families in two representative provinces in Thailand, Chiangrai and Nakorn Ratchasima. The intervention included core elements identified by Thai Ministry of Public Health and University of California, Los Angles, USA for improving physical and mental health, family relationship, and social outcomes for HIV-affected families.
Methods: The sample consisted of 194 adolescents (aged 12–17 years) in 402 HIV-affected families. A randomized controlled trial with pre-test and post-test was performed during December 2006 - January 2009. Adolescents were randomly assigned into 2 groups: (a) adolescents whose parent and caregiver(s) attended psycho-education and (b) adolescents whose parent and caregiver(s) did not attend psycho-education. The instrument was a set of questionnaire including: family relationship and EQ. Data were collected prior to the beginning of the program, and at 24-month follow-up. They were analyzed using t-test and logistic regression statistics.
Results: The study findings suggested, when controlled sex, age and education, family relationship and EQ of adolescents before and after the intervention in each group did not vary significantly. Family relationship had significantly positive relationship with EQ on the ''happy'' subscale [adjusted Odds Ratio (OR) = 12.03, 95% Confidence Interval(CI) = 3.21–45.02] and total EQ [adjusted OR = 9.57, 95% CI = 2.28–40.17]. However, it did not relate to EQ on the ''good'' subscale [adjusted OR = 3.13, 95% CI = 0.57–17.12] or the ''competence'' subscale [adjusted OR = 1.41, 95% CI = 0.158–12.57].
Conclusion: Family relationship is a protective asset in happiness and total EQ of adolescents in HIV-affected families. However, larger and robust trials are needed to further determine the effectiveness of psycho-education for Thai HIV families. This study was funded by the National Institute of Nursing Research (grant NINR R01-NR009922).

WEPDD0102

Home-based mental health services are associated with improved mental health outcomes among individuals with HIV

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Background: Mental disorders are highly prevalent among individuals with HIV and are consistently associated with negative health outcomes. These disorders are often not adequately treated due to significant individual and community level barriers. Innovative approaches are needed to engage and effectively treat mental health problems among individuals with HIV.
Methods: The NIH-funded Collaborative HIV/AIDS Mental Health Program (CHAMP) assessed the feasibility and preliminary outcomes associated with providing 9 months of in-home mental health counseling for 40 individuals with HIV and a Major Axis I mental disorder living in Mecklenburg County North Carolina. The CHAMP treatment was guided by the HIV/AIDS Illness Management and Recovery Model (HAIMR), which was adapted from the evidence-based Illness Management and Recovery treatment model using a Community Based Participatory Research approach. Study participants were surveyed at baseline, 5 and 9 months to assess psychiatric symptoms (using the Brief Symptom Inventory (BSI)), social support, coping, and medication adherence.
Results: The CHAMP study participants were reflective of the HIV population in the region with respect to race (80% African-American) and gender (35% female).

Statistically significant decreases in the global BSI score and a number of BSI symptoms dimensions including anxiety, depression, obsessive compulsive, and hostility were detected. The sample means for anxiety, hostility, and phobia dropped below the BSI clinical significance level and the proportion of participants meeting the BSI case definition based on having a BSI Global Score of 63 or above decreased from 85% of participants to 54% of participants ($p = .018$). Statistically significant improvement was also found for the SF-12 mental health scale, adaptive coping, overall social support and emotional support.

No statistically significant differences were noted in outcomes by gender or race/ethnicity.
Conclusion: Findings from the CHAMP Study suggest that in-home mental health treatment may be beneficial in engaging and treating HIV-positive individuals with co-morbid mental health disorders.

DEMOGRAPHIC CHARACTERISTICS	
Female	35%
African-American	80%
Average Age	43.1
Less than High School Education	28%
PROBABLE MENTAL DISORDERS (Mini-International Neuropsychiatric Interview (MINI))	
Depression	55%
Bipolar	30%
PTSD	38%

Baseline Characteristics of Study Subjects (N = 40).

	Baseline Survey (prior to treatment entry)	Survey at 9 months (after treatment completion); **p < .01
Brief Symptom Inventory (BSI) Global Score (higher score indicated higher symptom levels)	71.5	65.7**
BSI Depression	68.5	62.6**
BSI Anxiety	65.8	57.6**
BSI Hostility	64.5	57.5**
BSI Phobic	63.1	57.9**
SF-12 Mental Health Scale	37.6	46.5**
Adaptive Coping (Brief COPE scale)	2.9	3.2**
Overall Social Support (Medical Outcomes Study Social Support Index)	57.6	70.9**
Missed HIV medication in last 24 hours	17.4%	4.8%

CHAMP Study Findings (N = 34).

D12 - Socio-economic vulnerability and stratification (e.g., inequality, poverty, wealth, social status)

WEAD0102

Critical consciousness, perceived racial discrimination and perceived gender discrimination in relation to demographics and HIV status in African American women

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Background: Perceived racial (PRD) and gender discrimination (PGD) relate to poorer health in African American (AA) women (Kreiger, 1990; Borell et al., 2006). Critical consciousness (CC), the awareness of social oppression, has been found to moderate the effects of discrimination stress (Kelso et al., submitted 2012). The present study explored PRD, PGD, and CC in AA women, examining their relationships to age, education, employment, and HIV status.
Methods: Participants were 98 AA women (73 HIV-positive, 25 HIV-negative) from the Chicago Women's Interagency HIV Study. Table 1 displays demographic information. Self-report questionnaires measured CC and its dimensions Power Discontent, Rejection of System Legitimacy (RSL), and Belief in the Need for Social Change (BNSC) on behalf of AAs, and PGD, and PRD. Pearson correlations examined age, education, employment and HIV status in relation to CC. Partial correlations examined CC in relation to PGD and PRD. T-tests examined HIV status differences in PGD, PRD, and CC.
Results: HIV-negative women ($M = 4.38$, $SD = .71$) endorsed significantly greater (BNSC) on behalf of AAs than HIV-positive women

Variable	Age	Education	Employment
Identification with Women	.04	.19	.30**
Identification with African Americans	.06	.15	.24*
Power Discontent	.10	.21*	.20*
Rejection of System Legitimacy	.25*	.22*	.17
Belief in need for social change on behalf of African Americans	.03	.26*	.27**
Total Critical Consciousness	.17	.29**	.25*
Perceived Gender Discrimination	.23*	.04	.17
Perceived Racial Discrimination	.22*	−.20	−.14

Note. *p < .05, **p < .01.

Critical Consciousness Dimension	Perceived Gender Discrimination	Perceived Racial Discrimination
Power Discontent	.28*	.27**
Rejection of System Legitimacy	.32**	.29**
Total Critical Consciousness	.31**	.38***

Note. *p < .05, **p < .01, ***p < .001.

(M = 3.83, SD = 1.09); t(94) = 2.33, p = .02). Age significantly related to higher RSL, PGD, and PRD. Education and employment significantly related to higher total and subscale CC scores. Table 1 displays correlations. Controlling for demographics, total CC, RSL, and Power Discontent were significantly related to higher PGD and PRD (see Table 2).
Conclusion: Among HIV-positive and HIV-negative African American women, older age, employment, and more education related to higher CC. HIV-negative women endorsed greater BNSC on behalf of AAs. Lower CC related to having fewer material resources and to having HIV itself, indicating that HIV interventions targeted to raise CC should also support access to resources such as education and employment. Higher CC related to higher PGD and PRD, suggesting that PGD and PRD may be externalized attributions of social inequity related to awareness of social oppression.

FRLBD02

Freedom to adhere: the complex relationship between democracy, wealth disparity, social capital and HIV medication adherence in adults living with HIV

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Background: Human rights approaches to managing HIV globally offer hope to vulnerable persons living with HIV (PLHIV), but structural challenges impede achievement of this goal. Little is known about the relationship between structural challenges and health promoting behavior among PLHIV. Our purpose was to describe associations between national level democracy ranking, HIV criminalization, perceived social capital, and antiretroviral therapy (ART) adherence among an international sample of PLHIV.
Methods: We recruited PLHIV at 16 sites in Canada, China, Namibia, Thailand, and the United States. Participants ($n = 2{,}149$) completed a cross-sectional survey of demographics, social capital, and ART adherence. Data were collected between August, 2009 and March, 2012. HIV criminalization was assessed by reviewing site specific state/provincial or national laws and policies. Five aspects of a country's democracy and freedom were obtained from the World Audit (www.worldaudit.org) international database. Data analysis included descriptive statistics, correlational and regression analyses.
Results: Participants were primarily male (68%) with an average age of approximately 47 years. Overall, mean 3-day self-reported ART adherence was 82.6%. Strong associations were observed between medication adherence and overall democracy ranking (0.66, $p < 0.01$) and degree of limitation to political rights (-0.68, $p < 0.01$). In the final model, overall democracy ranking; HIV criminalization (e.g., HIV specific enhancements for other crimes, HIV reporting laws), and number of HIV-related prosecutions; and total social capital score were significantly associated with self-reported ART adherence after controlling for site, gender, age, time since HIV diagnosis, and adherence self-efficacy ($F = 132.05$, $p < 0.01$, adjusted $R^2 = 0.56$).
Conclusion: Our results demonstrate the interconnectedness of the political, social and biomedical spheres in addressing PLHIV health care needs. Decontextualized biomedical advances and models of intervention efficacy are insufficient for future HIV management. Our results provide evidence for the importance of using intersectoral human rights based approaches to the management of HIV and its intersecting vulnerabilities globally.

WEPDD0106

When time doesn't heal: complicated grief among orphans in rural Zambia

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Background: Across sub-Saharan Africa, the HIV pandemic has orphaned millions of children. Evidence from high-income settings on complicated grief, which precipitates psychologically and medically debilitating symptoms, is growing. However research on how

orphans in rural Africa cope with their loss remains scarce. We report on prevalence and predictors of complicated grief among a rural Zambian cohort.

Methods: 376 rural Zambian orphans 10-18 years, (46.3% = female, 44.1% = orphaned by AIDS) were interviewed five times. Respondents were included if they had lost their parent(s) at least two years prior to the final survey. Validated scales from Western settings were translated and culturally adapted. Complicated grief was defined as experiencing above average levels of grief symptoms in the last four weeks. Cross-sectional data assessed prevalence of complicated grief and tested multiple regression models. Bootstrapping supported robust regression coefficients estimates.

Results: Approximately one-third (30.3%; n = 114) of these orphans reported complicated grief symptoms. Independent predictors ($p < 0.05$) included peer bullying, daily stress (e.g. excessive household chores, looking after ill family) poor primary-caregiver relations, within household discrimination, number of primary caregiver losses, and time since loss. Together these explain a fifth of the grief found two or more years after parental death ($R^2_{adj} = 0.21$). Other theoretical predictors of complicated grief including age, sex, sudden or violent death, living with the deceased parent or experiencing their prolonged illness prior to death were not associated.

Expected comorbidities with depression, suicidal thoughts, PTSD, and functional impairment in everyday tasks were confirmed, underscoring construct validity.

Conclusion: One-third of orphans exhibit debilitating grief two or more years after parent death. While these data highlight the centrality of community-based initiatives that sensitise caregivers of orphans to alleviate stigma and discrimination, additional research on children with complicated grief suggests benefits from more focussed interventions. Screening tools and effective counselling interventions adapted for this rural African population are urgently needed.

WEPDD0304

Community-level income inequality and HIV prevalence in injecting drug users in Thai Nguyen, Viet Nam

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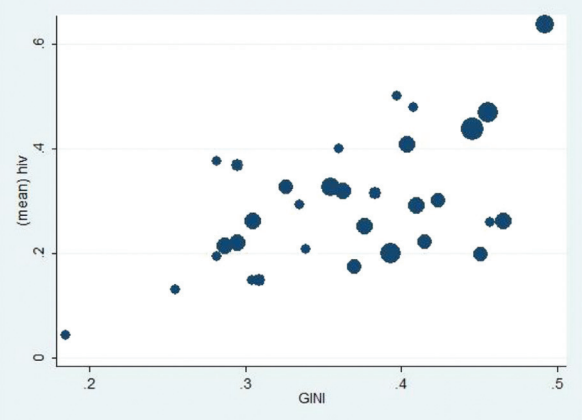
Background: There is mixed evidence on the association between HIV prevalence and poverty, but an increasing number of studies have found a positive association between HIV prevalence and income inequality, especially among countries with generalized epidemics. Less is known about the association between income inequality and HIV prevalence in concentrated epidemics, such as among injection drug users in Vietnam, or whether this association holds at the community level.

Methods: 1674 male IDUs, and 1349 community members (40% male) living in physical proximity, were recruited throughout Thai Nguyen. Both IDUs and community members completed cross-sectional surveys. IDUs were tested for HIV. The GINI coefficient for income inequality was calculated for each commune from the self-reported incomes of non-IDU community members. Scatterplots of the communes were then constructed to compare community-level income inequality and HIV prevalence among IDU.



HIV prevalence vs GINI scatterplot.

Predictor	Coefficient	p value	95% CI, lower	95% CI, upper
GINI coefficient (/10)	0.088	0.001	0.039	1.38
Total income, USD (*10)	−0.029	0.010	−0.050	−0.001
Urban (vs. rural)	−0.032	0.372	−0.104	0.040

Regression HIV prevalence GINI.

Results: The HIV prevalence among IDU in 32 communes in Thai Nguyen is 31.2% (4.3%–63.6%). There is a statistically significant positive correlation of 0.59 ($p < 0.001$) between HIV prevalence among IDU and the income inequality level of communes, weighted by population.

A regression of HIV prevalence as a function of GINI coefficient shows that an increase in GINI coefficient of 0.10 is independently associated with an 8.8% increase in HIV prevalence ($p = 0.001$), controlled for mean income of the commune.

Conclusion: To our knowledge, this is the first analysis demonstrating the association between income inequality and HIV prevalence at a community level, where social and cultural factors are relatively homogenous. It is also the first to demonstrate the association between income inequality among the general population and the HIV prevalence of a high risk group in a concentrated epidemic. The results suggest that the distribution of local economic resources is related to HIV infection in high risk groups.

WEPDD0305

Does the 'inverse equity hypothesis' explain how both poverty and wealth can be associated with HIV prevalence in sub-Saharan Africa?

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Background: A controversial aspect of HIV/AIDS epidemiology has been whether it is relative wealth or relative poverty that is a key driver of the epidemic in sub-Saharan Africa. We hypothesised that the social epidemiology of HIV in Africa is changing from a situation where more new infections are acquired by those of relatively high socioeconomic position (SEP), to one where those of relatively low SEP are at greater risk. We suggested this pattern is compatible with the inverse equity hypothesis from child heath that suggests those of higher socio-economic position benefit first from new health interventions.
Methods: We analysed Demographic and Health Survey (DHS) data from sub-Saharan African countries with two surveys measuring HIV prevalence or with a second expected in the next two years. We inspected the pattern of HIV prevalence by SEP, indicated by education status. In the countries with two surveys we calculated the percentage risk difference for HIV prevalence stratified by education and sex.
Results: Data were available for eleven countries: four with two surveys and seven expecting a second survey within two years. In the first/only survey, higher SEP is broadly associated with higher HIV prevalence. In countries with two surveys, HIV prevalence has risen in the no education group in all cases except among women from Lesotho, and fallen among those with secondary education in all cases except women from Malawi.
Conclusion: Available evidence strongly suggests that in the early phase of the epidemic HIV infections were concentrated among those of higher SEP. Our analysis supports the inverse equity hypothesis that new infections will increasingly concentrate in people of lower SEP because of lower access to public health interventions. Data that will be available within the next two years will further test this hypothesis. The inverse equity hypothesis has important implications for policy and resource allocation.

WEPDD0306

'There is hunger in my community': food security as a cyclically driving force in sex work in Swaziland

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Background: Swaziland has the highest HIV prevalence in the world. Many Swazis are chronically food insecure. Globally and within southern Africa, food insecurity has been linked to high-risk sexual behaviors, difficulty with antiretroviral (ARV) adherence, higher rates of mother-to-child transmission, and more rapid HIV progression.
Methods: In-depth interviews were conducted with 20 HIV+ female sex workers (SWs) in Swaziland. Interviews took place in four different regions of the country, and were designed to learn about context, experiences, and health service needs amongst Swazi sex workers. Interviews were coded in Atlas.ti.
Results: Hunger was a consistent, major theme in our informants' lives. Women cited their own hunger or that of their children as the impetus to begin sex work, and as a primary force in continuing to sell sex. Nearly all informants requested food-related services (parcels, grants, or education) when asked about desired programming. Good nutrition and the ability to eat ''healthy'' or ''balanced'' foods was seen as an important means of controlling HIV disease progression. Informants discussed difficulty in adhering to ARVs when faced with taking pills on an empty stomach. Across interviews, discussions of CD4 counts and ARV adherence intertwined with discussions of poverty, hunger and healthy foods. Food security and food sharing were also seen as important expressions of social networks, which many SWs felt they had trouble accessing as a result of both their HIV status and profession.
Conclusion: Informants described a risk cycle of hunger driving sex work driving HIV infection. The two latter in turn drive an increased need for 'healthy foods' and an alienation from social networks which offer material and emotional support against hunger. Poverty and food security are concrete, vital issues in the lives of SWs living with HIV in Swaziland, issues that cannot be ignored when conceptualizing risk or designing services.

D13 - Migration, social movements and population dislocation: mobile and immigrant populations (including people living with HIV)

THPDD0104

Increasing HIV testing among African refugees in Africa: intervening in the daily survival cycle to encourage priority shifting

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Background: Despite recent efforts to increase HIV testing in sub-Saharan Africa, poor testing availability and limited uptake in refugee populations persists. Refugees require additional focused efforts because many have suffered human rights violations putting them at increased HIV- risk. Our objective was to qualitatively study refugees' utilization of services in a refugee settlement where HIV/AIDS services are available.
Methods: Open-ended interviews were conducted with HIV-infected refugees living in Nakivale Refugee Settlement in southwest Uganda. Interviews focused on: (1) accessibility of HIV/AIDS-related testing and care; (2) experiences of ART adherence; and (3) perspectives on how to improve access to testing and care, adherence, and retention. Data were collected at the Nakivale HIV/AIDS Clinic from March to July of 2011 and included patient (N = 73) and staff (N = 4) interviews, and observations of clinical activities. For this analysis, category construction methods were used to analyze the data relating to HIV testing.
Results: Refugees, because of competing daily hardships, do not prioritize HIV testing. Refugees living with HIV/AIDS often present to clinic for testing and initial evaluation with very advanced disease. Reported barriers to HIV testing for Nakivale refugees reflected in the data include: difficulty physically accessing testing facilities; fear of stigma associated with HIV+ diagnosis; low self-perceived risk of disease, and lack of knowledge regarding the potential benefits of medical therapy. Given the competing priorities for survival, HIV tests are not obtained until special circumstances lead to temporary priority shifting.
Conclusion: Understanding how HIV testing fits among the survival priorities of refugees will help in designing effective interventions. To increase HIV testing for refugees, efforts should aim to intervene

in the survival cycle to encourage priority-shifting. Intervention approaches may include improving accessibility, providing incentives and increasing HIV-related education.

D14 - Family structures, kinship, and social safety nets for widows, orphans and other vulnerable groups

MOAD0305

The psychosocial impact of HIV on the siblings of infected children

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Background: There is paucity of published data on ways in which HIV in children receiving Highly Active Antiretroviral Therapy (HAART) impacts other children living within the same households. We investigated the psychosocial impact of HIV on the siblings of HIV infected children.
Methods: Data were collected using pre-tested interviewer administered questionnaires and focus group discussions. Twelve 12 HIV treatment sites which account for over 90% of children receiving HAART in Botswana participated. HIV affected children were defined as those aged 6-18 years who were living in the same household as documented HIV-infected children. Ethical approval was obtained from the Botswana Ministry of Health and Baylor College of Medicine.
Results: Of the 258 HIV affected children, 251 (97.3%) were attending school; 206 (79.8%) and 52 (20.2%) had been fully or partially disclosed to respectively. 153 (59.3%) were siblings of the HIV-infected children, 79 (30.6%) were cousins and 26 (10%) were related in other ways. 223 (86.4%) had lived together with the HIV-infected children for longer than 5 years. 11 (4.3%) said that living with an HIV-infected child made them feel different because of stigma, playing caregiver roles, fear of contracting HIV, and feeling sad. 65 (25.4%) faced various problems, including: worrying about the HIV infected child; receiving less attention from caregivers; and experiencing stress due to adherence-related issues, stigma, and family disharmony. They coped by crying, talking to an adult relative, talking to the HIV-infected child or isolating themselves from others. 230 (89%) felt sad or scared/anxious whenever the HIV-infected child was sick. 254 (98.4%) reported playing caregiver roles, such as reminding or giving medications to the infected children.
Conclusion: Although HIV affected children are not the prime targets of paediatric HIV interventions, they face many psychosocial challenges. Programs and policies aimed at ameliorating the impact of HIV should take these findings into account.

WEPDD0104

Care and support by households and extended families in the era of HIV treatment: responses to HIV and AIDS in rural South Africa

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Background: The last century's economic and political upheavals are widely believed to have reduced African and particularly South African families' cohesion and ability to function collectively. AIDS has compounded this threat to the resilience of households and wider family networks. We explore the resilience of families to AIDS and demonstrate that theories of social capital, family obligation and reciprocity can help to explain access to familial support in rural KwaZulu-Natal, South Africa.
Methods: Data were collected over a 7-month period from a small sample of households dealing with AIDS illness or death using in-depth interviews and participant observation. Retrospective and prospective data about households' experiences were analysed using framework analysis and the development of household case studies for comparisons.
Results: Affected households and individuals drew on family relationships for financial and material support and physical care. Close family members, often sharing a common sense of home and family, were the most important source of care and support. Their greatest motivation was a strong moral obligation to family, associated with norms of familial assistance. Support from other family varied depending on whether levels of mutual trust, investment in social capital and physical proximity, enabled negotiated reciprocal exchange. Families suffering from conflicting obligations, conflict, severe poverty or extreme illness were more likely to be excluded from these networks and suffered because of their inability to secure familial support.
Conclusion: Despite examples of exclusion, we demonstrate that social capital, reciprocity and a sense of family obligation persist in families responding to the impacts of AIDS, contributing to them maintaining cohesion, collective functioning and ultimately ensuring their resilience. Interventions to support the treatment, care and well-being of sick individuals need the flexibility to be able to both support families in their efforts to provide these services and address the needs of people without access to supportive family networks.

WEPDD0105

Family network proportion and HIV risk among black men who have sex with men

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Background: Black men who have sex with men (BMSM) have the highest rates of HIV in the United States. Despite increased attention to social and sexual networks as a framework for biomedical intervention, the role of family in these networks and their relationship to HIV prevention has received limited attention.
Methods: A network sample of BMSM and their family members (N = 380) was generated through respondent driven sampling of BMSM and elicitation of their personal networks. The proportion of personal networks that were family was calculated and weighted logistic regression was used to assess the relationship between this

Network Proportion*	N(%)	UAI AOR (95% CI)	Sex-drug use AOR (95% CI)	Group Sex AOR (95% CI)	Discourages UAI AOR (95% CI)	Discourages sex-drug use AOR (95% CI)	Discourages group sex AOR (95% CI)
Family Network (%)							
0%	111 (54.7)	ref	ref	ref	ref	ref	ref
20–39%	40 (19.7)	1.48 (0.67–3.27)	0.51 (0.24–1.05)†	0.51 (0.14–1.84)	1.05 (0.34–3.20)	0.89 (0.42–1.90)	2.12 (0.88–5.11)†
>40%	52 (25.6)	0.68 (0.34–1.36)	0.38 (0.17–0.87)‡	0.25 (0.10–0.67)§	1.66 (0.55–4.99)	2.18 (1.35–3.54)§	3.83 (1.56–9.43)§
Male Family Network							
0%	150 (73.9)	ref	ref	ref	ref	ref	ref
20–39%	33 (16.3)	1.26 (0.52–3.03)	0.55 (0.25–1.22)	0.53 (0.14–2.02)	1.07 (0.34–3.39)	1.37 (0.74–2.55)	1.33 (0.57–3.09)
>40%	20 (9.9)	0.37 (0.11–1.21)†	0.26 (0.06–1.22)†	‖	1.54 (0.39–6.10)	2.98 (1.17–7.61)‡	3.37 (0.95–11.9)†

Black men who have sex with men (BMSM) family netw.
*Proportion of close network members who are family. This is further limited to male family network proportion.
Models are weighted and control for age, education, employment status, HIV status, network size and site of participant recruitment.
†p <0.1.
‡p <0.05.
§p <0.01.
‖model doesn't converge.

proportion and unprotected anal intercourse (UAI), sex-drug use (SDU) and group sex (GS); as well as intravention efforts to discourage these risk behaviors among their MSM social networks.
Results: 45.3% of respondents listed at least one family member in their close personal network. Greater family network proportion (having 2 or more family members in the close network) was associated with less SDU [adjusted odds ratio (AOR 0.38(0.17–0.87))] and participation in GS (AOR 0.25(0.10–0.67)). For intravention, BMSM with greater family proportion were more likely to discourage GS (AOR 3.83(1.56–9.43)) and SDU (AOR 2.18(1.35–3.54)) among their MSM friend network. Moreover, increased male family network proportion was associated with lower HIV-risk and greater intravention than increased female network proportion.
Conclusion: Nearly half of BMSM have a close family member with whom they share personal information. Male family networks have received little attention previously. Combination prevention interventions might be made more potent if family networks, an often overlooked component of personal networks, were incorporated.

D15 - Violence and conflict: political, gender, social, structural, interpersonal and family-based

WEAD0103

Gender disparities and inequitable gender norms: implications for HIV prevention programming in Zambia

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Background: In Zambia, HIV prevalence in women (15–24) is twice that of same aged men. A gender perspective is critical for designing interventions that recognize gendered-risks to HIV. The Zambia-led Prevention Initiative (ZPI) is initiating community-level interventions through targeted approaches that address gender disparities and power imbalances. The baseline survey, part of the ZPI evaluation plan, identifies key areas for targeting.
Methods: A total of 1,060 men (aged 15–59) and 1,700 women (aged 15–49) participated in a survey conducted in 4 provinces. Provinces and districts were purposively selected; households and individuals were randomly selected. The survey included questions related to gender-based violence, rape myths that blame women for rape (i.e., *If a woman doesn't physically fight back, you can't really say it was rape*), and attitudes towards gender norms (measured using the Gender Equitable Men scale) and contraception.
Results: 68% of females ever experienced either or both physical (35%) or sexual abuse (39%); only 15% sought help. 62% of all respondents endorsed at least 1 of 4 rape myths and 37% supported inequitable gender norms. Those with 2+ partners (46%) in the last 12 months were more likely to support inequitable norms than those with 1 partner (39%) or no partners (26%) ($p < 0.001$). Nearly 20% of men think that contraception is women's business; 32% think women who use contraception are promiscuous. When women were asked about their last birth, 50% indicated they wanted to wait or did not want the pregnancy at all. Unintended pregnancies were highest among unmarried younger females (77–85%) compared to married women aged 25+ (50%).
Conclusion: Inequitable gender norms are pervasive and may affect women's vulnerability to HIV and gender-based violence. ZPI is addressing power imbalances between men and women that contribute to HIV risk and focusing on male norms and behaviors that contribute to gender-based violence.

WEAD0104

Abuse and mortality in women with and at risk for HIV

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Background: Gender based violence (GBV) is a human rights violation and public health problem impacting women's health globally and is interconnected with the HIV epidemic. GBV is associated with reduced adherence, poor treatment outcomes, and mortality in women with HIV.
Methods: Using marginal structural survival models (MSMs) we evaluated the effect of sexual, physical, or emotional abuse in the past 12 months on mortality among 2,222 (1,642 HIV-infected and 580 seronegative) participants in the Women's Interagency HIV Study (WIHS), an ongoing cohort study. Mortality data were confirmed by National Death Index Plus registry match. MSMs were used to estimate the mortality hazard ratio and survival curves from baseline (1994/95 or 2001/02) through 2007, controlling for sociodemographic, behavioral, and clinical factors.
Results: Overall, 437 (19.7%) women died between 1994 and 2007 and had abuse data available in the year prior to death. Compared to survivors, women who died were more likely to be older, HIV-infected and not treated with highly active antiretroviral therapy; have lower nadir and current CD4; to have engaged in transactional sex and used drugs and tobacco; be depressed, report lower cognitive function, and have a history of pre-study abuse including childhood sexual abuse. Accounting for these fixed and time-varying confounders, recent abuse was independently associated with all cause mortality (HR 1.54; CI 1.18, 2.02); findings remained significant in analyses stratified by pre-baseline abuse history, and by HIV serostatus. This effect was greater in uninfected (HR 4.39; CI 1.78, 10.82) than HIV infected women (HR 1.42; CI 1.07, 1.89).
Conclusion: Mortality risk is significantly elevated for women exposed to GBV and appreciable even in the context of a high death rate due to HIV infection. Interventions to address GBV should remain a public health priority. Further research is needed to identify possible biologic pathways underlying abuse related sequelae.

WEAD0106

HIV risk behaviour among victims and perpetrators of male-on-male sexual violence in South Africa: results from a population-based survey

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Background: Links between experience of sexual violence and HIV risk behavior among women are well established, as is the fact that male perpetrators of sexual violence against women report high levels of risk behavior. Links between sexual violence victimization and HIV risk have also been reported for MSM. However, little data has explored links between male-on-male sexual violence and HIV risk among men in the general population, and almost no such data exists from developing countries.
Methods: We conducted a population-based household survey of 1,738 men aged 18–45 across two provinces in South Africa. Information on sexual behavior, and experience and perpetration of male-on-male sexual violence was collected using audio-enhanced personal digital assistants.

	Male SV Victims	Non-Victims	P-Value
2+ casual partners in the past year	55.9%	40.6%	<.0001
Always use condoms	29.2%	38.8%	0.03
Transactional sex with a woman ever	80.3%	62.0%	<.0001
Sex with a female sex worker ever	29.7%	18.7%	<.0001
Weekly binge drinking	20.1%	12.1%	0.01
Perpetration of physical violence against a female intimate partner	58.8%	40.9%	<.0001
Perpetration of sexual violence against a female intimate partner	51.3%	25.4%	<.0001
Perpetration of sexual violence against another man	5.8%	2.7%	0.02
Self-report STI Symptoms	63.8%	41.5%	<.0001

Risky behavior: Male victims of sexual violence.

	Male SV Perp	Non-Perp	P-Value
2+ casual partners in the past year	68.9%	41.0%	<.0001
Always use condoms	28.6%	38.3%	0.05
Transactional sex with a woman	88.0%	63.8%	<.0001
Sex with a female sex worker	43.5%	19.0%	<.0001
Weekly binge drinking	18.4%	12.6%	0.19
Perpetration of physical violence against a female intimate partner	82.2%	41.2%	<.0001
Perpetration of sexual violence against a female intimate partner	88.0%	25.7%	<.0001
Self-report STI Symptoms	65.3%	42.8%	0.005

Results: 9.6% (95% CI: 8.2–11.3) of men in the general population reported any sexual violence victimization by another man; 3.4% (95% CI: 2.7–4.3) reported anal/oral rape. 3.0% (95% CI: 2.2–4.0) of men reported perpetrating any male-on-male sexual violence; 1.9% (95% CI: 1.3–2.7) reported anal/oral raping. Men who reported any sexual victimization reported more sexual partners, lower condom use, increased participation in economically motivated sex with women, increased alcohol consumption, and increased perpetration of violence against both female intimate partners and against other men, and more STI symptoms.

Similar increased risks were reported by men who perpetrated male on male sexual violence, with the exception of alcohol use.

Conclusion: Male-on-male sexual violence victimization and perpetration are common among men in the general population in South Africa and are associated with increased HIV risk behavior, as well as increased violence against women. Efforts to address the links between violence and HIV in South Africa must be extended to include prevention of male-on-male sexual violence, comprehensive support for male survivors of such violence, and efforts to address male-on-male perpetration.

MOPDD0205

Alarming rates of occupational violence and associated HIV risks among young female sex workers in post-conflict northern Uganda

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Background: As northern Uganda emerges from decades of war and displacement, a growing number of young women engage in sex work (SW) for survival. With the escalating rates of HIV, the normalization of violence in northern Uganda creates a high occupational risk environment for young SWs. We aim to investigate the prevalence of client violence and associations with HIV risks among a cohort of SWs in Gulu, northern Uganda.
Methods: We conducted an analysis of baseline data (questionnaire and HIV screening) of SWs enrolled in a prospective cohort. Young women ($\geq$14 years) who exchanged sex for resources in the last 30 days were recruited through ethnographic mapping, time-location sampling and peer outreach (current SWs) to SW venues. Bivariate and multivariate logistic regression modeled associations with physical and/or sexual violence by clients among SWs.
Results: Of 400 SWs, the median age was 21 (IQR: 19–25). The majority were Acholi (92.3%) with 66.5% (266) having formerly lived in displacement camps, 34.0% (136) living with HIV. In the last six months, 83.7% (335) had experienced violence by clients: 69.0% (276) forced unsafe sex, 28.8% (115) stabbed, and 18.8% (75) raped. In multivariate logistic regression, client violence was independently associated with rushing negotiations with a client due to police presence (a-OR: 3.58, 95% CI: 1.68–7.64), inconsistent condom use by regular and one time clients (a-OR: 3.53, 95% CI: 1.89–6.86), and older age (a-OR:1.08, 95% CI: 1.01–1.17).
Conclusion: The SW risk environment in northern Uganda is characterized by extreme occupational violence directly associated with a 3.5-fold increase risk of non-condom use. The criminalization of sex work in Uganda contributes to 3.5-fold increased odds of client violence from rushing negotiation due to police presence. Structural interventions (decriminalization and enforcement-based approaches) must be integrated into the HIV response, both as a human rights and public health imperative.

D16 - HIV-related stigma, layered stigmas and marginalized identities

WEAD0501

Success! Interventions that work to reduce HIV stigma and discrimination in communities: results of an evaluation study in Thailand

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Background: The Population and Community Development Association implemented the Positive Partnership Program (PPP), which pairs HIV positive and HIV negative individuals and provided pairs loans for income generating businesses. Pairs also collaborated to disseminate HIV/AIDS knowledge to their community, with the objective of reducing community-level stigma and discrimination. Interventions included monthly HIV campaign events, funfairs, and production of three IEC materials (radio dramas, posters, and slips of paper with HIV messaging).

Characteristics	Baseline (N = 560)	Endline (N = 560)
GENDER		
- Female	58.6	58.8
- Male	41.4	41.3
AGE		
- 15–29	22.5	20.0
- 30–39	17.9	19.5
- 40–49	23.0	23.2
- 50+	37.1	37.3

Community Respondent Profile, Baseline and Endline.

The study goal is to evaluate the effect of interventions on reducing community-level stigma.
Methods: Randomly selected households and individuals were interviewed at baseline (N = 560) and endline (N = 560). We conducted t-tests on three stigma domains: fear of HIV infection through daily activity; shame associated with having HIV; and blame towards people with HIV. We developed three scales using confirmatory factor analysis and regressed each stigma scale on demographic characteristics, HIV knowledge, and exposure to intervention activities.

	B Coefficient	(95% Confidence Interval)
CHARACTERISTICS		
- Female (ref = male)	1.37	(−0.36: 3.10)
- Personally know a PLHIV (ref = does not know)	−2.42	(−4.34: −0.51)
- 4–9 correct HIV knowledge responses (ref = 0–3 correct responses)	−4.71	(−6.35: −3.07)
INTERVENTION EXPOSURES		
- None or one	ref	
- Two	−0.98	(−2.95: 0.98)
- Campaign/VDB or PPP club/IEC	−2.86	(−6.82: 1.10)
- Campaign/Funfair/IEC	−4.18	(−7.74: −0.63)
- Four	−1.70	(−6.44: 3.04)

Results of Linear Regression on Fear-Driven Stigma.

Results: No differences were observed in respondent characteristics at baseline and endline.
Significant changes were observed in HIV transmission knowledge and fear of HIV infection from baseline to endline.

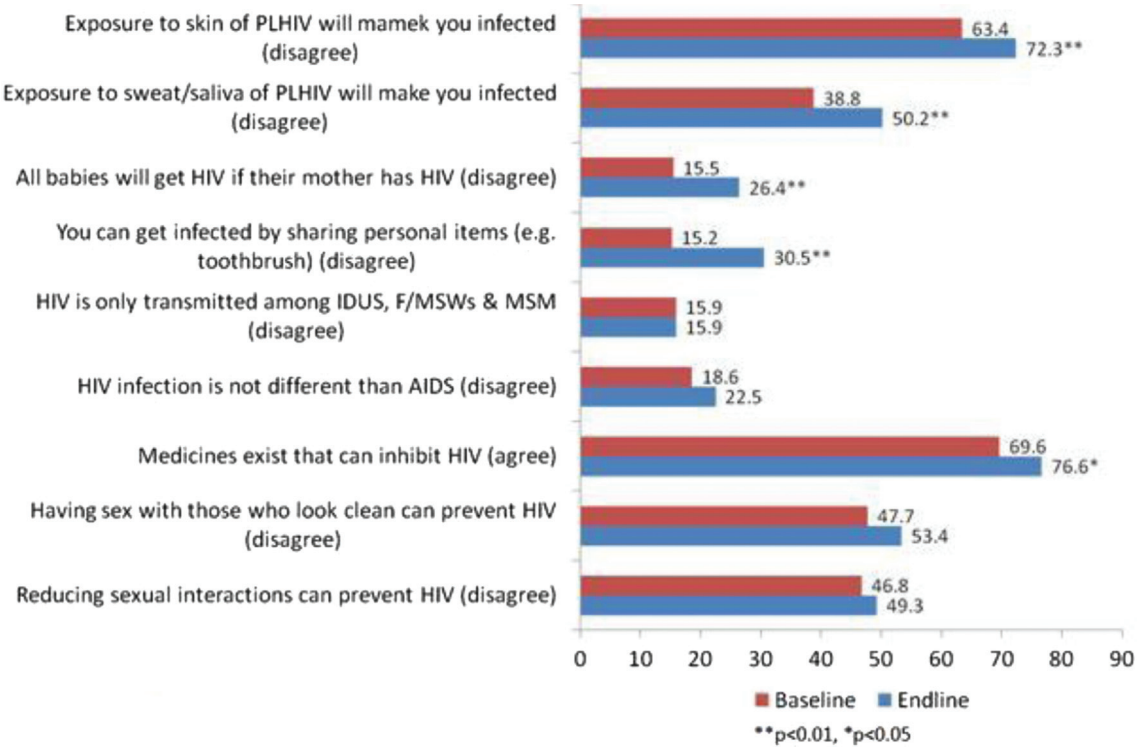

Figure 1. Change of HIV Knowledge Among Community Members.

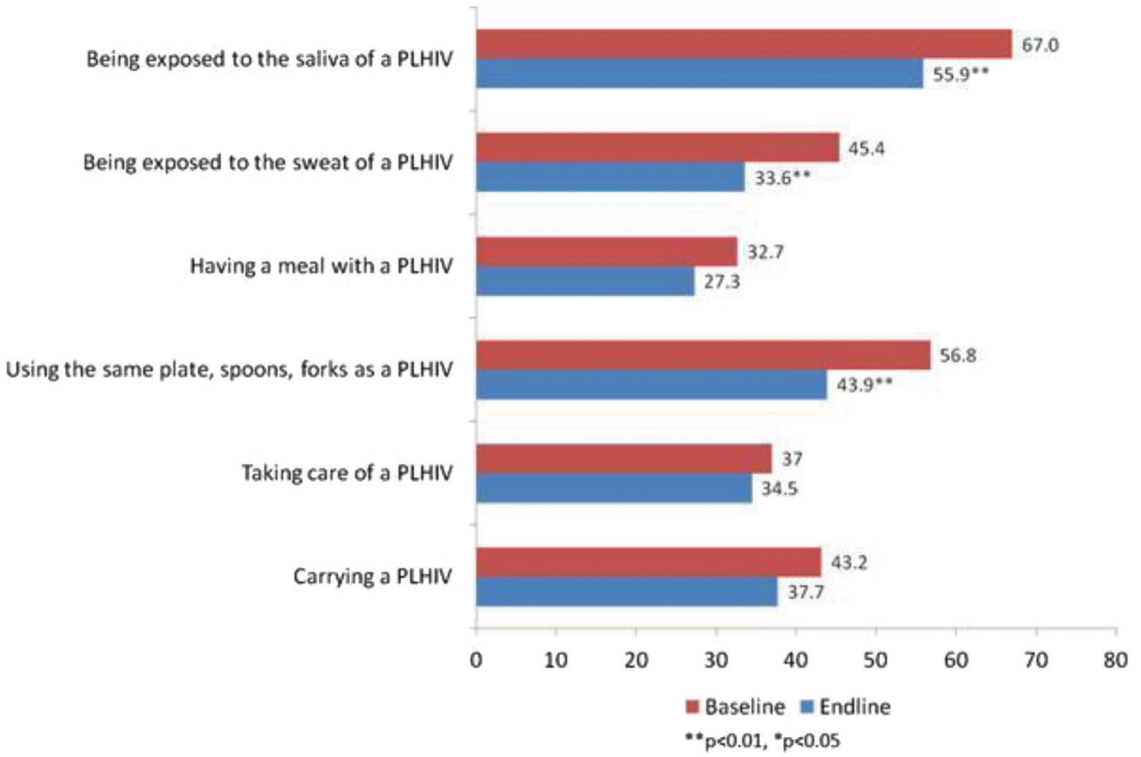

Figure 2. Change in Fear of HIV Transmission Among Community Members.

Respondents exposed to the monthly campaign, funfair and IEC materials were less likely to exhibit stigma along the dimensions of fear (4.2 points lower on average compared to respondents exposed to none or only one intervention; 95% CI: −7.4 to −0.6) and shame (4.7 points lower; 95% CI: −8.4 to −1.1), net of demographic controls and baseline levels of stigma. Personally knowing someone with HIV is associated with low fear and shame, and females are less likely to possess attitudes of shame compared to males.

	B Coefficient	(95% Confidence Interval)
CHARACTERISTICS		
- Female (ref = male)	−2.17	(−3.92: −0.41)
- Personally know a PLHIV (ref = does not know)	−1.78	(−3.72: 0.15)
- 4 to 9 correct HIV knowledge responses (ref = 0–3 correct responses)	−3.73	(−5.40: −2.06)
INTERVENTION EXPOSURES		
- None or one	ref	
- Two	−0.88	(−2.98: 1.14)
- Funfair/Campaign/ VDB or PPP club	0.60	(−7.84: 9.04)
- Campaign/VDB or PPP/ IEC	−1.11	(−5.13: 2.90)
- Funfair/Campaign/IEC	−4.73	(−8.35: −1.11)
- Four	−5.76	(−10.59: −0.94)

Results of Linear Regression on Shame Stigma.

Conclusion: Results suggest that a combination of three interventions is critical in shifting community-level stigma in Thailand: monthly campaigns, funfairs, and exposure to IEC materials. Knowing which interventions to invest in for maximum impact is crucial for country-wide expansion and scale-up of interventions.

WEAD0503

Stigma and serostatus disclosure within partnerships in four African countries: a mixed methods approach

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Background: Disclosure of seropositivity within a partnership is a pre-requisite for couples counseling and the tailoring of prevention interventions, such as the use of treatment as prevention. In this study, we used a mixed methods approach to describe the rates and determinants of disclosure within partnerships.

Methods: The Multi-Country African Testing and Counseling for HIV study was a cross-sectional study designed to compare clients' experiences of HIV testing services in Burkina Faso, Kenya, Malawi, and Uganda. Face-to-face questionnaires were administered and included multiple-choice and open-ended questions. Our analysis focuses on a sub-set of married/cohabiting participants reporting awareness of their seropositive status. We explore the influence of stigma through a multilevel logistic regression model.

Results: Of the 477 participants, 85.3% [95%CI 82.1–88.5] reported ever disclosing their serostatus. However, only 52.6% [95%CI 48.1–57.1] reported disclosing to their partners. We observed a significant variation between countries-participants in Kenya and Burkina Faso disclose at similar levels, while lower levels of disclosure were reported in Malawi and Uganda. Analysis of the open-ended responses among HIV positives who did divorce, revealed that disclosure can create serious rifts with partners. Perceived community stigma was approximately reported at same levels across the four countries, but levels of self-stigma differed. Patients were more likely to report self-stigma in Burkina Faso, while they were the least likely to report self-stigma in Malawi. However, none of our stigma indicators was associated with disclosure. At individual level, those with a lower education and member of a support group disclose less than the rest.

Conclusion: Seropositive patients tend to disclose to people in their support network. However, disclosure within the partnership is less common. We found no relationship between stigma and disclosure to partners. A tailored disclosure support and advice will be essential for programs looking at implementing treatment as prevention in serodiscordant couples.

WEAD0504

Internal stigma among HIV-positive adults in Ethiopia

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Background: Internal stigma or self-stigmatization is a critical problem among PLHIV as it usually leads to low self-esteem, a sense of worthlessness and depression, etc. The objective of this study is to assess the level of internal stigma among HIV-positive adults in Ethiopia

Methods: This study utilized a nationally representative two-stage cluster sampling method to collect data from 3360 PLHIV (68% of them women) sample cases.

Results: More than half of the PLHIV blamed themselves and reported to have low self-esteem. More than 40 percent of the PLHIV feel ashamed and guilty because of their HIV status. PLHIV residing in rural areas have higher likelihood of feeling guilty than PLHIV residing in urban areas. One out of five of the PLHIV felt suicidal, in connection with their HIV positive status. Abandoning aspirations/life goals, in connection to their HIV-positive status was reported by substantial proportion of PLHIV. For instance, the proportion of PLHIV who took the decision not to have (any more) children was 59 percent,), not to have sex was 40 percent and not to get married 37 percent. Significantly higher proportion of female PLHIV were noted to have taken all these decisions compared to males (P = 0.000). Almost one-quarter of PLHIV revealed that they have isolated themselves from their family and/or friends as a result of their being HIV-positive. Nearly equal proportion of PLHIV have decided to withdraw from their education/training and stopped working (12 percent) because of their HIV-status.

Conclusion: Internal stigma and its negative consequences are very common among PLHIV in Ethiopia. This may deter PLHIV from active participation in socio-economic activities of the community out of a fear of having their status revealed or being discriminated against. In

order to address the problem, peer-to-peer support groups, skills building, network building, counselling, training, should be given attention.

WEPDD0103

Risk and protective factors for depression symptoms among children affected by HIV/AIDS in rural China: a structural equation modeling analysis

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Background: Previous research has revealed a negative impact of orphanhood and HIV-related stigma on the psychological well-being of children affected by HIV/AIDS. Little is known about psychological protective factors that can mitigate the effect of orphanhood and HIV-related stigma on psychological well-being. This research examines the relationships among several risk and protective factors for depression symptoms using structural equation modeling.
Methods: Cross-sectional data were collected from 755 AIDS orphans and 466 children of HIV-positive parents aged 6–18 years in 2006–2007 in rural central China. Participants reported their experiences of traumatic events, perceived HIV-related stigma, perceived social support, future orientation, trusting relationships with current caregivers, and depression symptoms.
Results: We found that the experience of traumatic events and HIV-related stigma had a direct contributory effect on depression among children affected by HIV/AIDS. Trusting relationships together with future orientation and perceived social support mediated the effects of traumatic events and HIV-related stigma on depression. The final model demonstrated a dynamic interplay among future orientation, perceived social support and trusting relationships. Trusting relationships was the most proximate protective factor for depression. Perceived social support and future orientation were positively related to trusting relationships.
Conclusion: We conclude that perceived social support, trusting relationships, and future orientation offer multiple levels of protection that can mitigate the effect of traumatic events and HIV-related stigma on depression. Trusting relationships with caregivers provides the most immediate source of psychological support. Future prevention interventions seeking to improve psychological well-being among children affected by HIV/AIDS should attend to these factors.

D17 - Racism and other forms of social exclusion

WEAD0502

Racism, sexism, HIV-related stigma and quality of life among HIV-positive black African Caribbean women in Ontario, Canada

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Background: The deleterious impacts of racism, sexism and HIV-related stigma on well-being are widely documented, yet most research has examined these forms of stigma separately. Rising HIV infection rates among Black African Caribbean women in Canada underscore the importance of understanding factors associated with quality of life (QOL). We used a feminist intersectional approach to examine the influence of racism, sexism and HIV-related stigma on QOL among HIV-positive Black African Caribbean women in Ontario, Canada.
Methods: We conducted a community-based multi-method study triangulating qualitative and quantitative methods. Building on qualitative findings regarding stigma from 15 focus groups with HIV-positive women (n = 104) in Ontario, we implemented a cross-sectional survey with HIV-positive Black African Caribbean women in three Ontario cities. Multiple linear regression (MLR) analyses were conducted to measure associations between independent (block 1: racism, sexism, HIV-related stigma; block 2: resilient coping, social support) and dependent (total QOL; QOL domains: physical; psychological; level of independence; social relationships; environment; personal beliefs) variables.
Results: Survey participants (n = 163; mean age = 40.7 years, SD = 8.8) reported frequent/everyday experiences of racism (29.4%) and sexism (22.6%) and high HIV-related stigma (disclosure: 84.4%; personalized: 54.7%; public attitudes 40.4%; negative self-image: 27.6%). In MLR analyses, racism, sexism and HIV-related stigma were associated with lower QOL scores (total; psychological; level of independence; social relationships; environment; personal beliefs). Resilient coping and social support accounted for a significant variance of higher QOL scores (total; psychological; social relationships; environment) after controlling for the effects of racism, sexism and HIV-related stigma.
Conclusion: HIV-positive Black African Caribbean women experience pervasive racism, sexism and HIV-related stigma associated with reduced QOL; social support and resilient coping were associated with higher QOL. Interventions tailored for HIV-positive Black African Caribbean women should aim to strengthen protective factors, such as resilient coping and social support, and challenge stigma and discrimination associated with HIV, race/ethnicity and gender.

D21 - Sex and gender

TUAD0301

Condom attitudes of female entertainment workers in Metro Manila, the Philippines: setting, peer influence and social support

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Background: Female bar/spa workers in the Philippines face continued risk of sexually transmitted infections (STIs), yet Philippine Congress recently rejected a Reproductive Health Bill. Little is known about differences in condom attitudes among workers in different

venues and the effects of social support on their condom attitudes. This study assesses socio-structural and individual factors associated with condom attitudes among female bar/spa workers in the Greater Metro Manila Area, Philippines.

Methods: Female bar/spa workers (N = 498) from 54 venues underwent interview-led surveys as part of a larger intervention study. Multiple hierarchical linear regression analyses, adjusted for individuals nested within venues, were conducted to assess socio-behavioral (age, education, length of time employed as an entertainer, alcohol, and substance use) and socio-structural (venue type, manager support, peer support, establishment condom rule, condom availability at establishment, and social support) factors associated with condom attitudes.

Results: Participants were aged 18–60 years. Over 90% indicated using condoms every time while having vaginal and anal sex could lower their chances of contracting HIV/AIDS. However, nearly 70% considered condoms too expensive to use regularly. Over 60% said condom usage depended on males in their culture. Over half thought condoms caused pain or discomfort. A like proportion indicated that condom usage never or only occasionally went against their religion. In multivariate analyses, positive attitudes toward condoms were associated with co-worker peer support (0.35, $p < .01$) and working in spa/saunas vs. night club/bars (1.34, $p < .01$). Total social support increased the effect of manager support on condom attitudes (0.02, $p < .02$). Poorer condom attitudes were associated with substance use (−9.66, $p < .001$).

Conclusion: Socio-structural workplace factors (peer support, social support, and venue type) over individual factors (excepting substance use) influenced condom attitudes. Attention to socio-structural interventions may be necessary to improve condom attitudes among female bar and spa workers, especially those involved in sex work.

D22 - Age

THPDD0201

Getting older while living with HIV in the United States

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Background: In the third decade of the HIV epidemic in the United States, the population of persons living with HIV/AIDS (PLHIV) has aged. While 50 and older was initially created as the "older age" category, that cut-point is no longer informative. Understanding the health status of different adult age-groups of PLHIV will assist in providing the types of healthcare services needed by an aging population.

Methods: A convenience sample of 2,182 PLHIV was enrolled from HIV clinics and service organizations in the United States, Canada, Puerto Rico, Namibia, China, and Thailand from February 2010 to July, 2011. This subanalysis of U.S. participants (N = 1293) assessed differences in PLHIV in three adult age groups: 40–49 (n = 687, 53%); 50–59 (514, 40%); and 60 and older (n = 92, 7%).

Results: Participants' mean ages were 44.7, 53.4, & 63.9 years; 71%, 73% & 79% male, no differences in race/ethnicity, 64%, 71% & 87% reported other medical conditions, 81%, 82% & 91% were taking HIV medications, and 52%, 46% & 40% were diagnosed with AIDS. No differences were found in social capital (measured by the Social Capital scale, Onyx & Bullen) or physical functioning (measured by SF-12); there were significant differences in mental functioning (measured by SF-12) in that mental health improved with age (means = 43.6, 45.4, & 50.8), depressive symptoms (measured on CES-D) declined with age (means = 22.2, 20.5, & 14.8) and treatment self-efficacy (measured on the HIV-ASES) improved with age (means = 91.3, 96.8, & 100.5).

Conclusion: The oldest group of PLHIV has better mental health although they are living with multiple comorbidities, perhaps because they view themselves as survivors. Although fewer older persons have AIDS, 91% are taking HIV medications and their treatment self-efficacy is significantly higher than the younger age group ($F = 9.091$, $p = .000$). It might be time to reexamine the possibility of creating peer groups between middle and older aged PLHIV.

THPDD0205

HIV risk and recent sexual behaviour of older adults in rural South Africa

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Background: In 2010–2011 we conducted a HIV and non-communicable disease (NCD) prevalence and risk behavior survey ("Ha Nakekela" study) within the Agincourt Health and Demographic Surveillance System site (AHDSS) in Mpumalanga Province, South Africa (Menken P.I). We found surprisingly high levels of HIV prevalence at older ages, given in Table 1.

	40–49	50–59	60–69	70–79	80–89
Women	34%	25.5%	12.4%	8%	1%
Men	34%	33%	17%	6%	1%

HIV Prevalence of Older Adults in Agincourt, SA.

Older adults are either contracting HIV at earlier ages and surviving for a long period or they are contracting HIV at older ages. In this study we examine the sexual behavior and HIV risk for older adults in the two years previous to the study visit.

Methods: The Ha Nakekela study was based on a probability sample of 7,428 individuals aged 15 years and above. We analyze the sexual behavior survey for the 2,051 adults over age 39 in the study to investigate the prevalence of sexual behavior risk factors for acquiring HIV.

Results: We find evidence suggesting that older adults are at risk of acquiring HIV through unprotected sex and by having multiple partners. Fifteen percent of men over 39 report multiple partners, the majority of whom are significantly younger. Very few men (9.5%) and women (11.5%) reported condom use at last sex. We also find that older adults are not likely to know their or their partner's HIV status: only 5% of sexually active older adults said they knew the HIV status of their sexual partner. Of those that are HIV positive, 31% had never been tested and only 40% of those that had ever tested reported being on ART.

Conclusion: The high HIV prevalence, lack of condom use, lack of testing, and low ART uptake of known positives suggests that older adults are an over-looked but critical population for both HIV prevention and treatment programs.

THPDD0207

Determining the healthcare needs of older people living with HIV in Uganda: a qualitative study

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Background: HIV/AIDS among adults 50 and older in Uganda is on the increase partly due to newly diagnosed infections in this age group as well as improved survival owing to antiretroviral therapy, for many HIV infected persons. Although national programmes are in place to ensure access to medical services, older people living with HIV have unique unmet healthcare needs. The objectives of this study were to identify the healthcare needs of older Ugandans living with HIV and to gather recommendations for improvements by health service providers.

Methods: Data regarding healthcare needs were collected from HIV positive adults aged 50 years and older attending two large non-governmental outpatient clinics in Kampala and Masaka districts, Uganda between March 2011 and June 2011. Individual in-depth open-ended qualitative interviews focus group discussions were conducted. Observations of clinic interactions were also recorded. Interview transcripts were analyzed using thematic content analysis.

Results: The mean age of the respondents was 65 years, 50% were female, ($n = 40$). Respondents expressed multiple age-related healthcare needs that may differ from their younger counterparts. Needs increased with higher age. Both men and women attributed double stigma from HIV and old age as a major factor affecting disclosure and seeking healthcare for HIV. 60% of the respondents expressed anxiety about their future access to healthcare, the lack of social services and end of life care. Lack of transport and food access issues compromised respondents' adherence to antiretroviral therapy.

Conclusion: Older people living with HIV have unique healthcare needs which health promotion programmes should consider meeting through appropriate and innovative approaches such as preventing and managing age-related chronic illnesses, palliative care, developing age-friendly services and settings. Research to further explore the impact of these healthcare needs on the quality of life of older PLWHA is required.

D23 - Incarceration

WEAD0605

Prevalence of transmissible infections and socio-demographic and behavioral risk factors amongst prisoners in Mexico City: a cross-sectional study of 17,296 inmates

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Background: The health of prisoners is an issue of global concern. Increased socio-demographic and behavioural risk factors prior to incarceration and poor prison living conditions contribute to increased prevalence of transmissible infections. Little is known about the health of prisoners in Mexico City. This study sought to establish prevalence data and risk factors to identify those currently needing healthcare and to inform future policy.

Methods: This cross-sectional study was carried out in 4 Mexico City prisons, June to December 2010. Ethical approval was granted prior to starting; participation was voluntary, confidential and based on informed consent.

Participants were offered HIV, Hepatitis B, C and Syphilis testing. A representative sample completed a questionnaire on socio-demographic characteristics and risk behaviours. Positive results were delivered with counselling and treatment or referral with consent. Data was analysed using Stata.

Results: 76.8% (15,517/20,196) men and 92.9% (1,779/1914) women participated. Complete data sets were available for 98.8%. Prevalence of HIV (0.7%), syphilis (Anti-TP Ab 4.1%; VDRL 2.0%), Hepatitis B (HBcAb 3.0%; HBsAg 0.2%) and Hepatitis C (3.2%) was higher in the study population compared with national data. The relative increase was greater for HIV and syphilis amongst women, Hepatitis C in men, and all infections in younger participants. Questionnaire data (1934 men, 520 women) demonstrated lower educational levels, increased smoking and substance use compared to national data. High levels of unsterile tattoing, physical abuse and a history of sexual violence were found.

Conclusion: The study identified that health screening is acceptable to Mexico City prisoners and feasible on a large-scale. It demonstrated increased prevalence of HIV and other infections compared to national data, though low rates compared to international data. Individual participants benefited from earlier diagnosis, treatment and support. The data collected will also enable the formation of improved policy for this vulnerable group of individuals.

D24 - Those growing up with HIV

MOAD0103

The challenges of care and support for a generation of nosocomially infected young adults from Romania living with HIV

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Background: After two decades of living with HIV a generation of around 7,000 children from Romania nosocomially infected in communist era, turned into young adults. Hyper protection from the family, combined with discrimination in education services, developing social services, and a focus on medical aspects represented the environment these children grew. Between 2004 and 2010 the Global Fund financed social programs for their professional integration, increasing the percentage of those availing of cash benefits from 30% to 66%. In 2010 people living with HIV (PLHIV) and NGOs protested over ARV treatment interruptions and budgetary cuts due to economic crisis, although WHO estimated the treatment coverage at 83% in 2009.
Methods: A nationally representative clinic-based research among PLHIV was carried out in 2011 (March–June) to determine their access to treatment, care and support (N = 618, ±4%). Measures of treatment interruptions, adherence and access to services were included, as well as demographics variables. Sample was weighted according to subjects' surveillance center registration.
Results: The vast majority of the sample (71.7%) is young (18–24 years), with more than 6 years of known seropositivity (82.1%), receiving ARV for more than 6 years (78.7%), with more than 2 changes in their treatment plan (80.1%), and with their main source of income as cash benefits (80.5%). Unintended treatment interruptions were spread (65.2%, average interruption lasting 38 days), resulting in more visits to regional center (49.2% more than once a month), higher expenses and the need for new combinations of ARV. Discontinuous adherence was reported by 42.2%. Access to social services was high (over 80%).
Conclusion: While Romania is a low prevalence country, and ensures high coverage of ARV treatment, authorities must pay attention at continuous treatment access for PLHIV, and support of treatment adherence to prevent deterioration of the health status and ensure universal access for PLHIV.

D26 - Caregiving

MOAD0301

Mental health and substance use problems among a sample of African American and Latina caregivers of children infected, affected and unaffected by HIV

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Background: Despite evidence that a significant number of children infected and affected by HIV (uninfected, but have HIV+ family member) reside with caregivers who are not their birth parent, few studies have examined the psychological functioning of these alternate caregivers. The majority are women, typically ethnic minorities, often from impoverished communities. This study compares mental health and substance use problems in birth-mothers, and non-birth female caregivers of HIV-infected, affected, and unaffected children in the US.
Methods: Data come from the baseline caregiver interviews of two longitudinal studies of urban youth perinatally-HIV infected, HIV-affected, and unaffected by HIV. Caregivers (n = 451) included HIV+ and HIV− birth-mothers and other HIV− female caregivers primarily of African American and Latina ethnicity. Measures of depression and anxiety symptoms and substance use problems were completed.
Results: Birth-mothers reported more symptoms of depression ($p < .001$) and anxiety ($p < .001$) than non-birth caregivers. Non-birth caregivers were less likely (3%) to report substance use than HIV+ (13%) or HIV− (12%) birth-mothers ($p = .006$) (Table 1). In multiple regression analyses, HIV+ birth-mothers, but not HIV− birth mothers were significantly more depressed and anxious than non-birth caregivers, after adjusting for age, race, number of children under 18-years, and having a partner in home (Table 2). Both birth-mother groups (HIV+ and HIV−) had more substance use problems than non-birth caregivers even after adjusting for covariates. Among all caregivers in the study, those who reported either substance use or Latina ethnicity had significantly higher depression and anxiety scores (each $p \leq .01$; data not shown).
Conclusion: Data support previous studies that HIV+ birth-mothers have worse mental health outcomes than non-birth caregivers, warranting the development of efficacy-based interventions for this population. However, the data also indicate the vulnerability of inner-city HIV− birth-mothers, and the need for mental health

Table 1. Caregiver characteristics

	HIV+ Birth Mother	HIV− Birth Mother	HIV− Non-birth Caregiver	Chi-square/Anova p-value
N (%)	209 (46)	120 (27)	122 (27)	
Age (mean)	39.2	38.3	54.4	.000
African-American (%)	55	37	57	.006
Latina (%)	33	48	35	
Children <18 years in home (mean)	2.5	2.9	2.5	.014
Partner at home (%)	39	34	38	.723
Depression (mean)	10.8	8.8	6.6	.000
Anxiety (mean)	20.2	19.3	13.6	.000
Substance use (%)	13	12	3	.006

Table 2. Regressions-mental health/substance use

	Depression[a]	Anxiety[a]	Substance Use[b]
	β (p)	β (p)	OR (p)
HIV+ Birth Mother[c]	.247 (.001)	.272 (.000)	5.97 (.015)
HIV− Birth Mother[c]	.013 (.853)	.103 (.142)	5.00 (.039)
Age	−.002 (.977)	−.027 (.671)	1.00 (.981)
Race/Ethnicity	−.244 (.000)	−.256 (.000)	.710 (.324)
Children <18 years in home	.024 (.628)	.020 (.689)	.885 (.388)
Partner at home	−.158 (.001)	−.113 (.022)	1.11 (.761)

[a]Linear regression; [b]Logistic regression; [c]HIV− Non-birth Caregivers are the reference category.

services among caregivers with a history of substance use or of Latina ethnicity.

MOAD0303

Gendered violence, gender inequalities and home-based care: the forgotten relationship of power

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Background: Women's low or unpaid role in providing care for people living with HIV in the form of home-based care while central to the response to HIV been has increasingly been recognised as entrenching unequal gender relationships. Frameworks to map out the pathways have suggested that this process occurs in three domains: financial costs, opportunity costs and physical and emotional costs. Yet such a framework has a tendency to ignore the broader conceptualisation of gender inequalities that include violence against women.
Methods: We undertook 5 focus groups with 45 home-based carers in South Africa as part of a larger study focused on how to transform home-based care organisations from spaces of reproducing inequalities to transforming gender relationships. We conducted thematic analysis on the data exploring factors that could support or hinder gender equality.
Results: As with other studies, our data showed home-based carers suffered economic costs related to their work, often spending their own money to provide for their patients. In addition, few received stipends or other financial support either from donors, government or NGOs. Many carers also related the extreme physical and emotional costs of the work they did; again reflecting what is already known about providing care. However, home-based carers also spoke about the central role of gender-based and sexual violence that they feared, risked and experienced both while working and sometimes within the organisations they worked in. Such relationships of violence undermined their ability to envision their work as spaces for women's empowerment and transformation.
Conclusion: To move women's participation in home-based care from one of reinforcing gender inequalities to empowering women requires those supporting home-based carers to envision a wider conceptualisation of the gender inequalities home-based carers face, that includes the centrality of gender- and sexual-violence, and actively work to programme and tackle these.

D27 - Disability

FRLBD03

The impact of depression on retention in care and viral suppression in a large cohort of insured HIV-infected patients

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Background: Psychiatric disorders are prevalent among HIV-infected individuals and may have deleterious effects on HIV care and outcomes. We sought to examine the impact of depression on retention in care and viral suppression among racial/ethnical diverse HIV-infected patients in a large managed care organization.
Methods: We evaluated a cohort of HIV- infected adults who received care and had at least 8 months' membership in health care plan in 2010 in Kaiser Permanente Southern California. History of depression prior to 2010 was identified by International Classification of Diseases, Ninth Revision Clinical Modification (ICD-9 CM) codes for depressive symptoms. Retention in care was defined as ≥ 2 CD4 and/or HIV-1 RNA tests at least 90 days apart in 2010. Viral suppression was defined as undetectable viral load or HIV-1 RNA <50 copies/mL at the last test in 2010 while on antiretroviral therapy (ART). In multivariable analyses, Poisson regression with robust error variances was used to estimate rate ratios (RR) and 95% confidence intervals (CI) for retention and logistic regression was used to estimate odds ratios (OR) for failure of viral suppression, adjusted for age, gender, race/ethnicity, mode of HIV infection, ever AIDS diagnosis, and medical center of care.
Results: Among 6,455 patients (90% men, 49% white), 51% had a history of diagnosed depression, and 77% were retained in care. Among 4403 patients on ART with ≥ 1 viral load measurement, 86.3% were virally suppressed. In multivariable analysis, patients with depression were less likely to be retained in care (RR = 0.89, 95% CI = 0.86–0.91). In stratified analysis by gender, the adverse impact of depression on retention appeared to be larger among women (RR = 0.82, 95% CI = 0.75–0.89) than among men (RR = 0.89, 95% CI = 0.87–0.92). Depression was significantly associated with increased risk of failure of viral suppression (OR = 1.25, 95% CI = 1.04–1.49). In stratified analysis, depression appeared to be associated with increased risk of failure of viral suppression among women (OR = 2.65, 95% CI = 1.30–5.39) than among men (OR = 1.15, 95% CI = 0.96–1.38), and the adverse impact appeared to be larger

among patients who were not retained in care (retained: OR = 1.20, 95% CI = 0.99–1.45; not retained: OR = 1.37, 95% CI = 0.83–2.27).
Conclusion: Depression was prevalent in this cohort and worsened retention and viral control. Retention in care may modify the adverse impact of depression on viral suppression. Interventions are needed to alleviate depression and thus enhance retention and improve HIV outcomes.

D29 - Sexualities: meanings, identities, norms and communities

WEAD0101

A longitudinal in-depth study of gender-specific experiences in antiretroviral treatment patients in South Africa

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Background: Previous research (amongst others our own published in AIDS and Social Science & Medicine) has demonstrated gender differences in various antiretroviral treatment (ART) outcomes including, adherence, quality-of-life, disclosure and retention. However, little longitudinal, in-depth research has been done to investigate the why and how of these differences.

The current study firstly aims to explore the impact of masculinity and femininity on ART experiences, in both a longitudinal and in-depth manner. In addition, the study investigates the complex interrelationships between gender constructs whereby males and females potentially influence-through intricate household dynamics- the ART experiences of the other gender.
Methods: Based on a previous explorative quantitative study, we conducted a longitudinal qualitative study whereby 12 male and 12 female ART patients were repeatedly interviewed >over the course of 1 year in the Free State province of South Africa.
Results: Despite several cases of lipodystrophy and other side-effects among women due to ART, they seem to adhere and lead healthy lifestyles, often in the absence of a male partner. Male patients reported a clear notion of masculinity that required males to be in control and act strong, highly sexual and economically productive, thus conflicting with the role of 'good patient' that is expected to accept being HIV-positive, take instructions, and engage in health-enabling behaviors. The majority of men interviewed overcame these barriers and internalized their treatment, albeit with fewer side-effects and more support in terms of reminding and accompanying them to the clinic (mostly by females).
Conclusion: The study findings have both theoretical and practical relevance. Theoretically, the longitudinal impact of gender and household dynamics on the ART career draws attention to the sociological processes influencing ART outcomes. Practically, the study demonstrates that policy interventions aimed at improving long-term ART outcomes should incorporate the (interactions between) gender-specific illness and treatment experiences.

FRLBD06

'Privileging the personal': mobilising marginalised identities and voices in the context of HIV health promotion with ''hard to reach'' migrant and second generation Asian gay men in Metropolitan Sydney, Australia; a resource development and community building initiative

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Background: Asian gay men make up the highest group in MSM/gay HIV notification after Anglo background, constituting a priority group for HIV health promotion in Australia (MHAHS, 2011). Multiple challenges exist as issues of stigma, migration, isolation, in addition to sexual stereotyping and homophobia within the gay and ethnic communities respectively, complicates this work.The immediacy of these issues renders HIV health promotion a second order issue. Underrepresentation in HIV health promotion work, research and general media also contributes to their invisibility.

Multicultural HIV & Hepatitis C Service (MHAHS). *Trends in NSW HIV notifications 1999–2010.* (unpublished).
Methods: The ''A-Men'' publication was developed with an aim to engage lived experiences and visibility of Asian gay identities as an entry point to promoting sexual health and wellbeing. The approach was two-pronged: a resource production engaging broader issues facing Asian gay men - the person-centric approach; and the developmental process that involves and builds community ownership - 'for the community, by the community'. With $5000 community arts funding from Sydney city council, the resource was developed and distributed in-print and online.
Results: A total of 70 volunteers from 9 different Asian ethnicities were involved in the production.1000 hard-copies were launched in March and distributed through community and service providers. 1600 users accessed the online version to date. Volunteer feedback (n = 58) showed increased social-connectedness, self-esteem, pride, HIV awareness and knowledge of services. 2 community focus groups (n = 62)reported similar trends: greater community engagement and dialogue around wellbeing and self-esteem.
Conclusion: A broader exploration of lived realities was effective in enlivening HIV messaging with Asian gay men. Through engaging intersections of identity, art and community building, a 'biggest bang for your buck' can be achieved in a resource limited setting. Through cultural change, "A-Men" addressed the barriers to HIV awareness and wellbeing, in the process building a more resilient and empowered community.

D30 - Sexual minorities and HIV vulnerability and/or resilience (e.g., gay and other men who have sex with men (MSM), lesbians and other women who have sex with women (WSW), bisexuals, transgenders, transsexuals

THAD0504

Relationship between comfort with and disclosure about sexual orientation on HIV-related risk behaviours and HIV testing among men who have sex with men in Beirut, Lebanon

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Background: Evidence suggests that men who have sex with men (MSM) account for most new HIV infections in Lebanon and act as a bridge to transmission in the general population. In a region where same-sex sexual activity is highly stigmatized, a better understanding of the psychosocial factors that influence sexual risk behavior and HIV testing in MSM is essential for HIV prevention initiatives to be effective.
Methods: An exploratory, qualitative study was conducted with a sample of 31 MSM living in Beirut. Semi-structured interviews examined relationships with family and friends, comfort with and disclosure of sexual orientation, sexual behavior, and HIV testing. All interviews were recorded, transcribed, and coded in Atlas-ti to identify themes and extract counts.
Results: All men self-identified as homosexual (77.4%) or bisexual (22.6%), although 32.3% also have sex with women, and a majority (64.5%) reported some discomfort with their sexual orientation. The men described a strong heterosexual social norm, causing some to feel guilty and lead a ''double life'' where they conceal their sexual orientation by publically feigning attraction or dating women, or dissociating from effeminate men. Comfort with and disclosure about sexual orientation appeared to be linked with sexual risk behaviors and HIV testing. As compared to the remaining sample (n = 18), the 13 participants who were both uncomfortable with their sexual orientation and had not disclosed to either parent reported higher rates of unsafe sex (69.2% versus 33.3%), more annual sexual partners (mean = 36.7 versus 17.0), and lower rates of being HIV-tested (53.8% versus 88.9%) and discussing HIV risk with their sex partners (38.5% versus 88.9%).
Conclusion: These findings reveal the influence of sexual identity acceptance and disclosure on condom use and HIV testing in the context of high societal stigma, and suggest the need for HIV prevention interventions to facilitate progression through these psychosocial processes of sexual development.

FRLBD05

An MSM-specific definition of intimate partner violence includes HIV-related violence and is associated with sexual risk-taking among MSM

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Background: Evidence indicates that MSM experience higher rates of intimate partner violence (IPV) than non-MSM; however, no study has examined what defines IPV among MSM, or the associations between MSM-specific IPV and sexual risk-taking
Methods: Seven focus group discussions were held with 84 MSM, generating 30 types of IPV, including HIV-specific IPV. These were tested using a cross-sectional survey of 1,074 MSM. Factor analysis generated five domains of MSM-specific IPV, including a domain of HIV-related IPV. Six logistic regression models for unprotected anal intercourse (UAI) were created (n = 626). Models controlled for age, race, education, employment, HIV status, and gay identity, with the key covariate being receipt or perpetration of three different IPV measurements: MSM-specific, Conflict Tactics Scale (CTS), and World Health Organization (WHO).
Results: The MSM-specific IPV definition included HIV-specific typologies of violence not currently included in any definition of IPV, e.g., not disclosing HIV-positivity to a partner, and captured significantly higher reporting of IPV compared to WHO (46.2% v. 13.5% receipt of IPV; 31.9% v. 8.5% perpetration of IPV). Reporting receipt of neither WHO-defined IPV nor CTS-defined IPV was significantly associated with UAI, but reporting receipt of MSM-specific IPV significantly increased odds of UAI (OR: 1.80, 95% CI: 1.27, 2.54). Two models demonstrated a significantly increased risk of UAI among men reporting IPV perpetration (WHO OR: 1.74, 95% CI: 0.91, 3.31; CTS OR: 1.67, 95% CI: 1.06, 2.63; MSM-specific OR: 1.82, 95% CI: 1.26, 2.64).
Conclusion: This study provides for the first time a MSM-specific definition of IPV that captures HIV-related violence not represented in standard definitions. MSM who reported MSM-specific IPV had increased odds of UAI at last sex. These findings suggest that MSM experiencing IPV are at higher risk for HIV seroconversion, although this association may not be recognized by using non-MSM-specific definitions of IPV that do not include HIV-related violence.

D31 - Effects of homophobia and transphobia

THAD0505

Internalized homophobia and transphobia, low self-esteem and non-disclosure of sexual identity as factors contributing to HIV vulnerability of men who have sex with men (MSM), transgenders and hijras: experience from the Global Fund supported Pehchān program in India

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Background: HIV prevalence among MSM in India remains disproportionately high at 7.4% as compared with overall national prevalence of 0.3%. India HIV/AIDS Alliance in consortium with five other organizations implements the five-year Global Fund-supported Pehchān program in 17 Indian states to build the capacity of 200 CBOs to serve as effective HIV prevention partners with the National AIDS Control Program and reach 453,750 MSM, transgenders and *hijras* using a community-driven and rights-based approach. Non-disclosure of identity and low self-esteem due to internalized stigma are known to be associated with vulnerabilities that place these populations at greater risk of HIV infection.
Methods: A cross-sectional baseline study sampled 2,762 MSM, transgenders and hijras (TG/H: 16%) in 55 districts across 10 states to understand demographics, behavior and needs of target populations. Time and Location Cluster Sampling (TLCS) was used to identify these often hard-to-reach and relatively mobile populations. Data were analyzed using SPSS.
Results: Self-disclosure of sexual identity occurred least with parents (21%) for reasons ranging from fear of being rejected and rendered homeless to adverse legal consequences. Self-disclosure with siblings was also low (22%), for fear of being neglect, isolation, and verbal/physical abuse. Disclosure was highest amongst community peers (67%). Feelings of shame (33%), self-blame (28%) and feelings of guilt (26%) were associated with sexual identity among study subjects. 30% of respondents have actively attempted to avoid disclosure of their sexual identity.

Conclusion: Low self-esteem among MSM, transgenders and hijras and fear of rejection leads to non-disclosure of sexual identity. Based on the insights from the baseline, Pehchān developed a life skills training module that places greater emphasis on coping, communication and interpersonal skills to address sexual identity. The program plans messaging to change attitudes about homosexuality and gender identity within families and communities in India to strengthen support structures and manage conflicts more successfully.

D32 - Young people and sexuality, intergenerational sex

THAD0502

Homophobia and access to HIV services among young men who have sex with men (YMSM)

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Background: Globally, YMSM are uniquely vulnerable to HIV. Many are dependent on family that may not understand or accept their sexuality, forcing them to hide their sexual behavior or risk losing housing and financial support. YMSM also may have limited access to information regarding sexual health and legal rights. Despite this vulnerability, YMSM's distinct needs are often overlooked by efforts to address HIV among general youth and general MSM.
Methods: In 2010, the Global Forum on MSM & HIV (MSMGF) conducted a global online survey of MSM and their service providers. Among 5,066 survey participants, 1,488 were YMSM (age 30/younger). YMSM respondents were from: Asia (65%), Latin America (10%), Australasia (9%), North America (6%), Europe (4%), and Africa (3%). Chi-square and Wilcoxon rank-sum were used to evaluate differences between YMSM and other MSM. Multivariable regression was used to identify predictors of access to HIV prevention services.
Results: HIV-prevalence among YMSM was 14%. Most YMSM (67%) had two or more sexual partners in the past year; 33% were homeless/unstably housed. Compared to other MSM, YMSM reported lower ''easy access'' to evidence-based HIV prevention strategies: free HIV testing (53% vs. 37%[$p < 0.001$]), condoms (47% vs. 36%[$p < 0.001$]), lubricants (33% vs. 21%[$p < 0.001$]), HIV behavioral interventions (38% vs. 21%[$p < 0.001$]). Compared to other MSM with HIV, YMSM with HIV reported lower ''easy access'' to antiretroviral medications (59% vs. 33%[$p < 0.001$]). YMSM also had significantly higher levels of perceived homophobia ($p < 0.001$) and internalized homophobia ($p < 0.001$) than other MSM. Perceived homophobia was the strongest predictor (0.38; 95% CI = 0.3–0.4) of compromised access to HIV prevention services among YMSM.
Conclusion: YMSM are at increased risk for HIV due to a number of factors. Limited access to HIV services and high levels of homophobia may exacerbate vulnerability. Programs must be developed to address the unique needs of YMSM.

D33 - Relationships, concurrency, sexual networks and partnerships

THAD0503

Women partners of men who have sex with men (MSM) in India: preventing HIV transmission and promoting early HIV diagnosis and treatment

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Background: In India, many MSM either are married or expect to marry. The present study aimed to identify strategies for the national HIV programme to promote the health of women partners of MSM both in terms of preventing HIV transmission and in promoting early HIV diagnosis and treatment.
Methods: Qualitative field research used a collective case study design to collect data in 2010/11 from 11 sites in seven states among 401 MSM (HIV prevention outreach workers and beneficiaries) through 57 focus groups ($n = 364$; 46% married) and 37 key informant interviews. Women partners of MSM could not be recruited for the study. Potential interventions proposed are based on the inferences drawn by synthesising both the literature review and qualitative data (thematic analysis).
Results: Both literature review and qualitative data showed that women partners of MSM can include wives, casual, regular, paid or paying partners, and they may be at higher risk of HIV due to their male partners' high-risk sexual behaviours, which include having a large number of male and/or female partners combined with inconsistent condom use. Field data revealed that self-identified MSM may enter into heterosexual marriage with willingness, under compulsion (e.g., family pressure) or with indifference. Importantly, qualitative data offer new insights into whether disclosure of sexuality and/or HIV status among MSM is significant in preventing HIV transmission to female partners.
Conclusion: HIV prevention messages aimed at MSM ought to explicitly promote awareness of the risks/vulnerabilities faced by female partners. Such strategies ought to particularly include counselling and HIV testing approaches that address the complexities of safer sex practices with both male and female sexual partners. Developing interventions for single MSM that raises awareness of the HIV risks faced by their women partners and implementing interventions that explicitly target married MSM and their wives are key to effective, future HIV prevention programming.

WEPDE0204

Social network of male sex workers in Houston, Texas

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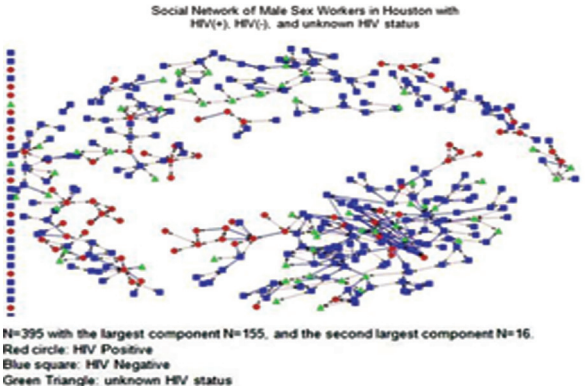
Background: Social network analysis has been widely used as a tool to describe and explain HIV prevalence and risk behaviors. However, the network of male sex workers is understudied. This study provided a description and graphical presentation of the social network



Social Network of Male Sex Workers in Houston.

structure of male sex workers with HIV status in Houston, Texas.

Methods: The study used network data from a cross-sectional network study derived from male sex workers in Houston, Texas. A convenience sampling plan was used wherein male sex workers were identified first and then were asked to refer their social, drug, or sex partners (both male and female) to the study. Netdraw, UCINET version 6, and Stata version 11 were used.

Results: The analysis consisted of 395 participants; with a mean age 33.1 years old (SD = 9.7); 84.3% male; 31.4% gay, 44.3% bisexual, and 24.3% straight. There were 81 (20.5%) HIV positive, 253 (64.1%) HIV negative, and 61 (15.4%) unknown HIV status. Two thirds of the participants traded sex for money or drugs in the last 30 days. The network had 17 components and 32 isolates. The largest component of the network consisted of 155 people (39.2%), and the second largest consisted of 16 people. The graph below indicates that HIV positive and HIV negative people tended to be clustered together. The mean sexual network size in the last 30 days was 35.1 (SD = 64.4). There was no difference in the sexual network size among HIV positive, HIV negative, and unknown HIV status.

Conclusion: Our network data showed that most network participants were connected with each other in 17 separate components, and more than a third were connected in the same network. HIV positive and HIV negative participants tended to be clustered together. These findings indicate high potential for network-level HIV interventions for HIV positive and HIV negative people.

D35 - Reproductive health, fertility, family planning

WEAE0406

'Condoms are not a family planning method': how efforts to prevent HIV have failed to comprehensively address adolescent sexual and reproductive health

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Background: Northern Uganda hosts one of the highest prevalences of HIV and teenage pregnancy in the country. The Gender Roles Equality and Transformations (GREAT) Project conducted ethnographic research to understand the processes through which social norms about gender, SRH, and violence, which underlie HIV vulnerability, are transmitted in this post-conflict setting.

Methods: Forty life histories were collected from adolescents across the life course: very young adolescence, older adolescence, newly married, and pregnant with or parenting a first child. Forty in-depth interviews were also conducted with adults who significantly influence adolescents in study communities. Data were analyzed using AtlasTI software.

Results: Data reveal efforts to destigmatize HIV have been largely successful as evidenced by widespread support for youth access to HIV services, including education, testing, condoms, and treatment, as well as by the ritualization of HIV testing among young unmarried couples. The need for young people to "test their blood" before beginning sexual activity appears to have become a cultural norm, viewed by adults and adolescents as a rite of passage into sexual relationships. These efforts, however, have not translated to other aspects of adolescent SRH, namely, pregnancy prevention.

Respondent Category	# of Males	# of Females
Very Young Adolescents (ages 10–14 years)	5	5
Older Adolescents (ages 15–19 years)	5	3
Newly Married Adolescents (ages 16–19 years)	5	6
Parenting Adolescents (ages 16–19 years)	5	6
Total	20	20

Life History Interviews (ages 10–19 years).

Respondent Category	# of Males	# of Females
Parent of adolescent girl or boy	2	7
Relative of adolescent girl or boy	4	4
Community Member (e.g. teacher, religious leader, elder)	8	3
Peer of adolescent girl or boy	6	3
Total	20	20

In-Depth Interviews (ages 20 years and above).

Results show that most respondents do not acknowledge the link between HIV prevention and family planning (FP) and oppose adolescent use of FP products. Condoms are viewed as acceptable only in the context of HIV prevention but not for pregnancy prevention. Opposition to adolescent FP use is primarily due to fear of compromised future fertility or increased promiscuity.

Conclusion: Severe social, economic, and medical consequences resulting from early pregnancy, particularly in low-resource settings, have been globally recognized. Efforts are needed to build on successes in HIV prevention efforts to address adolescent SRH in a more comprehensive manner.

D37 - Sex work and sex cultures

TUAD0303

The complexity of negotiating HIV risk with clients and in private relationships: experiences of female sex workers in India

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Background: Few studies have documented female sex workers' (FSWs) efforts to engage in safe behaviors in the context of their multiple identities with sexual partners in India. Recognizing the intricacies of women's perceptions of risks and benefits within diverse relationships and moving beyond condom promotion are crucial for HIV prevention.
Methods: An exploratory qualitative study was conducted with female sex workers in India. Sixty FSWs participated in 5 focus groups and 25 semi-structured in-depth interviews in addition to completing a short questionnaire that captured basic socio-demographic information.
Results: The majority (60%) of FSWs was based in rural areas and was Hindu (90.3%). Respondents' mean age was 30.2 years, with an average of 6.4 years of education. Only 28% reported being legally married or living with a partner and 82% had at least one child. Further, for 58%, sex work was the main income source. Findings implied a complex interplay of factors that determined FSWs' abilities and willingness to avoid unsafe sexual behaviors with paying clients, regular/trusted clients, and non-paying intimate partners. Often, this was dictated largely by economic hardships, emotional attachments, social norms, perceived lack of power as well as the threat of violence and to a less extent by the knowledge of HIV risk. Further, discrimination and exploitation by community members including police combined with the need to hide their sex worker identities often put FSWs in situations that compromised their efforts to avoid risky behaviors.
Conclusion: A deeper understanding of the multifaceted exchanges between the various partner types that heighten FSWs' vulnerabilities is critical when planning HIV prevention interventions in addition to adopting a human-rights framework and recognizing women's agency in safeguarding health. Challenging popular notions of sex workers as undeserving of substantive support and individual rights would go a long way in ensuring the effectiveness of HIV prevention efforts.

TUAD0304

Emotional men and pragmatic women: relationship and gender dynamics between female sex workers and their regular partners in the Dominican Republic

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Background: Male partners of female sex workers (FSW) have traditionally been viewed as holding power and decision-making authority regarding condom use due to the transactional nature of their relationships. The aim of this study is to explore relationship and gender dynamics between FSW and their regular partners and consider how these dynamics influence HIV vulnerability.
Methods: We conducted qualitative interviews with FSW (n = 20) and regular partners (n = 20). FSW were recruited from an ongoing cohort study and regular partners were referred by non-participating FSW in the cohort. Regular partners were defined as trusted and/or intimate partners with whom the referring FSW reported sex with at least 4 times in the last 3 months. We used narrative and thematic analysis to describe the relationship history and identify emergent themes.
Results: Both FSW and regular partners described emotional, sexual, and economic attachments to each other. Regular partners, however, described greater emotional and sexual attachment. While most men provided some economic support to their FSW partner, they were aware that due to their limited economic resources, they were not able to provide for all of their partner's needs. In contrast, FSW displayed more pragmatic attitudes, emphasizing the importance of both the material and emotional support provided by regular partners. Some FSW clearly stated that while they had the strongest emotional attachment to their regular partner, they had to maintain other partnerships in order to survive.
Conclusion: Findings challenge hegemonic norms of masculinity between FSW and their regular partners and highlight the intersection between socio-economic position and relationship power. HIV prevention efforts targeting FSW and regular partners must address both emotional and socio-economic dimensions of relationships and their influence on HIV protective behaviors.

TUAD0305

Older women and sex work: breaking the silence on the gendered structural drivers of HIV in Uganda

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Background: For some women who engage in female sex work (FSW) life remains bound up in the work as they age. We explored the reasons for entering and staying in FSW through life histories of older women (35 years and above) at high risk of HIV in Kampala, Uganda.
Methods: 100 women were purposively selected from a cohort of 1027 high-risk women. Life history interviews and in-depth interviews on their life and work, including sexual practices, were conducted with each woman. Data were analyzed using thematic content analysis. Informed consent and ethical clearance were obtained.
Results: Sixteenwomen were aged over 35, and had joined sex work as young adults usually because of financial need. They continued to take an active part in sex work. These women perceived sex work to be addictive, because of the quick access it could give to cash. Some women confided that they found their continued sex work humiliating and they really wanted to give up because they were too old and they feared that their children might find out what they did. However, faced with recurrent economic demands, paying children's school fees and buying food, these women had few alternatives.

Most wished for a 'husband' who could help them. In the absence of such support or alternative livelihoods, giving up FSW was not an option. As they aged, they commanded lower rates from clients. Some augmented their living by selling alcohol and providing labour in the community, including child care to younger sex workers. All these women were at risk of HIV, STIs and sexual violence.
Conclusion: Sex work remains a key structural driver of HIV among some vulnerable older women. Sexual violence and high risk behaviour characterized sexual relations. There is an urgent need for interventions to support such middle-aged and older women.

D38 - Sex, gender and new prevention technologies

FRLBD04

Will and should women in the U.S. use PrEP? Findings from a focus group study of at-risk, HIV-negative women in Oakland, Memphis, San Diego and Washington, D.C.

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Background: Findings from recent clinical trials evaluating the efficacy of antiretrovirals for pre-exposure prophylaxis (PrEP) against HIV among women are mixed, and none has included U.S. women. In addition, there is a dearth of research on knowledge, attitudes, and likelihood of use of PrEP among women in the U.S., who comprise 27% of new infections in the country. Thus PrEP´s potential as an HIV prevention strategy for American women is unknown.
Methods: We conducted a focus group study with 92 women in 4 U.S. cities between March and April 2012. Participants were recruited by local, woman-serving CBOs that also hosted the groups, which were led by trained facilitators. Participants completed a questionnaire with demographic and behavioral information. Focus group questions elicited basic understanding of PrEP, attitudes about its administration and uptake, barriers to use, and targeting and marketing. All sessions were digitally recorded and transcribed, and transcripts were analyzed to identify predominant themes and any demographic or site differences.
Results: Across sites, almost no women had heard of PrEP prior to the study; but once informed about it, nearly all found it an important option. Key considerations in deciding to take PrEP were cost (including who would pay), efficacy (most wanted 85–99%), and side effects (including interaction with contraceptives). PrEP was seen as "additional," not substitute, protection to condoms. Young women were the most commonly named target population, and schools the best venue for informing them. Mistrust of men was a main motivator for PrEP among women in Oakland and Washington; and churches were seen as a key barrier to PrEP in Memphis.
Conclusion: Women at risk for HIV in the U.S. are likely to use PrEP if it is known to be highly effective, doesn´t cost too much, doesn´t have significant side effects, and is promoted by peers and CBOs.

Demographic Characteristics	Number (%)*
Age: *18-30 years*	22 (24)
31-50 years	50 (55)
Race/Ethnicity: *Black/African American*	62 (69)
Latina/Hispanic	17 (19)
Marital/Relationship Status: *Married/Cohab*	30 (33)
Employment Status: *Employed*	45 (50)
Education: At Least *Some College*	54 (59)
Income: *$20,000 per year or less*	62 (69)
* Out of total completing question	

Demographic Characteristics.

Behavioral Characteristics	Number (%)*
Have Multiple Partners	8 (9)
Ever Had HIV Test	81 (91)
Know HIV Status	74 (83)
HIV/STI Prevention Methods Ever Used: *Male Condom*	77 (86)
Female Condom	18 (20)
Monogamy	46 (51)
Abstinence	40 (44)
Contraception Methods Ever Used: *Male Condom*	71 (84)
Female Condom	19 (22)
Oral (Birth Control Pill)	62 (73)
Abstinence	35 (41)
Perceives Self at Risk of Getting HIV Within the Next Year	24 (27)
* Out of total completing question	

Behavioral Characteristics.

D41 - Social networks of drug users

MOAD0401

The real risks of fishing: social networks and HIV among drug-using fishermen in Malaysia

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Background: HIV prevalence among fishermen in Malaysia is ten times that of the general population. Combining Rhodes' ''risk environment'' framework to assess contextual features influencing HIV risk and Berkman et al.'s comprehensive model of the mediating effects of social networks on health, this paper assesses the social relationships among drug-using fishermen in Malaysia as a key axis along which HIV risk decision-making occurs.
Methods: Data were collected in Kuantan, one of the busiest fishing ports on the East coast of Malaysia and from two nearby fishing villages. Twenty-eight fishermen reporting drug use during their last fishing trip or upon returning to shore participated in in-depth interviews. Fishermen were selected based on the type of fishing

vessel they worked on (traditional vs. commercial) and gear used (hook/line vs. trawlers/purse seiners) to draw upon different social networks and spheres of influence. Data were coded thematically and analyzed to inform key research questions around drug use and aspects of social networks.
Results: Economics, occupational culture, punitive policies and stigma shaped the social networks of drug-using fishermen. Social networks, in turn, shaped HIV risk perceptions and behavior through the following pathways: 1) social influence - through the introduction to drugs, male homosociality, and peer pressure; 2) social support - drug users relied on other drug users for information and emotional needs; 3) social engagement - other drug users provided a sense of community and shared identity; and 4) access to resources and goods, like drugs.
Conclusion: These results suggest that aspects of social networks both constrain and enable HIV risk behavior among Malaysian fishermen by mediating the relationships between social structures and individual behaviors. Understanding the role of network influence in drug use and HIV risk among fishermen is essential to developing HIV prevention interventions that are appropriate for the unique needs of this highly interconnected population.

D42 - Sexual transmission and drug use

TUPDD0201

Typology of polydrug use and unsafe sex practices among rural stimulant users

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Background: Drug users often use multiple substances and are involved in sexual risk behaviors, and thus are at high risk of sexually acquiring or transmitting HIV. Studies on typologies of drug use are limited, especially those that examine the relationship between typologies of polydrug use and unsafe sex practices.
Methods: Using respondent driven sampling, 248 rural drug users were recruited in rural areas of the Midwest. They participated in a longitudinal, natural history study of illicit drug use and health service utilization. Latent Class Analysis was used to identify a typology of poly-drug use and assess differences in sexual risk for HIV transmission between these classes.
Results: All stimulant users consumed multiple drugs in the previous 30 days and many (63.7%) reported unsafe sex (condomless sex). Three latent classes were identified: Class 1 (N = 107): all used powder cocaine, 90% used marijuana, 42.2% used crack-cocaine, 23.0% used heroin, and few used other stimulants and methamphetamine; Class 2 (N = 67): all used crack-cocaine, 72.3% used marijuana, 20.8% used powder cocaine, 90.0% used heroin, few used other stimulants, and no methamphetamine; Class 3 (N = 74): all used methamphetamine, 92.6% used marijuana, 74.2% used crack-cocaine, 88.1% used power-cocaine, 17.7% used heroin, and 49.1% used other stimulants. Although the patterns of drug use practice among the classes vary, the prevalence (64.5%, 67.2% and 59.5%, for Classes 1, 2, and 3, respectively) of unsafe sex practices was not significantly different across the classes ($p = 0.6213$).
Conclusion: Rural stimulant users can be classified into three latent classes: primary cocaine users, primary crack users, and heavy multiple stimulant users. High prevalence of unsafe sex practices was reported across all classes. While much attention has been given to HIV risk reduction efforts among urban stimulant users, HIV prevention and intervention efforts for rural stimulant user are still greatly needed.

TUPDD0202

Predictors of long-term trajectories (2003–2010) of sex-drug and heavy alcohol (SDA) use among MSM

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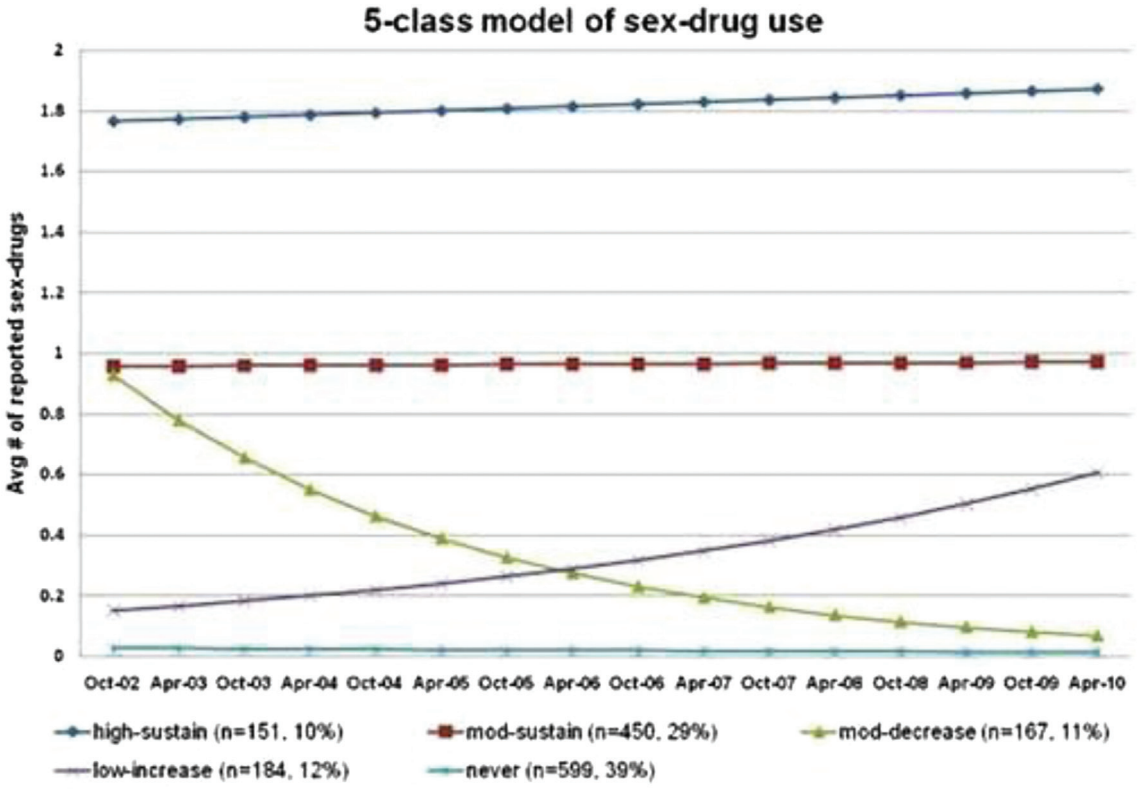
Background: Since 1985, research has shown that some gay/bisexual men combine specific sex-drugs and heavy alcohol use (SDA), resulting in high risk for HIV infection. Recently, we demonstrated that 2/3rds of incident HIV infections among men in the Multicenter AIDS Cohort Study (MACS) were associated with use of ≥ 1 sex-drug classes. However, there is little data on current prevalence and long-term SDA trajectories of MSM. Using data from 1,551 MSM in the MACS, we examined vulnerability and resilience factors (V&R) that predict adult SDA use trajectories and associated morbidities.
Methods: We used Latent Class Trajectory Analysis (LCTA) to assess statistically reliable patterns of SDA use over time. Classifying each participant into a distinct trajectory, we used MLR and LCTA including potential covariates to determine pre-existing V&R factors predicting SDA trajectories.
Results: The best fitting model yielded 5 distinct SDA use trajectories (Figure). While 10% of men were classified as high-sustained users of two SDA, the largest group (40%) never used SDAs. The next largest group (29%) used moderate (< 1) SDA consistently; and 2 groups (11–12% each) showed change in opposite directions (i.e., from low to moderate use or moderate to low use).

Only white race, higher education and income, high sexual sensation seeking (SSS), and adult internalized homophobia were consistently predictive of high-sustained and increasing SDA trajectories. Inclusion of a sexual risk measure (#UAS partners) in the LCTA modeling did not alter the trajectories or V&R modeling results.
Conclusion: We identified two subgroups of MSM with problematic SDA use. Adding #UASP did not improve the LCTA results, indicating SDA use is still a powerful measure of HIV risk among a minority of MSM who resemble the club/circuit participants of the 1980s/90s. Their vulnerabilities, particularly high SSS and internalized homophobia, are potential intervention targets if instituted before SDA use and HIV infection are established.



5-Class Model fof SDA Use.

TUPDD0203

Correlation between illicit substances, unsafe sexual behaviour and symptoms suggesting sexually transmitted infections among male clients of female sex workers in Bangladesh

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Background: Bangladesh is thus far regarded as a low HIV prevalence country with increased vulnerability due to several risk factors including high demand for commercial sex. Male clients of female sex workers (FSWs) are considered to be a potential bridge population to transmit HIV and other sexually transmitted infections (STIs) to the general population. The objectives of this paper are to describe the correlation between illicit substances (ISs), unsafe sexual behavior and self-reported symptoms suggesting STIs among male clients of FSWs in Bangladesh.
Methods: A cross-sectional study was conducted among 1565 male clients of FSWs during November 2005 to July 2006 in three sex trade settings (streets, hotels, and brothels) in Bangladesh. No personal identification of the clients was recorded and only verbal consent was taken in the structured questionnaire administered by male interviewers. Bivariate and multivariate data analysis was performed.
Results: Among the male clients of FSWs, 36.2% aged $\leq$24 years, nearly 30% never attended school, and above one-half (54.6%) of them were never-married. Nearly one-third (30%) used ISs. Cannabis (60.6%), alcohol (51.9%), heroin (6.8%), sleeping pills (5.7%), and injecting drugs (1.5%) were used by these clients. Consistent condom use with non-marital sexual partners in the last one month from the interview date was reported by only 13.2% of those who used ISs. Almost one-half(45%) of the IS-users experienced the symptom of STIs in the last 12 months prior to the interview date. The IS-users were 1.7 times more likely to have symptom of STIs than the non-users (adj. OR = 1.70, 95% CI: 1.29–2.20).
Conclusion: Use of ISs was a significant risk factor for having symptom of STIs among the male clients of FSWs and they are less likely to use condoms consistently during non-marital sexual relationship. There is an urgent need to implement targeted intervention to promote safer sex behavior for male clients of FSWs in Bangladesh, especially those who use ISs.

TUPDD0204

Getting high, getting laid: injecting practices and sexual behaviour of people who inject drugs (PWID) in three Indian states (findings from the Hridaya baseline study)

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Background: Injecting drug use has emerged as an important route for HIV transmission in India. The Government of India currently estimates that there are 200,000 PWID (or IDUs) in India (NACO, 2010), though other studies indicate the numbers could be much higher. Surveillance studies estimate HIV prevalence among PWID at 9.2% (NACO, 2010). Understanding the patterns of drug use and other behaviors by PWID is critical to successful intervention design.

India HIV/AIDS Alliance conducted a baseline with PWID in three states (Delhi, Manipur and Haryana) on drug use and behavior patterns, as part of the Hridaya project, the India component of the five-country, Dutch government-funded Community Action on Harm Reduction program.
Methods: A cross sectional survey was conducted with PWID in three states. 181 respondents were selected through systematic random sampling using client information made available by partner NGOs at selected sites. Data were analyzed using SPSS software.
Results: 60% of PWID interviewed have injected drugs for more than 5 years; 32% inject daily and 33% at least once a week in the last 30 days. 22% of PWID have injected using needles or syringes previously used by another person. In the last 12 months, 55% of respondents had sexual intercourse with regular partners; 22.9% with casual partners; and 26.6% with commercial sex partners. During last sexual contact, 70% used condoms with regular partners; 64% with casual partners; and 51.7% with commercial sex partners respectively. Of the 100 respondents who disclosed their HIV status, 21% reported being HIV-positive.
Conclusion: Unsafe injection practices along with low condom usage are putting PWID at dual HIV risk. These findings support the development of focused prevention strategies that address both injection drug use and sexual behavior as part of Hridaya's harm reduction approach.

TUPDD0205

Substance use and high-risk sexual behavior: dose-response associations in episodic and high-frequency substance-using men who have sex with men (SUMSM)

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Background: Substance use is associated with high-risk sexual behaviors and HIV-seroconversion among MSM. Most MSM use substances episodically but research does not usually distinguish between episodic (less than weekly) and high-frequency (at least weekly) users when evaluating HIV risk. We sought to assess the relationship between engaging in serodiscordant unprotected anal intercourse with a partner of unknown or HIV-positive status (SDUA) and varying frequencies of use for different substances.
Methods: We screened 640 substance-using HIV-negative individuals for a qualitative study to adapt the Personalized Cognitive Counseling HIV prevention intervention for SUMSM in San Francisco from March 2009-January 2010. Data on substance use and sexual risk behaviors were collected via structured telephone interviews. We examined the association between SDUA and different frequency (episodic or high-frequency) of use for methamphetamine, cocaine, and poppers, using multivariable logistic regression, adjusting for age and race.
Results: Episodic use was more prevalent than high-frequency use for methamphetamine (13% vs. 6%), cocaine(26% vs. 5%) and poppers (25% vs. 9%). We observed significant dose-response relationships (i.e., greater risk with more frequent use) between episodic use and high-frequency use of methamphetamine, cocaine, and poppers; and having SDUA. Compared to non-users, the adjusted odds ratios (AOR) for SDUA among episodic and high-frequency methamphetamine users were 6.6 and 7.2, respectively. AORs for episodic and high-frequency cocaine users were 2.0 and 4.4, respectively. For poppers, AORs for episodic and high-frequency users was 1.7 and 2.8, respectively (all AORs $p < 0.01$; see Table 1).
Conclusion: Infrequent and episodic substance use may be a driver of HIV transmission. In our sample of SUMSM, even infrequent use such as less than weekly use of methamphetamine, cocaine, and poppers was associated with greater odds of having unprotected sex with a serodiscordant partner. HIV prevention interventions should integrate efforts specifically addressing the range of substance use patterns, to minimize the harms associated with high-frequency, as well as episodic use.

D43 - Criminalization of drug use and people who use drugs and its impact on HIV

MOAD0204

The impact of police violence on HIV risks among people who inject drugs in Thailand

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Background: Thailand continues to experience dual epidemics of injection drug use and HIV/AIDS. In response, Thailand has relied on heavy-handed enforcement-based approaches. Although policing is known to contribute to the production of drug-related harm among

Substance	Frequency of Use	N	Percent	Adjusted Odds Ratio*	95% CI	P-value
Methamphetamine	episodic (less than weekly)	80	13	6.6	(4.0–11.0)	<0.001
	high-frequency (at least weekly)	37	6	7.2	(3.5–15.0)	<0.001
Cocaine	episodic (less than weekly)	169	26	2.0	(1.4.–2.9)	<0.001
	high-frequency (at least weekly)	34	5	4.4	(2.0–9.4)	<0.001
Poppers	episodic (less than weekly)	158	25	1.7	(1.1–2.5)	<0.001
	high-frequency (at least weekly)	60	9	2.8	(1.6–4.9)	<0.001

*Referent group is SUMSM who do not use substances before or during UAI; adjusted for age and race.
Frequency of substance use and SDUA.

people who inject drugs (IDU), the impact of police violence on HIV risks among IDU has not been fully characterized.

Methods: Using multivariate logistic regression, we identified the prevalence and correlates of experiencing police violence among IDU who participated in the Mitsampan Community Research Project (Bangkok) in 2009 and 2011.

Results: Among the 637 unique IDU who enrolled in the study between June 2009 and October 2011, 153 (24.0%) were female, and the median age was 37 years. In total, 239 (37.5%) participants reported having ever been beaten by police. In multivariate analyses, exposure to police beatings was independently associated with male gender (Adjusted Odds Ratio [AOR] = 9.25), younger age (AOR = 1.65), study enrollment in 2011 (AOR = 1.95), obtaining income from illegal sources (AOR = 2.12), a history of imprisonment (AOR = 4.52), syringe sharing (AOR = 1.91) and overdose (AOR = 1.73) (all $p < 0.05$). Seventy percent of participants reported experiencing police violence during the interrogation process.

Conclusion: A high proportion of community-recruited IDU participating in this study reported being beaten by police, and this form of police violence appears to have increased in recent years. Further, experiencing police violence was independently associated with indicators of drug-related harm, including syringe sharing and overdose. These findings suggest that the over-reliance on enforcement-based approaches is contributing to ongoing human rights violations at the hands of police and the perpetuation of the HIV epidemic among Thai IDU. These findings indicate the need for greater police oversight and a shift toward the implementation of evidence-based programs focused on the HIV- and addiction-related needs of IDU.

D44 - Harm reduction programmes, including syringe exchange, substitution therapy and supervised injection facilities

MOAD0402

Global Fund investments in harm reduction from 2002 to 2009

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Background: Injecting drug use has been documented in 158 countries and is a major contributor to HIV epidemics. People who inject drugs have poor and inequitable access to HIV services. The Global Fund to Fight AIDS, Tuberculosis and Malaria is the leading multilateral donor for HIV programmes and a major funder of harm reduction interventions. This presentation will discuss findings from the first detailed analysis of Global Fund investments in harm reduction (which is being published in the *International Journal of Drug Policy* during the conference, as well as in the Global State of Harm Reduction 2012 report).

Methods: The full list of over 1,000 Global Fund grants was analysed to identify HIV grants that contain activities for people who inject drugs. Data were collected from the detailed budgets agreed between the Global Fund and grant recipients. Relevant budget lines were recorded and analysed in terms of the resources allocated to different interventions.

Results: 120 grants from 55 countries and territories contained activities for people who inject drugs worth a total of US$ 361 million, increasing to US$ 430 million after projections were made for grants that had yet to enter their final phase of funding. Two-thirds of the budgeted US$ 361 million was allocated to core harm reduction activities as defined by the United Nations. Thirty-nine of the 55 countries were in Eastern Europe and Asia. Only three countries with generalised HIV epidemics had grants that included harm reduction activities.

Conclusion: This study represents the most comprehensive assessment of Global Fund investments in harm reduction, data which are important for policy-makers, advocates and researchers alike. This funding, while substantial, falls short of the estimated needs. Investments in harm reduction must increase if HIV transmission among people who inject drugs is to be halved by 2015.

MOAD0403

Opioid substitution therapy in Eurasia: how to increase the access and improve the quality

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Background: According to the latest update on the global state of harm reduction published in 2010, OST is available in 70 countries and territories around the world. The global coverage is estimated at the level of between 6 and 12 OST clients per 100 PWID. However, in most countries of Central and Eastern Europe and Central Asia coverage is limited due to long-term pilots and lack of systematic scale-up. The purpose of this study is to provide an up-to-date overview of the state of OST service provision in Eurasia, with a particular focus on access and quality issues.

Methods: Data were collected in 28 countries between August and November 2011 in order to capture some of the most recent developments related to OST service provision in Eurasia. We conducted an on-line survey using a semi-structured questionnaire in Russian and English, reviewed available literature and interviewed key stakeholders.

Results: Essential OST-related data including year of OST introduction, OST medications, number of clients, number of sites in prison and community settings, geographic coverage, and availability of take-home doses were analysed for all 28 countries. Based on this analysis, countries were divided into three groups: i) countries with sustained availability of OST programmes; ii) countries with limited availability and sustainability of OST programmes; and iii) countries with no OST programmes. Within each of the three groups, we identified challenges and opportunities for scaling up OST services, improving their quality and/or strategies for overcoming existing opposition.

Conclusion: While some progress has been made and more countries introduced OST over the past three years, numerous challenges still exist. The opportunities for increasing access to and improving quality of OST programmes are related to six areas, ranging from national ownership of OST service provision to protection from police harassment and violation of human rights of OST clients and service providers.

MOAD0404

A qualitative study on reasons for relatively low methadone dosing among persons who inject drugs in three provinces in China

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Background: Since 2004, China has rapidly scaled up Methadone Maintenance Treatment (MMT) from 8 to 716 clinics with 332,996 cumulatively enrolled drug users by September 2011. The average methadone dose is lower than the minimum recommended dose (60mg) in Chinese national guidelines. Lower methadone dosing may result in higher drop-out and continued HIV risk behavior. On average, 7.8% of MMT clients are HIV-infected.
Methods: A qualitative study was conducted in 2011 to determine reasons behind current dosing practices. Key informant interviews were conducted in 10 MMT clinics in 3 provinces (Guangdong, Guangxi, and Guizhou) among current and former MMT clients, their family members, and service providers. All interviews were conducted using a field guide and each interview lasted around 45 minutes. Interviews were recorded and transcripts were analyzed using a coding scheme and thematic sorting.
Results: Interviews with clients and their family members revealed that they did not view drug users as patients with a chronic disease in need of long-term treatment; they expected MMT to end drug use in a short time. They also thought that methadone was more addictive than heroin and that methadone withdrawal was more severe and long-lasting. This contributed to their preference for lower and tapering methadone dosing. Interviews with MMT providers revealed that many doctors did not have previous experience in drug use treatment. Lack of experience and insufficient training led to client-dominated, lower methadone dosing and the common misperception ''the lower dose, the safer and better for patients.''
Conclusion: Factors contributing to lower methadone dosing include clients and their families' misperceptions as well as providers' limited experience and training in MMT. To improve the performance of MMT in China, it is recommended that capacity building for providers be improved and education and counseling of clients and their family members be strengthened.

D45 - Positive health, dignity, psychological well being, mental health and prevention

MOAD0105

Resiliency among urban youth newly diagnosed with HIV in Kenya: sources of social support and active coping strategies

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Background: Rates of HIV are increasing among youth throughout Kenya. Research regarding how these youth have coped with their diagnosis and remained resilient is critical to the development of interventions that promote their health and well-being. The purpose of this study was to explore resilience among urban/slum youth newly diagnosed with HIV in Kenya.
Methods: Adolescents (ages 18–25) who were diagnosed with HIV within the past two years were recruited from ten villages in the Kibera informal settlement in Nairobi, Kenya. Six gender-specific focus groups (N = 53; 26 female, 27 male) were conducted. Questions elicited specific and contextual data regarding participants' experiences, beliefs, and behaviors as youth newly diagnosed with HIV.
Results: Qualitative data were analyzed first separately, and then collaboratively, by two teams of analysts in Kenya and U.S.A. using a phenomenological framework. Seven primary thematic areas of active coping strategies were reported: 1) *accepting a new HIV+ identity; 2) disclosing HIV+ status to supportive others; 3) engaging in holistic self care; 4) participating in formal support and health promotion programs; 5) advocating for other HIV+ individuals; 6) finding HIV+ role models; and 7) re-engaging with friends for social activities.* Seven primary sources of social support were also revealed: 1) romantic partners; 2) friends; 3) healthcare workers/counselors; 4) people living with HIV; 5) co-workers/employers; 6) religious colleagues; and 7) affirming HIV+ media figures.
Conclusion: These data demonstrate that Kenyan youth who are newly diagnosed with HIV demonstrate resilience across multiple dimensions. In addition to *intrapersonal-level resilience* related to individual cognitions and behaviors, they also reported *interpersonal-level resilience* related to both seeking support and providing advocacy/support for others. Future interventions for Kenyan youth newly diagnosed with HIV should work to enhance the coping and social support of these young people through the use of creative strategies focused on developing and maintaining varying types of resilience.

MOAD0302

Living with HIV increases risk for poor mental health among adults caring for orphaned children in South Africa

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Background: Adults caring for AIDS-orphaned children face poor psychosocial outcomes. However, we have little understanding of whether living with HIV exacerbates psychosocial outcomes. We assessed prevalence of depression and anxiety among caregivers of AIDS-orphaned children; compared prevalence among caregivers living with HIV and those not living with HIV; and tested whether social support serves as a protective factor.

Methods: A cross-sectional survey of 4,954 participants (2,477 children 10–17 years and 2,477 of their primary adult caregivers) was conducted in 2010 in KwaZulu-Natal Province (HIV prevalence 36.3–41.6%). Depression and anxiety were assessed using the Center for Epidemiologic Studies Depression Scale and the Beck Anxiety Inventory. HIV status was based on self-report and the verbal autopsy method. Social support was assessed using the MOS-SSS. Chi-square tested whether outcomes differed among caregivers living with HIV versus those without HIV. Multivariate logistic regressions identified whether social support was a protective factor and controlled for sociodemographic differences.
Results: Among caregivers, 35.6% met criteria for depression and 49.4% met criteria for anxiety. Caregivers of AIDS-orphaned children were more likely to report depression or anxiety than caregivers of other children ($p < 0.001$). Among caregivers of AIDS-orphaned children, those living with HIV were more likely to report depression or anxiety than caregivers not living with HIV ($p < 0.0001$). Caregivers who were living with HIV and caring for an AIDS-orphaned child were significantly more likely to report poor mental health than non AIDS-affected caregivers (OR = 2.69, 95% CI = 2.05–3.53, $p < 0.0001$) even after adjusting for differences in age, socioeconomic status, and education. Social support was identified a protective factor (OR = 0.79, 95% CI = 0.62–0.99).
Conclusion: Caregivers of AIDS-orphaned children are at risk for poor mental health. Living with HIV can exacerbate mental health vulnerabilities but social support functions as a protective factor. Findings suggest a cumulative effect of AIDS-orphanhood and living with HIV on caregiver mental health.

WEPDE0103

Addressing the unmet sexual and reproductive health and rights (SRHR) of people living with HIV (PLHIV): the results from a baseline study in four states in India

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Background: Evidence from India suggests that a comprehensive approach to SRHR has been lacking and that current responses have not sufficiently decreased vulnerability and sexual and reproductive ill-health among PLHIV. Previous studies with PLHIV have shown high rates of unmet contraceptive needs, untreated STIs and lack of knowledge and skills on safer sex and broader positive prevention.
Methods: 803 people living with HIV aged 15–49 (352 men; 401 women; 50 transgender/hijra) were interviewed in five districts in four states of India (Andhra Pradesh, Gujarat, Maharashtra and Tamilnadu). Lists of PLHIV covered by local CBOs were used as the sampling frame for the selection of respondents. The required number of respondent households was arrived at using systematic random sampling.
Results: Approximately one quarter of all respondents reported STI-related symptoms in the previous three months which is a cause of concern. Also, a relatively small proportion of mothers reported seeking maternal health advice during their last pregnancy (12% in Andhra Pradesh; 21% in Gujarat; 44% in Maharashtra; 27% in Tamilnadu). 10% of respondents reported having been advised against having children because of their HIV status indicating a lack of accurate or comprehensive information available at health facilities. Awareness of contraceptive methods ranged between 55% and 98%; similarly, STI-related knowledge levels ranged between 56% and 91%. Reported condom use with non-regular partners ranged between 56% and 91%.
Conclusion: The study highlighted unmet SRHR needs of PLHIV in the four states. While most subjects reported frequent condom use, STI-related symptoms indicate unsafe sexual behavior. SRH and HIV-related knowledge levels are low, and respondents also reported SRH-related rights violations. This study confirms the need for interventions for positive prevention along with specific SRH programming for PLHIV as part of India's HIV response.

D46 - Adaptation to living with HIV for individuals, families and communities

MOAD0102

Challenges and coping mechanisms of HIV-positive school age children in Botswana

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Background: There is a dearth of literature on the challenges and coping mechanisms of school-age HIV infected children. The purpose of this study was to investigate challenges faced by HIV infected children in Botswana and to assess the coping mechanisms they employ to cope and survive.
Methods: The study was conducted among HIV-infected children and adolescents aged 6–18 years, using a cross-sectional design, in 12 antiretroviral therapy sites accounting for over 90% of all HIV-infected children receiving Highly-Active Antiretroviral Therapy in Botswana. Data were gathered using a structured pretested inter-viewer administered questionnaire and focus group discussions. Focus group discussions were held until saturation was achieved. Quantitative data were analyzed using descriptive statistics and cross-tabulations. Qualitative data were grouped into mutually exclusive categories according to themes emerging from the data. Ethical approval was obtained from the Botswana Ministry of Education & Skills Development, the Botswana Ministry of Health's Health and Research Development Committee and Baylor College of Medicine's Institutional Review Board.
Results: 984 HIV infected children participated between August 2010 and February 2011. The children were confronted with various challenges, including: poor school grades; poor school attendance due to medical appointments; poor nutrition; unanswered questions of how they became infected; and stigma or altered relationships with other children and teachers. In response to these challenges HIV infected children developed or adopted various coping mechanisms including: non-disclosure of HIV status, self-isolation; non-participation in school trips; attempting to treat HIV like any other disease; talking to close relatives or friends; and adoption of positive attitudes toward life.
Conclusion: HIV infected children faced many serious psychological and social challenges in living with HIV. These challenges elicit both positive and negative coping and survival strategies. Support systems for the children should aim to build on the positive coping strategies while ameliorating the negative ones.

D47 - Seropositivity: social identity, disclosure and vulnerability

THAD0501

HIV-positive gay and bisexual men in Peru: sexuality, disclosure and the disconnect between sexual health needs and access

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Background: Approximately 70000 people are living with HIV (PLH) in Peru. Over half live in Lima-Callao and one half are gay/bisexual men and transgender people. While they are the focus of care and prevention services, not much is known about their sexuality, sexual and reproductive health (SRH) needs and access. A community-based collaborative study involving the Peru Positive Network took place to assess sexuality and SRH status and access of PLH in Peru.

Methods: Trained PLH volunteers in Lima-Callao and 6 inner cities conducted 814 structured interviews in 2011 (48.7% in Lima-Callao, 72% biological males). This analysis focuses on 273 males reporting being gay and bisexual (40.8%) and compares Lima-Callao (n = 134) with other cities (n = 139).

Results: Participants in Lima-Callao were slightly older; 40% in Lima-Callao and 60% elsewhere lacked health insurance. Overall 32% had regular partners-in Lima-Callao 95% of partners were men, while elsewhere 21% of those were women and 17% trans; 42% of regular partners were seropositive, but serostatus of another 20% was reported as unknown outside Lima. Participants had disclosed serostatus to 82% in Lima-Callao but 60% elsewhere. 88% reported penetrative sex in last 6 months-up to 40% unprotected outside Lima; condom use was unrelated to partner serostatus. Among those with only casual partners, 28% reported unprotected sex in prior month; disclosure was negligible. Participants recognized a shared responsibility in prevention, including through treatment adherence. 21% and 8% had heard about barebacking and serosorting, respectively, but few had practiced them. 15% had been diagnosed STIs in prior year, primarily herpes and syphilis. Sexual health advice received by participants often encouraged abstinence (30%).

Conclusion: HIV+ gay/bisexual men in Peru remain sexually active; serostatus disclosure is limited, particularly with casual partners; unprotected sex and STIs are common. Often sexual health services inappropriately advise abstinence and insufficiently address prevention and disclosure.

D48 - Growing up with HIV: early infection, children and youth

MOAD0104

Experiences and challenges in sexual and reproductive health for adolescents living with HIV in Malawi, Mozambique, Zambia and Zimbabwe

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Background: An increasing number of children living with HIV are growing into adolescence where they face new sets of challenges. In resource constrained settings, few psychosocial and sexual and reproductive health (SRH) services provide age-appropriate support for these adolescents.

Methods: A large multi-country cross-sectional observational study was conducted in Malawi, Mozambique, Zambia and Zimbabwe, looking at the experience of adolescents aged 10-19 [n = 1600 (boys = 790, girls = 810)]. Gender specific experiences from rural and urban settings were explored in each country. Data was collected using in-depth interviews with adolescents (n = 150) and guardian/parents (n = 46), focus group discussions (n = 68), participant observation (3 months) and a knowledge, attitude and practice survey (n = 1498). Data was analysed through a triangulation approach.

Results: Preliminary analyses reveal that key challenges for adolescents living with HIV include accessing information on SRH; disclosing their status to peers; talking about sex and HIV in the context of a relationship, within families and with health service providers; planning to have children; and emotional well-being. HIV represents a complex challenge for adolescents who lack safe and non-judgemental environments to talk about safer-sex options and pregnancy, whilst it is assumed by families and health providers that sexual activities should not start before adulthood. Few health services provide support tailored to adolescents; health providers give out inappropriate information and frequently breach confidentiality, resulting in further marginalising adolescents living with HIV.

Conclusion: Despite variations between the four countries and in rural vs. urban settings, the attitude of health care providers and the lack of family-centred approach result in inadequate support for adolescents when they first experience sexual and love relationships. The study provides evidence that new policies and funding for HIV in low income settings must include safer-sex advice and SRH interventions, training for health-workers and families in order to provide adolescents with skills to make choices about relationships, safer-sex and HIV disclosure.

D53 - Ageing with HIV - social, behavioral and mental health issues

THPDD0203

Quality and quantity: what do current experiences of older people with HIV tell us for future generations living into older age? Results from the UK 50 Plus study

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Background: As HIV treatment extends the lives of people with HIV, we are learning about social as well as clinical drawbacks for the current generation over 50 with HIV. Many people with HIV express

fears about the future but what is the reality and how can it be managed?
Methods: 410 UK-based people with HIV aged 50+ were surveyed online and on paper. PLHIV were involved throughout the process advising, managing and administering the survey. Results were analysed in comparison to data on general population aged 50+ and data on all PLHIV.
Results: This group is highly diverse in terms of sexuality, ethnicity, gender, length of diagnosis. Compared with their peers they

- Report twice as many other long term medical conditions in addition to HIV, many linked to lifestyle issues such as smoking and exercise
- Report greater mobility problems and difficulty with everyday tasks
- Are less economically active, less likely to have savings or a pension and more reliant on state benefits
- Are less likely to be homeowners, more likely to live in social or rented accommodation

Many, particularly gay men, report social isolation due to age or HIV stigma, death of peers or concerns about disclosure. They also report difficulties getting primary healthcare, particularly from dentists and GPs, which are more heavily used by older people. Full results can be obtained from www.tht.org.uk/50Plus.
Conclusion: HIV appears to systematically disadvantage people in health, social and financial terms over a lifetime. Attention must be paid to healthcare and financial and social inclusion of older PLHIV, but also to informing long term condition management for younger and future generations of PLHIV about the greater importance of healthy lifestyle and financial planning. Work must be done to inform geriatric and generic healtcare providers about the needs of older PLHIV.

THPDD0206

Same old problem? Differing characteristics between heterosexual older adults with HIV who are white (HW) or from BME community (HBME)

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Background: Treatment advances and HIV transmission feed a growing population of older adults with HIV. Little attention has been given to differences within this group.
Methods: One in twenty UK-based over 50s with HIV (n = 410) surveyed. Sample was accurate for demographics of wider group. Data from 106 heterosexual over 50s, comprised of 51 HW and 55 HBME.
Results: Health: HW 3x as likely be recently diagnosed. HBME diagnosed in last 6-9 years 5x HW (51.0/10.0%). HBME twice as likely to have low CD4 count when first diagnosed. HW have higher count generally. HW♂ /HBME♀ most likely to have low CD4 count now, or not know count. HW♂ more than twice as likely not to be attending a treatment centre, despite reporting significantly higher occurrence of extreme pain/discomfort.
HW less likely to be taking medication for HIV (84.3/98.1%), have higher pill burden, find it harder to remember to take HIV treatment (15.5/5.7%), have side-effects from medication (20.8/13.3%) and more problems with walking, (56.0/42.6%), taking care of themselves (27.5/18.8%) and performing everyday activities (56.0/39.2%).
HBME♀ have more other long-term health conditions (HBME♂ have the least), but only 50% are taking medication for these (70% HW♂ are).
HBME higher levels of depression (28.8/21.6%), particularly HBME♀ (34.2%), but HW three times as likely to rate emotional/psychological health as poor.
Financial/Social Exclusion: HBME all of those with no income and 3x not enough income for basic needs (45.3/15.7%).
HW more likely to own their own home (47.1/18.2%). HBME more likely to be homeless, living in asylum support housing or renting council flat/house.
Socially, HW more likely to disclose to Partner (16.4/4.5%), family members (16.4/12.7%) or friends (16.4/12.7%). HBME more likely to seek support from non-family.
Conclusion: There are major health, financial and social differences between HW and HBME. These factors need to be considered when targeting support for these groups.

D56 - Improving social and behavioural data collection, triangulation of data sources and analysis in HIV research and programmes

MOAD0304

Who really provides care and support? The roles of young people in skipped-generation households

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Background: In communities severely affected by HIV many children are growing-up without their parents in skipped-generation households. Often these are headed by their grandparents. This research aims to critically examine what it means for children to grow-up in these households and which roles and responsibilities they assume.
Methods: The data for this qualitative and quantitative study were collected in Misangwa, a small community in the rural part of the Copperbelt Province in Zambia. Data collection was conducted by means of household surveys, in-depth interviews, Focus Group Discussions, and observational techniques. Respondents were members of the younger and the older generation found in 65 skipped-generation households. Their lives were followed over the course of thirteen months.
Results: Between 2001 and 2009 the number of skipped-generation households in Misangwa has increased. The proportion of children living in these households also increased significantly. The experiences and roles these children have are complex. It was found that especially older children actively impact the situation in their homes and are often wholly responsible for many aspects of daily life in the households. They work on the fields and are engaged in income-generation. Given the social isolation of many skipped-generation households a focus on households, rather than families, can be justified.
Conclusion: Literature often characterizes fostering as one-directional. This research examined skipped-generation households using ecological theories of child development. It found that that it is often children, and not guardians, who care for others in the households. Depending on age, personal characteristics and granted freedoms the older

children provide care and support to the members of their households. In a sense these people assumes the roles and are associated with the missing middle generation. The research has brought to the surface a complexity that calls a different focus on kinship and caring with attention for diversity, historicity and experience.

D68 - Available capacity, capacity building and organizational development

TUAD0201

Conducting an objective assessment of organizational capacity of NGOs providing services to HIV orphans and vulnerable children in India

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Background: There is a high demand from donors to predict which NGOs are able to improve the health outcomes of their populations and ensure an adequate return on social investment. The principal drivers of capacity development for NGOs are often those of the donor, and promote the development of organizations contrary to achieving sustainability. This stems from insufficient knowledge of the predictors of organizational sustainability, and how to measure and prioritize capacity building efforts. These gaps must be filled since local NGOs are the backbone for services in HIV care, support, and treatment.
Methods: We studied three NGOs providing community based/ residential care to OVC. An instrument was developed, consisting of 14 organizational domains, to enable a quantifiable and replicable assessment of an organization's level of development. Data was collected from key informants, staff surveys, record review and abstraction of routine program data. Domains were weighted in order to ascertain their relative importance in a ''healthy'' organization, and individual NGO performance was measured against this standard.
Results: The profiles generated were those of well-managed but unsustainable organizations. Financial and pharmaceutical management scored highly, while governance structures and strategic and business planning were weak. When graphed, the output revealed that only one organization's capacity was balanced while the other two curves were asymmetrical, indicating uneven capacities and ability to deliver services (Figure 1).
Conclusion: The quantitative instrument is the first tool enabling consistent, repeated assessments on the organizational capacities of NGOs providing HIV services. It guides donors on which NGOs to invest in and which capacities to build. It also enables donors to rigorously evaluate capacity building efforts of international organizations and hold them accountable. This is vital as resources for HIV/AIDS are in jeopardy and as PEPFAR increasingly emphasizes the delivery of HIV services through local organizations, investment in organizational development and country-owned capacity building.

D71 - Stigma and discrimination in health care settings

THAD0102

An intervention to reduce HIV stigma in health care settings in China

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Background: HIV-related stigma and discrimination is widespread in health care settings and poses a barrier for HIV prevention and control. The objective of the intervention was to reduce service providers' stigmatizing attitudes and behaviors toward people living with HIV (PLH).
Methods: The study was conducted in 2008-2011 in 40 county-level hospitals in two provinces of China. The hospitals were matched into pairs, with one hospital in each pair randomly assigned to the intervention condition after the baseline assessment. For intervention hospitals, we identified and trained about 20% of the popular opinion leasers (POL) among service providers to disseminate stigma reduction messages within their hospital. At the same time, universal precaution supplies were provided to all participating hospitals. A total of 1,760 participants, 44 from each hospital, were assessed at baseline, 6, and 12 months. Main outcomes of the intervention included general prejudicial attitude towards PLH, avoidance

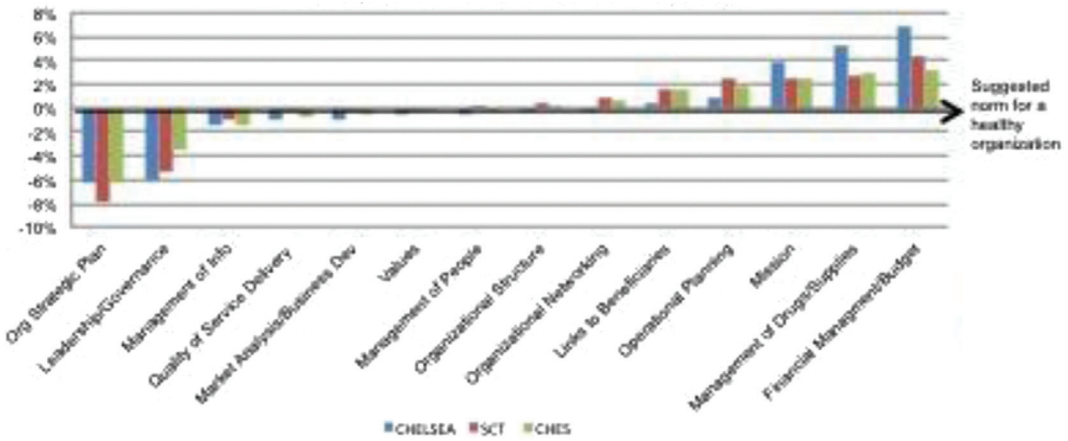

Figure 1. Deviations from Norm and Prioritised Areas for Capacity Building [Prioritized areas for capacity building].

intent to treat PLH, and perceived institutional support in the hospitals.

Results: Significant improvements for the intervention group were observed in reducing prejudicial attitude (Estimate 2.401, SE = 0.220; P <.0001), reducing avoidance intent (Estimate = 1.098, SE = 0.174; P <.0001), and increasing institutional support (Estimate = 0.390, SE = 0.131; P =.0029) at 6 months after controlling for age, gender, occupation, prior contacts with PLH, and province. The intervention effects were sustained and strengthened at 12 months.

Conclusion: Reduction in stigmatizing attitudes and behaviors among service providers can be achieved by an intervention implemented in health care settings. The intervention has the potential to be integrated into the health care systems in China and other countries.

THAD0104

Reducing stigma among Indian nursing students: a brief intervention involving local PLHIV networks

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Background: AIDS stigma inflicts hardship and suffering on People-Living-with-HIV (PLHIV), reducing the likelihood of HIV testing, treatment and disclosure. Stigma can be particularly harmful in health care settings. This study was designed to examine and reduce AIDS stigma among nurses and nursing students in India.

Methods: We interviewed 369 nurses in Mumbai and Bangalore, assessing stigma, endorsement of coercive measures and discrimination toward PLHIV. Based on these results, we developed, implemented and evaluated a 2-session stigma reduction intervention, co-facilitated by PLHIV, for 50 intervention and 50 control nursing students.

Results: Casual transmission misconceptions were common, with 28% of nurses believing HIV could be transmitted by sharing a glass and 26% HIV by sharing toilets with PLHIV. 70% agreed that people who were infected via sex/drugs deserved their infections. Almost all (96–99%) endorsed mandatory testing for sex workers and surgery patients and most stated that HIV-infected men (77%) and women (73%) should not be allowed to get married and that HIV-infected women should not be allowed to have children (76%). 88% said they would treat PLHIV differently from other patients, taking unnecessary precautions when drawing blood. significantly more participants worried about acquiring HIV at work (41%) than in their personal lives (14%, $p < 0.001$). Multiple regression analyses showed that worries about occupational transmission, negative feelings toward PLHA and transmission misconceptions were significantly associated with AIDS stigma.

Nursing students showed similar misconceptions and stigma levels as the nurses. Following the intervention, students showed significant pre-post decrease in all stigma scores, including blame, endorsement of coercive measures, and intent to discriminate (all $p < 0.01$). In contrast, pre-post scores among control students remained the same.

Conclusion: These findings demonstrate high levels of AIDS stigma in these health-care settings, that may be reduced by a brief intervention using a human rights framework, focusing on underlying variables and involving PLHIV.

THAD0105

Gender differences in HIV-related stigma among doctors in Egypt

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Background: Stigma is a hindrance to care for people living with HIV (PLHA) in Egypt. To understand how gender affects stigma among healthcare workers (HCWs), a study was conducted to identify the differences in HIV related misconceptions and attitudes of male (M) and female (F) doctors.

Methods: A cross-sectional study was conducted in two tertiary care hospitals in Cairo from October–December 2010. All doctors working in surgical departments were invited to participate; three hundred thirty two accepted (210 males, 122 females). Data was collected on socio-demographic information and HIV related misconceptions and attitudes. A chi square test was used to examine the differences between male and female doctors.

Results: Both male and female doctors had misconceptions about HIV modes of transmission. Significant differences ($p < .005$) were observed regarding transmission through mosquito bites (F: 44.3%, M: 31.9%), sharing cups and spoons with a PLHA (F: 28.7%, M: 19.0%), sharing toilets with a PLHA (F: 27.9%, M 16.7%) and serving food to a PLHA (F: 14.8%, M: 6.7%).

Differences were also significant in terms of blame and refusal to deliver care: 40% of females would not treat a PLHA (vs. 20% males), 50% would refuse to treat an injecting drug user with HIV (vs 36.8% males), and 57.4% would not treat a sex worker (vs. 40.7% males).

Conclusion: Female doctors had more misconceptions about HIV modes of transmission and judgmental attitudes compared with males. Further studies should explore factors influencing stigma among female HCWs in order to address it accordingly.

THAD0106

Health worker perceptions on the impact of HIV-related stigma and discrimination on health service delivery in Kenya

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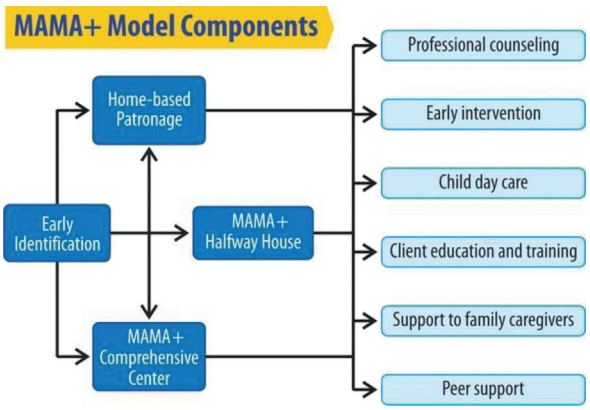
Background: Studies indicate that stigma and discrimination among health workers is higher than in other sectors. This subsequently affects service delivery and access to care and treatment for health workers living with HIV. This study aimed to determine the impact of HIV, including stigma and discrimination, on demand and supply of service delivery in order to develop health sector specific mitigation policies.

Methods: Data was collected from key informant interviews with 35 health facility managers and 6 focus group discussions with various cadres of facility and community based health workers in both public and faith based health facilities drawn from eight provinces in Kenya over the period June-August 2011. Content analysis of the key informant interviews and focus group discussions was done to determine health worker perceptions on the impact of stigma and discrimination on demand and supply of HIV services.

Results: Although stigma in the general community was reported to be reducing, the majority of the key informants felt that stigma amongst health workers was of significant concern. Stigma contributed to a high tendency of health workers to self test for HIV, avoid uptake of post exposure prophylaxis, and seek counselling and antiretroviral therapy in distant facilities. Disclosure of HIV status among health workers remained low particularly in lower level facilities. Despite high level of knowledge on HIV, it emerged from the FGDs that health workers living with HIV are discriminated against by other health workers. This manifested as a refusal to shake hands, share utensils and bias in the allocation of duties.
Conclusion: Policy and programmatic interventions, to support health workers living with HIV and to eliminate stigma and discrimination, are required within a comprehensive HIV workplace programme for all health workers in the country.



MAMA+ Model Components.

D72 - Family-centered approaches

MOPDD0103

Replication of the MAMA+model to prevent child abandonment by HIV-positive women in Yekaterinburg, Russia

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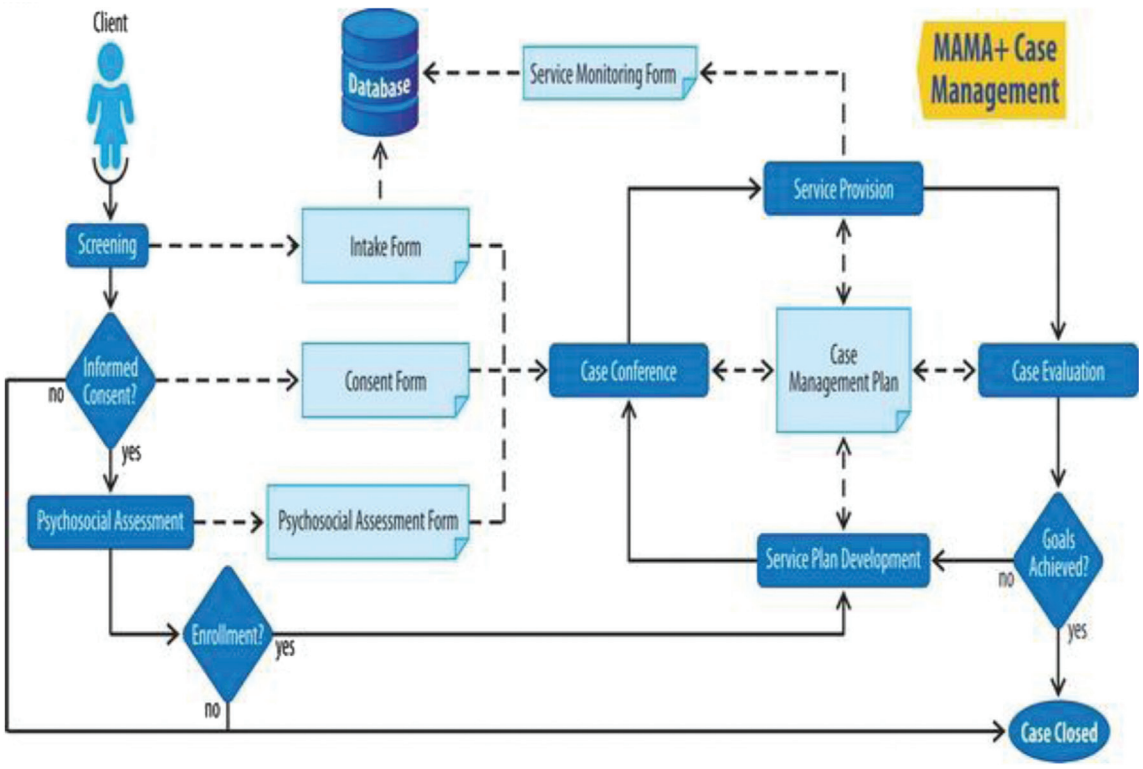
Background: Abandoned children in Russia, particularly those affected by HIV, face a grim life or death in a government institution. HealthRight and local partners developed a comprehensive MAMA+® model that includes early identification of women at risk of abandoning their children, home visits, child daycare and halfway house. Implementation of this model reduced the child abandonment rate in St. Petersburg, Russia, from 27% in 2004 to 6% in 2009. This project aimed to improve access to psychosocial services for women at-risk of child abandonment, including HIV-positive women, and reduce child abandonment in Yekaterinburg, another high HIV-prevalence city.
Methods: In 2010–2011, HealthRight and partners replicated the MAMA+ model in Yekaterinburg, the capital of Sverdlovsk region, which leads the country in absolute number of HIV cases. The replication involved 10 training events and 12 supervision sessions;



MAMA+ Case Management.

67 government and 30 NGO service providers were trained on case management, HIV basics, psychosocial counseling, reproductive health counseling and other topics. Data were collected on the uptake of services for at-risk women delivered by the trained providers using case management records.

Results: A cross-sectoral referral network between government healthcare, social services and non-government agencies was established. An interagency referral guide was published, and an interagency protocol is being developed. A government-NGO risk screening, home visiting and case management service was institutionalized in five government social service centers, with 249 women screened and 159 (63.9%) enrolled as high risk. These women, their children and other family members received 1,201 services over 1,126 service encounters. The rate of child abandonment by HIV-positive mothers in Yekaterinburg decreased from 6.3% in 2009 to 1.9% in 2011.

Conclusion: Replication of the MAMA+ model offers a promising approach for decreasing child abandonment by HIV-positive mothers in urban settings. Institutionalization of psychosocial services within government agencies is key for sustainability of the MAMA+ model in Russia.

MOPDD0104

Improving child-parent relationships among HIV+ mothers

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Background: People living with HIV (PLHIV) face various problems dealing with their relatives. Most often PLHIV in Armenia do not disclose their status to anyone. The disclosure of a childs HIV status or the parents to their children is a particularly sensative issue often leading to pshycological and interpersonal tensions, which leave influence on the health and child-parent relationships. To prevent the above ''Positive People Armenian Network'' NGO (PPAN) has carried psychological work with PLHIV and their children.

Methods: 10 trainings with HIV affected children were conducted. It was aimed at extension of the emotional and volitional spheres. 10 children 8–13 years old were selected (8 parents were HIV+, 2 HIV-). The age group was selected as the middle childhood years are significant in reviewing children-parents relationship. Children in middle childhood years are emotionally less active than teenagers. Design of meetings was planned (fables-discussions, games, art-therapeutic exercises). They were aimed at decreasing emotional tension, empathy development, value system identification, emotional harmony. Parenting works were also carried out.

Results: During 10 group meetings it was possible to establish psychological intimacy. Group thinking was strengthened through art-therapeutic techniques ''the group tree''. Subsequent works have focused on skill development. Through discussion of Fables and art-therapy childrens vision was enlarged and turned versatile, developing the moral values.

Children learned to understand their emotions properly, see themselves on the underside for understanding others' reactions through. Parents noted the positive change in children-parents relations with and in school environment.

Conclusion: The values and skills obtained during the meetings will help the children for further disclosure and acceptance of parents' status, to manage their emotions and feelings not allowing the parents illness to cause pshycological problems in themselves. Currently individual work with parents and children is still ongoing. More similar and parent-children mixed group meetings are planned for the future.

D74 - Community involvement and outreach in service delivery

TUAD0202

Strengthening treatment, care and support to people living with HIV through community-based treatment services

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Background: HIV care and treatment services in Ethiopia are mostly facility based and, services are not extended to or followed up at community level. To address this challenge, AIDSRelief introduced the Community-Based Treatment Support Services (CBTS) based on the principle of continuous patient and family engagement in care and treatment to assist HIV patients achieve optimal anti-retroviral therapy (ART) adherence and maintain low rates of loss to follow-up (LTFU) at St. Luke hospital in Oromia.

Methods: The CBTS model is composed of adherence counselor, case managers, community nurses and community volunteers (CVs) with distinct responsibilities. This team, established at the facility level, was trained to assist establishment of community level support for HIV patients.

At the facility, the team leads patients through structured treatment preparation prior to ART initiation; conduct home visits; sets up appointment system and same day follow-up for patients who miss clinic appointments; and provides supportive counseling to assist status disclosure and stigma reduction. CVs focus on providing home visits, LTFU tracing, awareness raising, early identification and counseling for OIs, and referring pregnant mothers for prevention-of-mother-to-child-transmission (PMTCT) programs.

Results: Following CBTS start-up in St. Luke hospital, the LTFU rate declined rapidly from 53.1 LTFU/1,000 patient months of follow-up (PMFU) in December 2010 to 47.3 LTFU/ 1,000 PMFU in March 2011. The retention rate has also shown statistically significant increase from 74.8% in March 2009 to 79.6% in March 2011.In addition, the overall patient crude retention rate has increased from 34.4% to 47.5%. Moreover, cross-directional linkages to other community-based programs supporting PLHIV have improved and community-wide disclosure among pregnant women has been promoted.

Conclusion: This experience proves that higher adherence rates can be attained through the CBTS model structured care programs. Such innovative community programs could to be scaled up and replicated for substantial country wide results.

TUAD0203

Community support systems: from horizontal initiative to vertical institution

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Background: Community support systems are effective structures to provide care and support to most vulnerable children and PLWHA. However, sustainability of such initiatives can be weak. The purpose of this study was to get insight into sustainability issues of World Vision's community based care and support programming in Eastern and Southern Africa.

Methods: A qualitative review has recently been conducted, including 13 key informant interviews and 54 focus group discussions with community initiative members, non-governmental organization staff and government representatives in Ethiopia, Kenya, Mozambique, Uganda and Zambia.
Results: The study results indicate that the sustainability of community based organizations depends on several issues, one of the key factors being vertical linking to government structures. These links can take different shapes, ranging from loose cooperation between government officers and community organizations to government representatives becoming members of community organizations' executive or coordinating boards. Such cooperation can even lead to a full adoption and institutionalization of community care and support initiatives into regional or national government structures, including further roll-out of such systems. The findings further indicate that any form of government structure cooperation with community based care and support systems can improve the community organizations' sustainability and increase the service delivery of both sides.
Conclusion: As it seems, the stronger the link to government structures, the higher the community groups' sustainability. However, sustainability also depends on the quality and availability of resources within such cooperation, as well as on the individual commitment of the partners. And finally there is also need to consider the possible pitfalls in government structure co-option, like the loss of access to external NGO funding and a politicization or restructuring of community groups, which can change their initial focus or even undermine and end volunteers' efforts in providing care and support to vulnerable children and PLWHA.

TUAD0204

Engagement of community volunteers for improving access to TB and HIV prevention, treatment and care services in Ibadan, Nigeria: the PLAN Foundation/TB CARE I experience

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Background: TB/HIV twin epidemics should be addressed jointly at community level. PLAN Foundation engaged community volunteers (CVs) for improving access to TB/HIV prevention, treatment and care services in 5 Local Government Areas (LGAs) of Ibadan, Nigeria.
Methods: 24 communities were selected from high TB-prone areas, high density areas and hardly-reached communities. A consensus meeting involving various community stakeholders was held during which 50 CVs were selected to facilitate active referral of TB suspects to DOTS centres and linkage with HIV testing services in ART clinics and other healthcare facilities in the areas.

The CVs were trained on the basics of TB, suspects' identification, defaulter tracing, adherence support and TB/HIV relationships. They were involved in providing support and follow-up services for smear-positive cases, linkage with HIV testing and treatment for dually-infected persons; and organizing community mobilization.

Monthly CVs review meetings were held while PLAN Foundation staff provided supportive supervision to the CVs in communities.
Results: There were steady and significant increases in number of TB suspects referred by CVs between project onset in June 2011 and October 2011. TB clients referred to DOTS centres for screening were: June-47; July-56; August-118; September-274; October-238 totaling 733 for the period. Of these, 78 of the suspects were smear positive cases while 25 were dual infected with TB and HIV.
Conclusion: Engaging CVs is effective in identifying, referring, supporting and following up TB suspects and persons infected with TB and HIV. There is the need for linkage of TB and HIV services as a strategy for detecting HIV infection among people with TB.
Community mobilization through CVs helps to increase awareness about TB and HIV in communities.

There should be improved support and motivation for CVs as vital linkages to communities TB/HIV interventions.

TUAD0205

Outreach clinic services for rural hard-to-reach people living with HIV (PLHIV): an approach to avoid follow-up default and sharing of ARVs

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Background: Effectively reaching PLHIV in rural, hard-to-reach areas is considered critical to improving access to health services and enrolment in care and treatment, which are needed to improve PLHIV's quality of life. Health facilities are located at least 20 kilometers from a farming population in Lamu District, Kenya. Infrastructure is poor and transport is unavailable; therefore, access to information and health services is an uphill battle. PLHIV there have had no option but to default treatment or share drugs.
Methods: Through Ministry of Health (MOH) structures, community sensitization was undertaken and trained clinical staff made available. Technical and financial support to conduct monthly mobile clinics was provided through AIDS, Population, and Health Integrated Assistance (APHIA*plus*). Comprehensive services for PLHIV were provided, including education on secondary prevention, HIV counseling and testing, provision of Septrin and HAART, adherence and support counseling, prevention with positives package, and treatment of opportunistic infections during monthly clinic days. Service delivery data was collected and summarized using standard MOH tools.
Results: From June 2010 to December 2011, 304 people were tested for HIV and 6% were found positive. Cumulatively 52 (48 active) patients have received HIV care (18 new) and 37 of them are actively on HAART (20 new). Patient retention is 92% and 87% have disclosed their serostatus to their sexual partners. All patients have had a CD4 test and 6-month monitoring is regularly conducted. The patients have formed a vibrant support group for psychosocial support and economic empowerment.
Conclusion: With structured links to health systems and community involvement, sustainable models of outreach clinics for remote and hard-to-reach areas can be developed to achieve universal access to HIV prevention, care, and treatment. The approach has the potential to promote ART adherence, patient retention on care and treatment, and stigma reduction in the community.

TUPDE0104

Community-led cash transfers in Zimbabwe: pathways for buy-in and improved child health and development

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Background: There is a sense of urgency to identify instruments that can promote the health and development of children in poor resource and high HIV prevalence areas of sub-Saharan Africa. This has led to a surge in technical programmes, such as cash transfers, whose new ideas and resources may not necessarily resonate with local support structures. This paper describes the effects of a community-led cash transfer programme in Manicaland Province, Zimbabwe, and explores how community members appropriated 'techno-fixes' in ways that benefits them and achieve buy-in.

Methods: We report on data from 35 individual interviews and three focus group discussions, involving 24 key informants, 24 cash transfer beneficiaries, of which four are children, and 14 non-beneficiaries.

Results: A thematic network analysis found the cash transfer programme to have had a substantial effect on children's schooling and education, mainly through improved access, concentration and ultimately performance, but also on their health and well-being, primarily through improved food intake, access to healthcare and reduced levels of stress and worry at a household-level. The programme was also said to provide the beneficiaries with an important platform to reduce levels of poverty, primarily through investment opportunities arising from having greater disposable income. Encouraged by local participation in the programme, conditionalities and witnessing its positive effects, both benefiting and non-benefiting community members spoke enthusiastically about the programme and highlighted their preference for conditional cash transfers-indicating community-wide buy-in and involvement.

Conclusion: We conclude that despite their invasiveness, cash transfer programmes can, if implemented through local community structures, be appropriated at a community-level in ways that facilitate health-enabling and supportive social environments for vulnerable children and youth in sub-Saharan Africa.

D75 - Impact of service delivery on providers, coping strategies, burn-out and motivation

THAD0101

Treating the Nation: the positive impact of antiretroviral drugs on the clinical practice, coping strategies and workplace morale of health care workers in Kabarole District, Uganda

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Background: The advent of UNAIDS ''Treatment as Prevention'' policy of global antiretroviral (ARV) scale-up is not only life-saving for HIV-positive health care users, but may also hold significant potential to improve health care worker clinical practices, professionalism, and workplace morale. This research investigates the impact of ARV service delivery programming on health care workers′ clinical practices and personal and workplace morale in a rural western Ugandan setting.

Methods: As part of a larger community study (N = 142, 48% female), individual qualitative interviews were conducted with health care workers (n = 15, 47% female) from Rwimi clinic in Kabarole District, during a four-month period. Clinic practices were also assessed through 40 hours of participant observation. Findings were coded and analyzed using Attride-Stirling′s Thematic Network Analysis, and further mapped for discussion using the Social World Triad, a conceptual model developed for this study.

Results: ARVs are seen as being a positive, helpful force which allows health care workers to re-frame their clinical practice and professional identity to one of mastery over the illness. Their representations of HIV/AIDS are correspondingly beginning to change, to that of an illness which is manageable and controllable with drugs, thereby providing health care workers with renewed hope and a sense of clinical competence not felt since before the HIV/AIDS era. Professional practice is improving through more positive clinical interactions between health care workers and clients, which could lead to improved health service programming uptake by the community.

Conclusion: The clinical use of ARVs has also improved the personal coping strategies, workplace morale, and professionalism of health care workers at this clinic. Such findings encourage increased advocacy and community outreach efforts regarding ARV service provsion, and suggest that ARVs could be utilized in concert with broader social and biomedical interventions and programming, as a social change agent to reduce stigma and improve health service uptake.

D76 - Social factors determining use of HIV and AIDS, tuberculosis (TB), hepatitis and other related services

THAD0103

The debates over Mexico City's HIV/AIDS clinic: socio-political implications for HIV prevention, treatment and comprehensive health care for transgender sex workers

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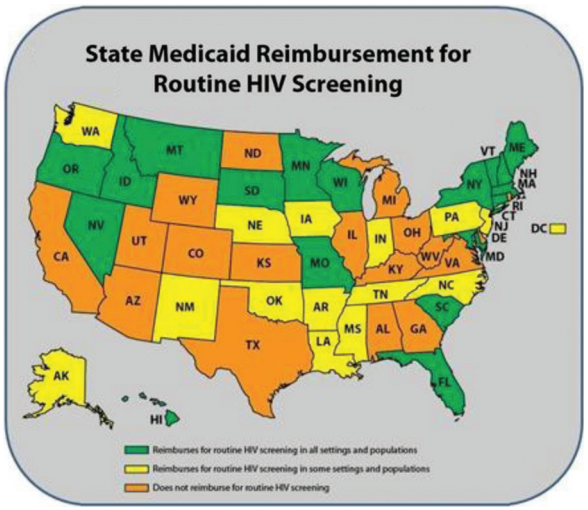
Background: As the efforts to tackle the HIV/AIDS pandemic have become increasingly more refined, the dialogue about the ways in which the local understandings of gender and sexualities and dynamics of stigma shape the success or failure of treatment and prevention efforts has come to the fore. This presentation examines one such example in which the complex social, political, and health entanglements affect—in differing and often unexpected ways—the efforts to provide HIV-related prevention and treatment services. Specifically, it provides a qualitative socio-political analysis of the debates around the emergence of an HIV-focused clinic in Mexico City, where after the approval of a local law more comprehensive health care services for trans individuals were also to be delivered.

Methods: It is based on fourteen months of ethnographic research in Mexico City conducted in two phases spanning 2009–2011. It draws on qualitative interviews, observations and analysis of relevant

textual documents, and provides a qualitative ''bottom-up'' analytical approach to the gathered data.
Results: The results show that the emergence of a transgender health program delivered in what is known as the HIV clinic sparked a heated controversy between supporters and detractors. Due to the intersections between structural vulnerabilities and existing dynamics of stigma around HIV, many trans women—and particularly sex workers—prevented themselves from accessing HIV-related and other health care services available to them in this hospital. Many of them did not want to be seen as potentially HIV positive individuals, as this may have brought both negative social and labour consequences into their lives.
Conclusion: The predicament between accessing or not health services in a clinic tainted with stigma had direct implications for the successful prevention and treatment of HIV and other illnesses. This study supports the view that local sociocultural and political dimensions need to be fully considered when envisioning HIV-specific programs.



Map 1.

D78 - Policy determinants and constraints

WEAD0603

Applying public health law research methods to address legal barriers and facilitators to effective HIV prevention programs

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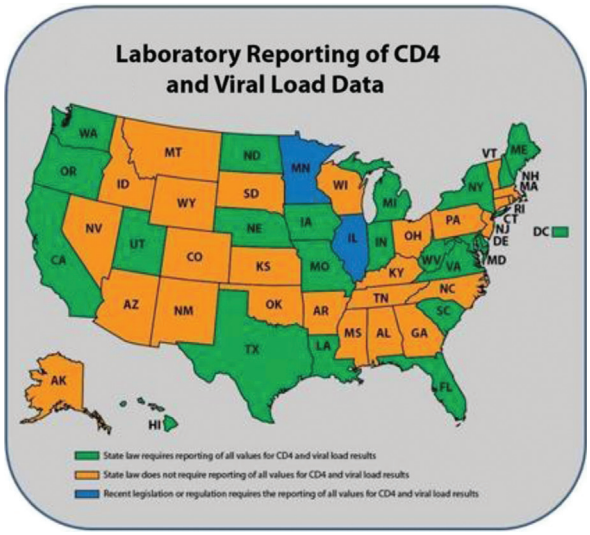
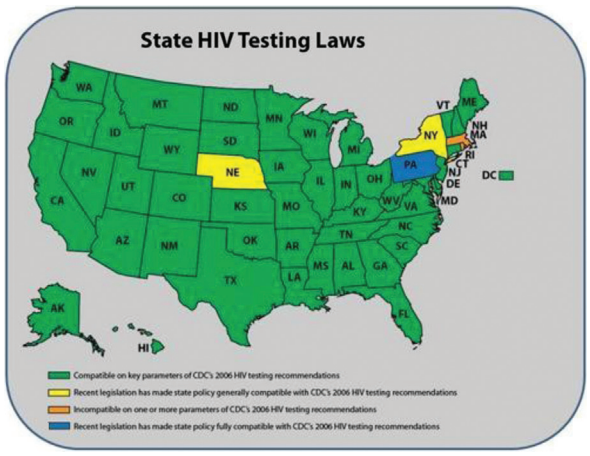
Background: The Division of HIV/AIDS Prevention (DHAP), Centers for Disease Control and Prevention (CDC) Legal Assessment Project is developing interdisciplinary public health law research (PHLR) methods to assess legal frameworks that can be barriers or facilitators to effective HIV prevention. Rigorous, reproducible methodology focusing on interpreting legal data and using epidemiologic research methods can facilitate translation of legal text into data useful for making structural programmatic decisions.
Methods: In the U.S., state law plays a preeminent role in shaping local HIV prevention environments. We conduct 50-state legal surveys across numerous legal domains. For each domain, preliminary research identifies existing legal data from academic and legal research institutions. Research protocols (search parameters, coding schemes, codebook, pilot phase, reliability/validity checks) are developed, followed by systematic data collection (typically WestlawNext™.) Periodic legislative tracking assesses policy diffusion across states over time. These data can be combined with secondary data (census, HIV incidence, etc.) for further quantitative analysis.
Results: We present results from three domains. 1) Reimbursement for HIV screening: 18 states reimburse for HIV screening in all populations, and 15 reimburse in some populations (August 2011) (Map 1). 2) Reporting of all CD4 and viral load laboratory results to state HIV surveillance programs for monitoring access to care and quality of care: 26 states plus D.C. specifically require reporting of all CD4 and viral load data (January 2012) (Map 2). 3) Previous research on consistency of state laws with CDC HIV testing recommendations was updated: 46 states plus D.C. had laws consistent with CDC recommendations (January 2012) (Map 3).
Conclusion: PHLR data characterize important structural barriers or facilitators to effective HIV prevention environments. Methods development is ongoing and may be translatable internationally or



Map 2.



Map 3.

for cross-country comparisons where countries share a regional identity and where policy diffusion across state/national lines may be expected.

THAD0402

Effective representation of PLHIV in decision making processes still an uphill journey in Malawi; why?

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Background: Systematic efforts to develop a national GIPA policy can help change the HIV landscape towards improving the quality of life for PLHIV in Malawi. The GIPA Report Card, a measurement tool, which assesses the application of the GIPA principle in the national response to HIV, was conducted in Malawi to identify specific barriers and opportunities to involving PLHIV in the development of policies and delivery of programmes.
Methods: The Malawian Network of People Living with HIV conducted a nationwide assessment. The study included knowledge about the principle, PLHIV involvement in policy development at district level, inclusion of GIPA in the National Action Framework, universal access targets, and the involvement of PLHIV in research. The data collectors, all PLHIV, also visited institutions that have HIV workplace programmes.
Results: The respondents represented varied institutions: 33% PLHIV; 27% Civil Society Organisations, 14% government departments or other public institutions; 5% UN agencies; 9% International NGOs, 5% parastatal organisations; and 5% private sector. Respondents stated there were fewer efforts in ensuring that the principle is practiced at local and community levels. Inclusion of GIPA in the Malawi HIV Extended National Action Framework signals the increase in efforts by the government to embrace the principle. However, there is no proactive communication and outreach campaign regarding the principle. Stigma and discrimination remain the greatest barrier to the GIPA.
Conclusion: Malawi must increase awareness and funding to support activities highlighting the meaningful involvement of PLHIV and to address the barriers to the effective application of the GIPA. A multi-sectoral communication's strategy and systematic efforts to develop national GIPA guidelines would help to promote the involvement of PLHIV and contribute to the quality of Malawi's HIV response.

D79 - Advocacy and lobbying by civil society, affected communities and PLWHA

THAD0401

Participation of women with HIV in the national response to the HIV and AIDS VI in the departments of Chinandega, Managua, Masaya, Rivas, Leon and South Atlantic Autonomous Region (SAAA)

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Background: HIV prevention in women is a priority identified in the National Strategic Plan for STIs, HIV and AIDS 2006–2010 and the Country Programme agreed between the Government of Nicaragua and the Population Fund United Nations taking note that Nicaraguan women are being increasingly affected by HIV. In order to contribute to the national response has developed an initiative to visualize this situation and promote the active participation of women with HIV in the national response to the increased incidence departments to advocate for the promotion and defense of human rights, including reducing the stigma and discrimination, and develop preventive actions to prevent other women from acquiring HIV.
Methods: Qualitative evaluation.
Results:

- 6 departments have women's organizations and local references with HIV prevention and support for the capture and defense of human rights including access to treatment, care and support.
- Women with HIV at 3 CONISIDA integrated departmental and national CONISIDA, 5 Commissions to Fight AIDS, from civil society (CNLCSSC) and 6 Multidisciplinary Care Teams departmental hospitals.
- Coordination with various stakeholders and mobilizing key social sectors, around HIV prevention in women and the promotion and defense and guarantee of the rights of women with HIV enhancing hardly a social response is obtained as quickly and effectively with other actors.

Conclusion: The initiative developed has been proposed as a successful model to be incorporated in the national response to HIV. Their strategies: i) Strengthening the organization of women with HIV in their communities, ii) development of their capacities in advocacy, communication and addressing HIV with other women affected by the epidemic; iii) public advocacy decision makers to influence the reduction of stigma and discrimination and vi) the exchange of experience can be replicated and adapted to different contexts to be feasible to develop successfully.

THAD0403

Mainstreaming gender into the national Global Fund strategy in China: a case study from a grassroots women's NGO network

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Background: Despite the growing number of women infected with HIV/AIDS in China, insufficient attention to women living with HIV/AIDS in the Global Fund's strategy and structure continue to increase the vulnerability and participation of women. No expenses in the budget are designated for projects focused on women, and all 11 NGO representatives in the Country Coordinating Mechanism (CCM) are men.
Methods: The Henan Women's Network works to mainstream gender-based approaches into China's national AIDS strategy in order to help women gain improved access to HIV/AIDS prevention, treatment and care services. The Network used three major strategies to advocate within the national Global Fund mechanism as entry point for broader national advocacy: working with female PLWHA to conduct needs assessment, and strengthen collaboration between women's health organizations; submit recommendations and mobilize international organizations including UNWOMEN and

UNAIDS to incorporate gender concepts into the revision of CCM regulations; and cooperate with the All China Women's Federation on gender rights awareness trainings for health departments, the Federation and female PLWHA.
Results: After incorporation of a gender strategy into the CCM regulations and a targeted call for applications from women, 40% of 2011 CCM NGO consultants are women. Their increased participation in decision-making process will further the development of gender-based approaches in budget and strategy.
Conclusion: Actual needs of women living with HIV/AIDS have been successfully passed on through a local grassroots network. Integrated support from international organizations, the government, scholars, experts and community organizations was instrumental in achieving consensus in a gender-based strategy. Moving forward, capacity-building for women living with HIV/AIDS need to enable greater participation, and needs assessments will need to clarify suitable targets for women. Budgets promulgated by the CCM need to define specific expenses to implement gender-based strategies.

THAD0405

Influencing the political arena: case studies of women living with HIV's meaningful participation in shaping HIV decision-making, policies and programs in Rwanda

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Background: Rwandan women and girls are disproportionately impacted by HIV and comprise the largest percentage of those infected. Progress has been made to promote gender equality and women's participation in decision-making. However, women living with HIV (WLHIV) remain underrepresented in the national HIV response. Experience shows that HIV policies and programs often fail when women are excluded from shaping their content and direction.
Methods: The authors examined three case studies to determine best practices for ensuring meaningful involvement of WLHIV (MIWA): (1) National Accelerated Plan for Women, Girls, Gender Equality and HIV (2010–2014); (2) EC-UN Women ''Supporting Gender Equality in the Context of HIV/AIDS'' program; and (3) National Strategic Plan for the Elimination of Mother-to-Child Transmission of HIV (2011–2015).
Results: Participatory processes (workshops, focus groups, and in-depth interviews) involving women, including WLHIV, were used to identify key priorities, activities, and HIV strategies for the National Accelerated Plan (2010) and eMTCT Strategy (2012). The EC-UN Women project fostered HIV-positive women's leadership through training, technical assistance, advocacy planning sessions, and the development of formal mechanisms within national AIDS coordinating bodies that include women.

These case studies demonstrate that WLHIV's active participation in national HIV policies and strategies development increases their visibility and ensures that their needs and rights are prioritized (e.g. requirement of future participation of women and girls in national HIV decision-making). Such practices enable WLHIV to be directly involved in implementation, monitoring, and evaluation of strategies they helped to develop (e.g. by aligning their own programs and budgets to the National Accelerated Plan).
Conclusion: These Rwandan cases highlight MIWA's positive impact and the need for concentrated commitment to actively involve WLHIV in decision-making. Deliberate programming is needed to ensure that women and girls are empowered and equipped to transform national agendas to protect and promote their needs and rights in the HIV context in all countries.

TUPDD0104

Ending discrimination in recruitment processes: an effective campaign to prohibit pre-employment questionnaires

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Background: The UK is currently reforming its benefits system to encourage people with health conditions to return to work. However, research indicates that unscrupulous employers were using pre-employment health questionnaires to discriminate against people with health conditions in the recruitment process. Research from 2006 found that when a non-disabled person and a disabled person who disclosed their disability applied for the same job, non-disabled applicants were invited to twice as many interviews. Research also shows that fewer than 50% of people diagnosed with HIV in the UK are in employment.
Methods: NAT brought together a coalition of organisations including mental health and HIV charities, to campaign to prohibit the use of health questionnaires before a job offer. The Equality Bill was identified as an appropriate piece of legislation to outlaw the use of these questionnaires. Media coverage of the impact of discrimination on people living with HIV and mental health conditions raised the profile of the campaign. The coalition submitted evidence to Parliamentary Select Committees including international examples and secured cross party support for the campaign in the House of Commons. After initially rejecting the idea, the Government met with the coalition and representatives living with HIV to listen to our concerns.
Results: The Government accepted the evidence presented by the coalition and tabled an amendment to the Equality Bill prohibiting the use of pre-employment health questionnaires. The Equality Act came into force in October 2010 and it is now unlawful for employers to ask health related questionnaires before a job offer. This is a significant step forward in ending discrimination in recruitment for people living with HIV.
Conclusion: There are significant gains to be made in building coalitions with organisations supporting people with other health conditions that face similar stigma and discrimination to campaign to reform legislation.

TUPDD0105

AIDS and human rights activists fighting for maternal health justice in Uganda: the value of real synergies

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Background: The crises of preventable maternal death and HIV are interrelated. In Uganda, a country with HIV treatment coverage rates of 47%, 16 women die unnecessarily in childbirth daily, one in five new HIV infections is through vertical transmission, and untreated HIV contributes to 25% of preventable maternal deaths. In addition, stigma as well as lack of basic health equipment such as gloves for

midwives contributes to reluctance of health professionals to attend to HIV positive mothers, particularly in remote areas.
Methods: Civil society networks in Uganda formed a diverse coalition to implement a legal and advocacy strategy to challenge the epidemic of preventable maternal death in Uganda. Combining a Constitutional Court challenge with a challenge in the court of public opinion, the coalition used grassroots mobilization, media work, budget monitoring and advocacy in Parliament to create a common platform for health justice advocacy, prioritizing issues ranging from HIV treatment access to the shortage of nurses. The multiple factors that contribute to preventable maternal death, including HIV, created multiple opportunities for high impact civil society advocacy.
Results: This new civil society coalition has been able to break down walls between disease- and condition-specific advocacy and implement bold campaigns to scale up access to essential health services in Uganda. In one year, the coalition has supported an historic legal challenge on the right to health and preventable maternal death; has successfully advocated for increased investments in increased professional health worker recruitment, remuneration and equitable deployment; and has generated national and international press attention to the human right to health in Uganda.
Conclusion: We have developed an approach to advocacy in Uganda that joins civil society focusing on a wide range of diseases and conditions in synergy. Uniting around key policy opportunities has resulted in important progress in the struggle for health for all.

D80 - Evidence-informed policy development

MOAD0203

Evidence-based drug policy in four African countries: barriers and opportunities

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Background: The purpose of the study was to identify barriers to and opportunities for evidence-based policy on illicit drugs in four sub-Saharan African countries-Tanzania, South Africa, Nigeria and Ghana. Small-scale studies indicate that HIV transmission is linked to injection and non-injection drug use in all of these countries.
Methods: A policy case study for each country was developed through in-person semi-structured interviews with key informants, including policy-makers, academic experts, NGO representatives and representatives of international organizations.
Results: The lack of population-based data and trend data on the extent of drug use and drug injection is an impediment to policy-making, leading to denial at policy levels. In all four countries, the law allows the police wide latitude in search, seizure and arrest of people accused or suspected of committing minor drug crimes, who can receive long prison sentences. Except in Tanzania, there are very limited affordable options for evidence-based drug treatment, especially of opioid dependence. Pressure from the US and other external actors to demonstrate interdiction successes may contribute to the domination of the policing-based drug policy. South Africa's drug policy-making has been walled off from HIV policy-making bodies. Ghana is seeking to generate population-based data on the extent of drug injection as health authorities bemoan the weakness of mental health and drug treatment services.
Conclusion: Criminalization and policing dominate drug policy in most of these countries, impeding evidence-based responses to HIV. There is an urgent need to build capacity among policy-makers and civil society to rethink entrenched policing-based approaches to drug use and to raise awareness of affordable evidence-based services for people who use drugs. The advances made in Tanzania's methadone program, including new awareness by the police of the importance of public health approaches, should be an occasion for learning across the continent.

WEAD0604

Bottlenecks analysis: a critical step to evidence-based planning for eMTCT, Cameroon experience

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Background: Cameroon is among the 22 countries with the highest burden of PMTCT unmet needs. In response to the global commitment to eliminate new infections among children and keep their mothers alive, Cameroon decided to develop a bold PMTCT scale-up plan aligned with the global MTCT elimination targets. To develop an evidence based plan, the MoH with support from its partners conducted an analysis of programme bottlenecks, disparities using an innovative tool based on marginal bottleneck budgeting (MBB).
Methods: The tool was used to analyze bottlenecks and disparities on the demand and supply of MNCH and PMTC services. Key steps included: advocacy and consensus building on the methodology, key tracer interventions; consensus on bottlenecks and disparities, causal analysis and identification of corrective actions.
Results: Key bottlenecks are presented in table 1. Geographical, socio-cultural and economic disparities were also observed between and within regions (see fig 1 and 2). Strategies and interventions to address these bottlenecks include: 1) capacity building of community actors for the promotion of integrated PMTCT/SMNI, 2) strengthening procurement and supply management system, 3) quality assurance of PMTCT service delivery, 4) strengthening monitoring and evaluation.
Conclusion: The bottleneck analysis has proven to be a powerful method for identifying and analyzing disparities and factors impeding the performance of MNCH and PMTCT programmes. To generate accurate information and draw relevant conclusions quality data are a prerequisite. This was one of the major challenges which were addressed by actively collecting data by field actors. Choices and decisions on key bottlenecks should be based on their potential impact on programme performance, relevance and feasibility of corrective strategies, and availability of resources for action. Participation of all level-stakeholders from the onset of the process increases ownership, and recognition of findings. Results from the analysis were precious inputs for the development of the national mother to child transmission elimination Plan. The plan provides a framework for strategic vision and coordination for all actors and is therefore a structured road map to achieving the set targets for PMTCT by 2015.

THAD0404

Community-based actions and services achieve results

R. Rodriguez-Garcia[1], O. Kayode[2], B. Manteuffel[3], B. Simms[4], B. de Zalduondo[5], R. Bonnel[1] and N. Njie[1]

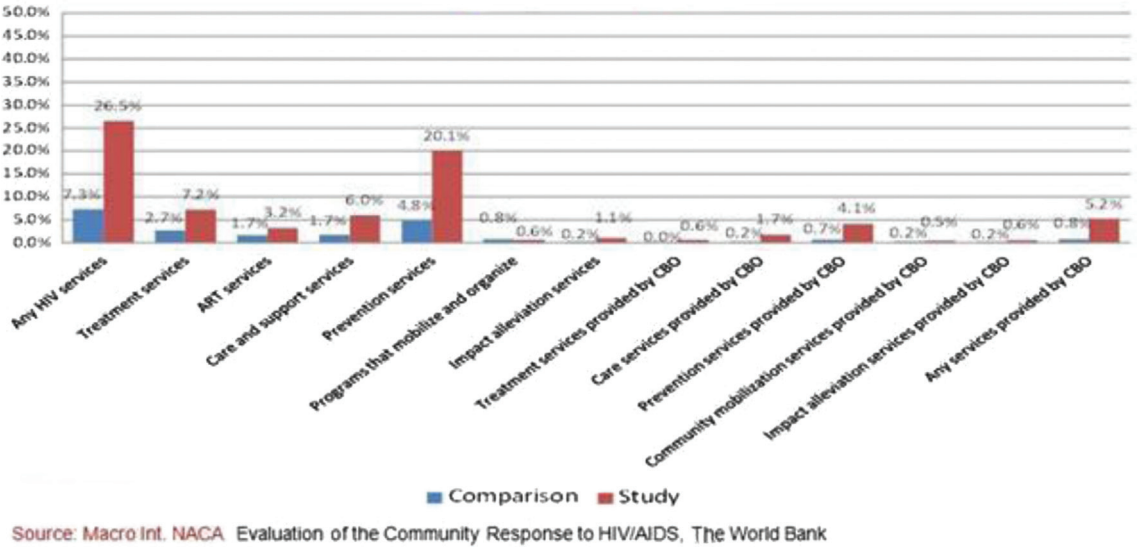

Figure. Significant use of prevention and any HIV Services by study communities as compared to 'comparison' communities.

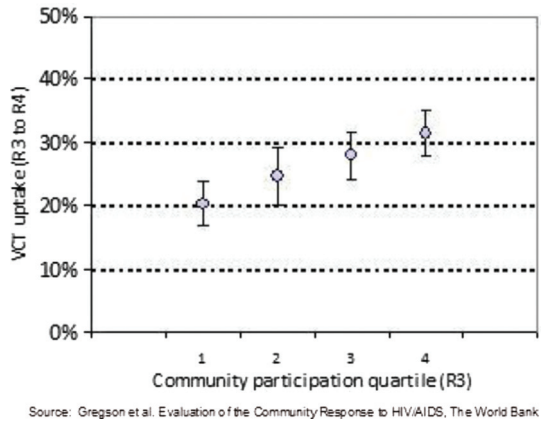

Figure. Villages in Zimbabwe with more people in community groups have greater HCT update. 2003–2008 (N=184).

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Background: The demand for effectiveness swept through the international community raising expectations about results and their impact. None has been more affected than CSOs. Despite being at the front-lines of the international response to HIV/AIDS, these efforts were not always evaluated. This evaluation of the community response asked: Do communities with a strong community engagement show: (i) better knowledge, attitudes, perceptions and behavior, (ii) greater access to and utilization of HIV/AIDS services, and (iii) social transformation?
Methods: Given the complexity/variety of community responses, the approach selected involved several countries, studies and methods. Experimental and quasi-experimental methods measure community results looking for changes in knowledge, behaviors, utilization of services and health outcomes with indicators related to prevention, treatment, care, support and mitigation. Quantitative and qualitative data from CBO/NGOs/households were collected and analyzed to better understand social transformation and the findings.
Results: Eleven studies were conducted in 8 countries (2009–2011) (B*urkina Faso, Kenya, India, Lesotho, Nigeria, Senegal, South Africa, Zimbabwe*). Strong casual evidence shows that specific community interventions can affect the course of the HIV epidemic through increased HIV knowledge and reduced stigma, and increased condom use, testing uptake, treatment adherence and use of services. Example: (i) community empowerment increased services utilization among FSWs in India ($p < 0.001$); (ii) peer mentoring nearly doubled the number of individuals attending pre-test HCT and by 120% the number of individuals receiving their test results ($p < 0.1$) in Senegal. Strong evidence shows that community-based actions play a complementary role to national programs by providing services to less favored communities (i.e. rural communities; high risk groups).
Conclusion: This evidence can support decision-making by CSOs and resource allocations at national level to ensure that civil society components are integrated in the national response to decrease dependency on international funding for a more effective and efficient achievement of the 3-Zeros.

D83 - Histories of policy responses to the epidemic

WEPDD0206

International blood donation guidelines for men who have sex with men (MSM)

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Background: The U.S. Food & Drug Administration prohibits men who have sex with other men (MSM) from donating blood. The policy does not consider the potential donor's HIV status, sexual activity, or relationship status. The current policy allows other populations at elevated risk of HIV to less restrictive deferrals, or no deferral at all. This type of policy reinforces incorrect information about the spread of HIV. Most countries have permanent deferrals of MSM blood donors despite chronic blood shortages. Reform of U.S.

blood donation guidelines is necessary to maximize blood donations and improve blood safety protocols.
Methods: Advocates, including public health and blood bank communities, blood product recipients, and NGOs, have pushed for a more equitable policy. In May 2010, GMHC joined with leading hemophilia advocates, who also represent a population disproportionately impacted by HIV, to raise awareness of blood donation guidelines in agreement that: the current deferral of all MSM results in a large number of potentially eligible blood donations; and that there are some high-risk activities permissible from heterosexual donors under the current policy. Both perspectives were presented to the Advisory Committee on Blood Safety and Availability (ACBSA) in June 2010.
Results: The ACBSA recommended that sufficient data were not present at that time to change the policy banning MSM, that current blood donation guidelines are ''suboptimal'', and that a robust research agenda be pursued in order to carefully examine alternative policies. Government agencies are now implementing the ACBSA's recommendations to identify a subset of low-risk MSM blood donors. In tandem with U.S. momentum for reform, a number of other countries, including the United Kingdom, have made reforms to their policies to allow MSM to become blood donors.
Conclusion: International momentum to revise blood donation guidelines for MSM advances efforts to maximize blood safety, increases blood donation, and decreases stigma of MSM.

D84 - Policies regarding HIV prevention, diagnosis, treatment and care

WEPDD0201

Analysis of political governance as a determinant of level of ART coverage using country-level data

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Background: Political leadership is known to affect HIV prevention and treatment. In this presentation, we aim to show the dimensions of political governance that are associated with ART coverage using country-level data.
Methods: Percentage of ART coverage from 2004 to 2009 as estimated by UNAIDS is analysed as the outcome measure. High-income countries as defined by the World Bank in 2009 are excluded from the analyses. Measures of political governance and GDP per capita (log-transformed) from the World Bank, adult literacy rate (UNESCO, reflected and log-transformed), gender inequality index from World Development Report 2011, skilled birth attendance at delivery compiled by World Bank (reflected and log-transformed) and disability adjusted life years (DALY) due to non-HIV causes and international (HIV and non-HIV) health funding per capita from the Institute of Health Metrics and Evaluation were fitted separately as predictors in multi-level linear models, in which year of reporting or estimation and HIV prevalence from UNAIDS are included. Missing data were imputed for fitting a final model that includes year, HIV prevalence and variables that remained statistically significant.
Results: Higher levels of ART coverage are significantly associated with higher GDP per capita ($p < 0.001$), lower gender inequality ($p = 0.003$), higher literacy rate ($p = 0.011$), higher percentage of births attended by skilled attendants ($p = 0.002$) and less DALY due to non-HIV causes ($p = 0.033$). It is also highly significantly associated with better political governance in all six dimensions(political stability, voice and accountability, control of corruption, rule of law, government effectiveness and regulatory quality) ($p < 0.001$). In the final model, only political stability and voice and accountability remained as statistically significantly associated with higher levels of ART coverage.
Conclusion: The analyses indicate that better political governance are crucial determinants of ART coverage in a country.

WEPDD0205

Three I's for HIV/TB and early ART to prevent HIV and TB: policy review of HIV and TB guidelines for high HIV/TB-burden African countries

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Background: The HIV and tuberculosis (TB) epidemics present unprecedented public health challenges. Antiretroviral therapy (ART) and the *Three I's for HIV/TB* (isoniazid preventive treatment (IPT), intensified TB case finding (ICF), and TB infection control) are key interventions to prevent TB in people living with HIV (PLHIV). This article reviews the extent to which national HIV and TB guidelines for high HIV/TB burden African countries are consistent with current World Health Organization (WHO) guidelines.
Methods: The 14 African countries with 62% of the estimated global HIV/TB burden were identified from WHO estimates. Recommendations on ART initiation criteria and the *Three I's for HIV/TB* from national HIV, TB and HIV/TB guidelines were reviewed and compared with current WHO recommendations.
Results: Of the 14 countries, eight (57%) and ten (71%) follow WHO's recommendation to provide ART at CD4 counts ≤ 350 cells/mm^3 in asymptomatic people and pregnant women, respectively. Seven (50%) countries recommend ART in people with HIV and TB irrespective of CD4 count. All countries have guidelines on the *Three I's for HIV/TB*. All 14 countries except Zimbabwe recommend IPT for six months, and ten of them follow symptom-based screening to rule out active TB. However, the WHO four-symptom screening algorithm is not yet widely recommended. Nine, eight and five countries have monitoring and evaluation indicators for ICF, IPT, and TB infection control, respectively. In the 14 countries, 38% of 8.4 million people eligible for ART were receiving it and 61,997 people without active TB were on IPT.
Conclusion: WHO and country guidelines on ART and the *Three I's for HIV/TB* are largely consistent and reflect a common approach to addressing HIV and TB. However, there is a significant gap in implementation of the guidelines. Further scale-up of existing programmes and implementation of policy recommendations are required to address the HIV/TB syndemics in the countries examined.

D85 - Policies addressing social and economic determinants of vulnerability

WEPDD0202

UNAIDS' gender policy: strengths and weaknesses

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Background: Gender inequalities are a key driver of the epidemic, yet despite this being recognised for many years, global policies to change these often have had little effect. Using the UNAIDS' *Agenda for Country Level Accelerated Action on Women, Girls, Gender Equality and HIV* which is its flagship gender and HIV policy as a case study, we explore the barriers and facilitators of the *Agenda*'s development and implementation, to understand the strengths and limitations of gender policy better.
Methods: We conducted semi-structured interviews with 16 southern African and global gender and HIV/AIDS policy makers, researchers and activists who had been involved in the development or implementation of the *Agenda*. We analyse their responses using thematic analysis.
Results: Barriers to the development and implementation of the *Agenda* included the lack of resources and tools to development and implement the policy; the lack of participation of women in grassroots organisations, despite this being a pillar of HIV and gender policy; and a lack of political will to see the policy translate into meaningful programmes and change on the ground, despite significant visible support from key actors in UNAIDS. Yet positively, the *Agenda* also provided a collaborative platform for women's organisations to develop and common language to prioritise women and girls and ensured consistent and strong language around this emerged.
Conclusion: Our study suggests that despite the *Agenda* being the 'flagship' policy on women and girls in the context of HIV championed by UNAIDS, there remain significant weaknesses in how the *Agenda* was developed and is being implemented. These challenges are reflective of the wider field of gender and HIV and reflect the limited real commitment that is often placed around challenging gender inequalities in the response to HIV.

D86 - Policies addressing HIV and AIDS in the workplace and educational institutions

TUPDD0102

License denied: professional and vocational licensing restrictions affecting people living with HIV in the United States

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Background: We reviewed the laws of the 50 states and compiled those vocational and professional licensing laws (e.g. for licensure to be an acupuncturist, barber, massage therapist, midwife, cosmetologist, nurse practitioner, doctor, dentist, etc.) that discriminate against people living with HIV/AIDS and/or those with a communicable, contagious, or infectious disease.
Methods: The statutes, regulations, and cases were identified in Westlaw using the following search terms: ''HIV,'' ''Human immunodeficiency virus,'' ''communicable,'' ''contagious,'' ''infectious,'' and ''disease.'' The volume includes laws that explicitly discriminate against people living with HIV/AIDS (PLWHA) as well as laws that do so implicitly through restrictions concerning communicable, contagious, or infectious diseases. While we did attempt to include all relevant state law, this does not promise to be an exhaustive list.
Results: The results of this survey reveal a deeply rooted HIV stigma that has been embraced by policy makers in a majority of the states. Thirty-five of the fifty states have licensing requirements that explicitly discriminate against people living with HIV/AIDS for one or more of the fifteen vocations considered here, and forty-four states have requirements that either discriminate against PLWHA or discriminate against people living with infectious, communicable, or contagious diseases. These laws lack any basis in the science of HIV transmission, and maintaining them only validates the ignorance and bias that spawned them.
Conclusion: Licensing criteria that discriminate against people living with HIV/AIDS violate federal law. States that allow these discriminatory laws to remain on the books are ignoring scientific consensus and promoting HIV stigma. If PLWHA in the United States are to enjoy the same employment opportunities that other individuals enjoy, then states must examine their licensing procedures and alter or remove any discriminatory requirements until all licensing practices are in compliance with the Americans with Disabilities Act and guidance from the Department of Justice.

D88 - Monitoring and evaluation of policies and their impact on PLWHA, affected communities and vulnerable populations

TUPDD0103

Southern exposure: HIV and human rights advocacy in the southern United States

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Background: The southern United States has the highest numbers of adults and adolescents living with HIV and the highest death rates from AIDS. Numerous southern cities are in the top ten for HIV infection rates. Yet state laws and policies fuel the epidemic and exacerbate pervasive stigma and discrimination.
Methods: This long-term, multi-method investigation is based on hundreds of interviews with people living with HIV and AIDS, their advocates, public health officials, legislators, judges and medical providers, as well as extensive legal and policy analysis.
Results: Multiple state laws and policies create an "environment of risk" that has made the South the nation´s leading region for both HIV infection and deaths from AIDS. In the South, where poverty levels are the highest in the nation and fewer people have access to health insurance state policies are contributing to the disproportionate impact of HIV on minority communities. The failure to invest in public health, Medicaid and HIV-specific programs, particularly housing and transportation for a rural population; insistence on failed abstinence-based education; criminalization of HIV exposure; homophobic laws that drive MSM and transgender people underground and away from essential health services and the highest incarceration rates in the nation are some of the human rights violations that undermine public health efforts and fuel the epidemic in southern states.
Conclusion: Laws and policies in the southern U.S. are undermining human rights and conflict with the goals and objectives of the National HIV/AIDS Strategy. This interactive session will identify strategies for challenging these policies at the federal, state and local level.

D89 - Impact of policies on health systems

MOAD0202

Overcoming double standard policies towards expansion of opioid substitution treatment (OST) in Ukraine

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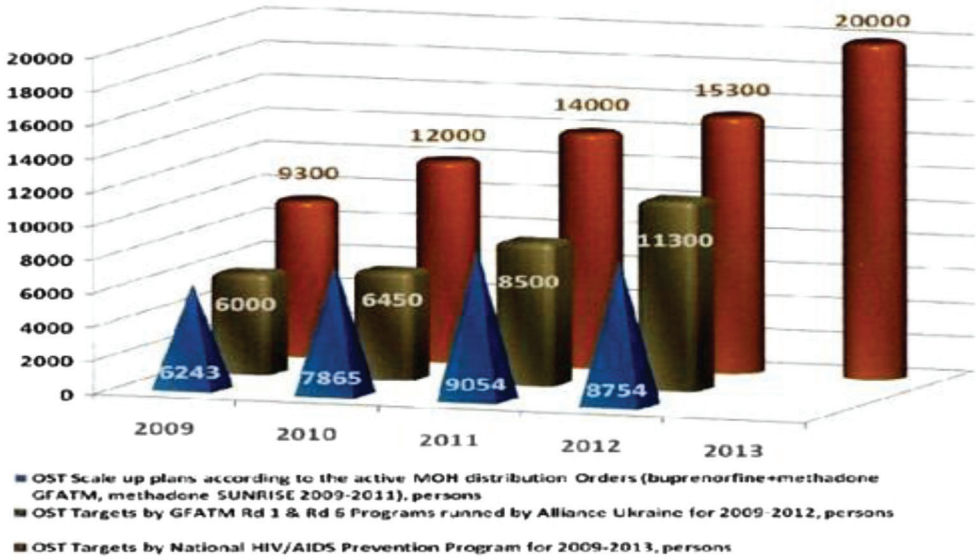
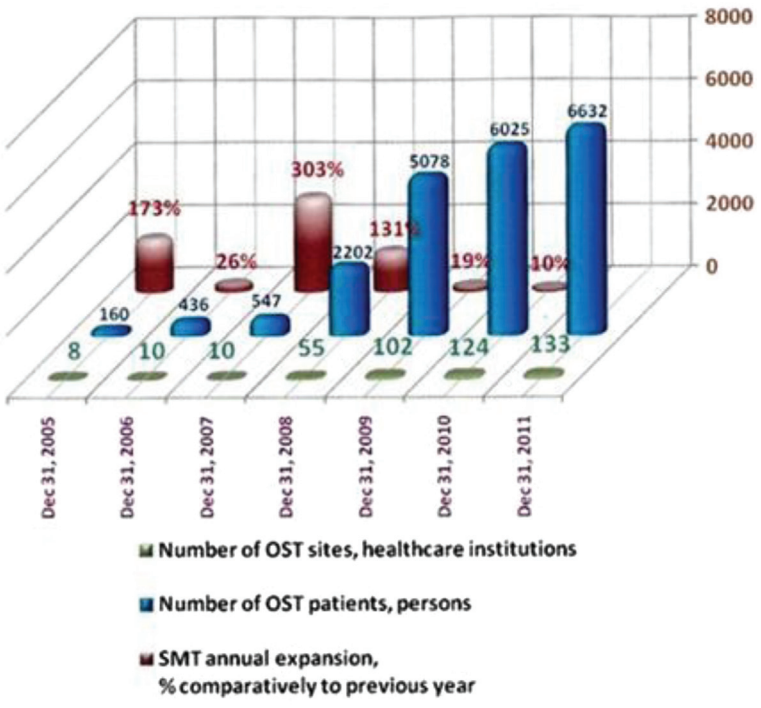
Background: Ukrainian National HIV/AIDS Prevention Program (NAPP) envisages 20,000 people on opioid substitution treatment (OST) by the end of 2013. WHO estimates 53,000 IDUs shall be placed on OST to provide adequate response to HIV/AIDS epidemic. Ministry of Health (MOH) is only organization regulating number of OST patients. MOH determines number of OST patients in its distribution orders (DO). OST targets set by MOH DO are much lower than annual NAPP indicators and indicator of GFATM Rd 6 funded Program run by ICF ''HIV/AIDS Alliance in Ukraine'' (AU) for 2012 as it shown on Diagram #1.
Methods: 6650 patients were getting OST in 133 healthcare institutions in all regions in January, 2012. All patients receive



Diagram#1.



Diagram#2.

treatment and psychosocial support for free within GFATM Rd 6 funded Program. Though OST procurement is budgeted in NAPP OST medications have never been bought from state budget. OST is regulated by MOH and other executive bodies in clumsy manner. It takes up to 7 months to issue new OST DO. State Service on narcotic control (SSNC) allowed importation of only 55% of methadone envisaged by MOH DO in 2011. SSNC is intended impose lower domestic methadone quota for 2012 than needed for OST scale up under NAPP.

Results: Ukrainian State demonstrates double standard policies towards scaling up of OST. Ambitious OST NAPP targets were proclaimed but MOH applies inadequate efforts to achieve those targets. Diagram#2 demonstrates that OST expanded on 10% only over 2011 comparatively to 303% in 2008 and 131% in 2009.

Conclusion: AU is overcoming double standard policies towards OST scale up. AU collaborates with National AIDS Center (NAC) which is one of MOH compartments and our implementation partner within GFATM Rd 10 funded Program. This partnership is aimed to build NAC capacity for OST provision, ensure OST scale up and sustainability.

WEPDD0204

Complementary production of global public goods for health: measuring contributions of HIV/AIDS initiatives

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Background: This study examines how HIV/AIDS funds, including vertical Global Public Goods for Health (GPGH), might be leveraged to contribute to production of horizontal GPGH through health system strengthening. Specifically, it addresses the following questions: 1)How can vertical (disease-specific funds) be used to decrease the impact of funding asymmetries between vertical and horizontal GPGH and support the production of horizontal GPGH? 2)How would complementary activities be evaluated with regard to their contribution to health system strengthening?

Methods: Global Fund grant information was used to examine the extent to which HIV/AIDS grants are currently contributing to system strengthening and capacity building at the national level beyond their disease-specific areas and if the inclusion of health system strengthening components influences grant performance. In addition, a framework is developed to evaluate the contribution of HIV/AIDS programs to the production of GPGH through the horizontal strengthening of national health systems.

Results: In the bivariate analysis, the number of health system strengthening components was significantly related to performance. However, as more variables were added the significant disappears. The grant characteristics significant across the models were grant duration and region. While the results regarding the positive association between health system strengthening components and grant performance are inconclusive, the inclusion of health system strengthening components doesn´t appear to interfere with a grants ability to meet its disease specific performance targets.

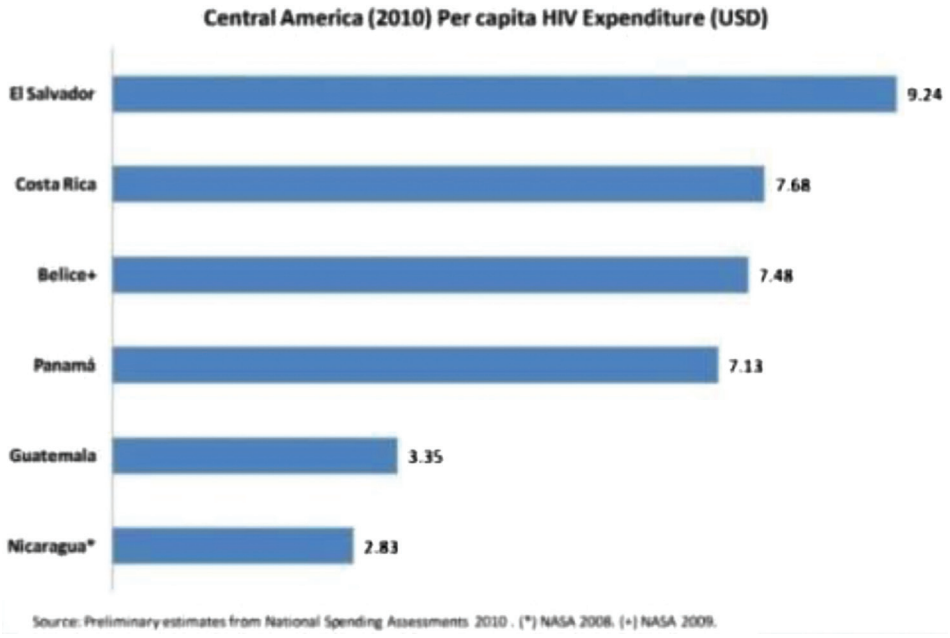
Conclusion: The results from this analysis indicate the need for additional research to examine the relationship between health systems, health system strengthening, and HIV/AIDS program performance. The critical step would be to examine how the national subsystems are contributing to the international level through governance, financing or provision of goods and services related to GPGH.

D91 - Analysis of resource allocation and monitoring of their use

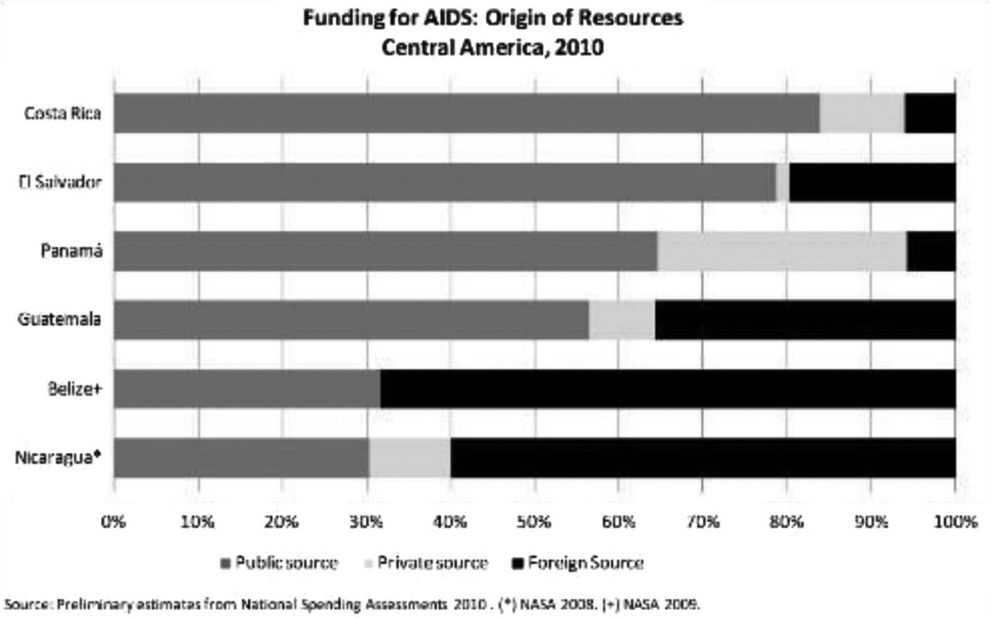
WEAD0601

Mapping HIV spending in Central America: providing evidence for a renewed policy agenda

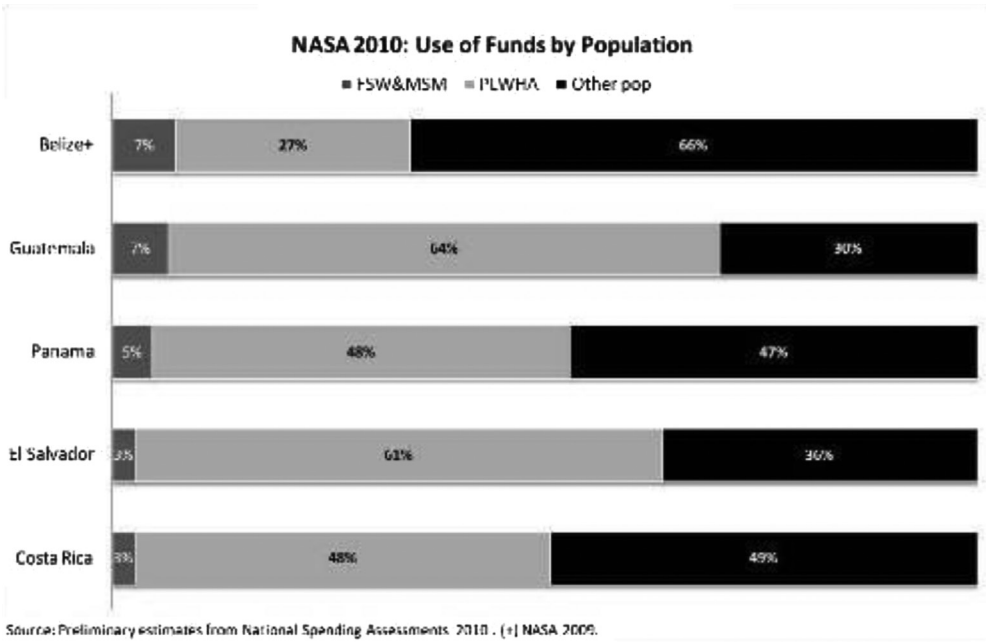
R.D. Valladares Cardona, NASA Teams Guatemala, Belize, El Salvador, Nicaragua, Costa Rica, Panama



National AIDS Spending in Central American Countries.



National Aids financing by source in selected countries.



National Aids spending by Beneficiary Population.

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Background: In most of the three decades since HIV appeared in Central America resource scarcity have limited the response. The HIV spending analysis it's been used for advocacy to mobilize international and public resources. National aids expenditure assessments (NASA) 2010 sheds evidence on the need to review the political agenda of resources in pursuit of higher levels of sustainability, equity and effectiveness.

Methods: NASA is a technique based on health accounting principles, extended to multi-sectoral responses to HIV, according to the resource needs model (RNM). With USAID PASCA support and by Health Ministers Council Agreement, six Central American countries developed NASA 2010, with a harmonization strategy based on research questions guiding design, data analysis and interpretation; tabular and graphical outputs, both relevant and feasible for all countries, and guidelines for data validation and participatory discussion of results.

Results: Except Belize, countries with higher HIV per capita spending in Central America are not those with higher HIV prevalence but

those who have: a) health systems with mainly public financing, or b) large Global Fund grants. In both cases, most of the funding goes to medical interventions, people living with AIDS and general population. Spending on key populations at higher risk for HIV exposure is minimal, although the epidemics are concentrated, with high prevalence among gay men, sex workers and Trans. Antiretroviral spending is about U.S. $ 26 million, with few countries monitoring length of survival and quality of life since treatment initiation.

Conclusion: There are sharp contrasts in financial position of the response to HIV in Central America. NASA 2010 showed evidence that will put these issues on the political agenda of countries and define an updated and more effective financial strategy.

WEAD0602

Using geographic information systems mapping as a decision support tool for PEPFAR South Africa

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Background: PEPFAR South Africa saw a 2008 government policy shift in HIV opening doors to more formal collaborative planning and greater transparency in implementation of donor-supported programs. In 2010, PEPFAR commissioned a national survey to catalog i) geographic location of partners and sites and ii) human and financial resources used for implementation. This dynamic online reporting, graphing and mapping tool is called the PEPFAR Inventory and is accessible freely on the Internet. Its purpose is to provide strategic information to monitor implementation of the PEPFAR Partnership Framework between the United States and South African Governments.

Methods: Data were captured into a single database and 6,600 sites were geocoded using open source tools. Sites were then assigned to sub-districts, municipalities and provinces using additional open source proprietary software. A combination of open source software was used to create searchable maps.

Results: The Inventory is integrated with results and budget data which will be linked to targets. This will make it possible for the PEPFAR Inventory to monitor achievement and US Government investment across the country. Cluster maps enable program managers to view program coverage. MapGuide software provides an interface to display various data sets comparatively, such as population and HIV prevalence, pin-maps per agency, prime partner, site type, site ownership and program area. Viewing which partners are working in the same geographical and programme area helps to avoid duplication of effort.

Conclusion: The Inventory, developed by the USAID-funded Enhancing Strategic Information Project implemented by John Snow Inc., is a critical tool for monitoring the Partnership Framework. Aggregated provincial data can be integrated with other datasets at similar geographical levels to determine if PEPFAR resources are distributed to respond to the needs of the epidemic. It is envisaged that HIV/AIDS activities of other donors will eventually be linked to allow better coordination and more effective targetting.

WEPDD0203

Investing in HIV prevention in a global recession: HIV prevention research and development funding trends 2000–2011

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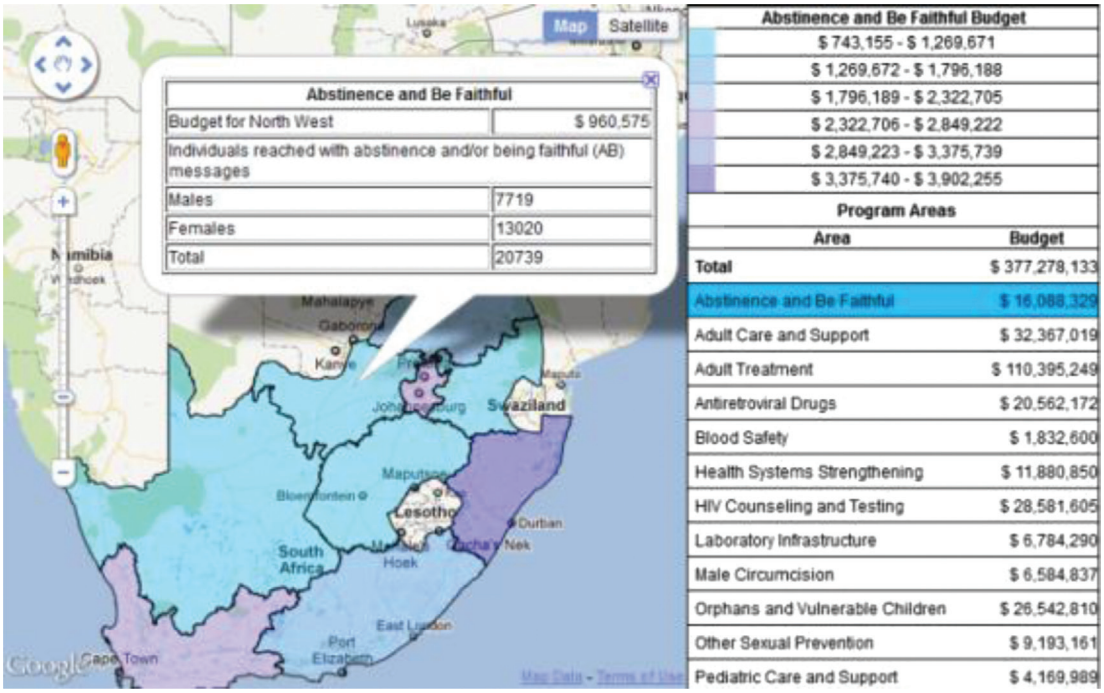
[1]AVAC, New York, United States. [2]UNAIDS, the Joint United Nations Programme on HIV/AIDS, Geneva, Switzerland. [3]International



PEPFAR SA Program Area Provincial Budget Map.

Partnership for Microbicides, Silver Spring, United States.
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Background: Since 2004, the HIV Vaccines and Microbicides Resource Tracking Working Group has employed a comprehensive methodology to track trends in R&D investments and expenditures for biomedical HIV prevention options, including HIV vaccines, microbicides, PrEP, treatment as prevention and adult voluntary medical male circumcision.
Methods: R&D data were collected on annual disbursements by public, private and philanthropic funders for product development, clinical trials and trial preparation, community education and policy advocacy efforts in order to estimate annual investment in HIV prevention R&D. Investment trends were assessed and compared by year, prevention technology type, funder category and geographic location.
Results: The period from 2000 through 2010 saw significant growth in funding support for HIV prevention research and development. However, in 2011 HIV prevention research began to see increased funding pressures as governments worldwide decreased or flat-lined budgets in global health and as philanthropic donors worked to revise their investment strategies. Funders also had to deal with greater competition among funding priorities within the field of HIV prevention and with other major global disease needs. Despite various pressures, HIV prevention research progressed significantly in 2011, with new findings and promising new trials.
Conclusion: Monitoring funding trends for HIV prevention research is particularly important in this time of economic uncertainty, especially as the scientific community has articulated a clear path to the end of the HIV epidemic. Such monitoring permits identification of investment needs, prioritization of research areas and assessment of the impact of public policies that increase or decrease investment. It also provides the fact base for advocacy around spending levels and allocations that will sustain investments in the research required to build on the success of recent trials; bring novel HIV prevention candidates into the pipeline; and, support follow-on clinical trials needed to assure the safety, immunogenicity, efficacy and acceptability of new HIV prevention products.

D92 - Impact of the law, law enforcement and/or access to justice on the HIV response

TUAD0101

Reducing conflicts between public security policy and HIV response: a research of the impact of prostitution elimination policy on female sex workers

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Background: *Sao Huang* (elimination of prostitution) in China is an important public security effort to eliminate prostitution by imposing harder punishments on FSWs. Despite of the growingly intensive intervention from health department, HIV infection among female sex workers in Kunming remains high, at the level between 1.6 and 4.0% in 2009, syphilis infection at 12% and other STIs at 51% in 2006. Convincing evidences are needed to concert policies from public security and health departments.
Methods: The research was carried out jointly by the Kunming CDC, FSW peer workers and university volunteers, in four populated urban districts in Kunming China. In the initial phase, an estimation of FSWs was conducted. The second phase included literature review of policies, laws, regulations and practices related to Sao Huang, with special attentions drawn to Women's Education Center, a facility created under the public security system to detain FSWs arrested in Sao Huang. The third phase was a study on the lives of FSW and impact from Sao Huang particularly related to health service accessibility. Face-to-face interviews, focus group discussions and questionnaires were carried out to cover 561 FSWs.
Results: Extensive discrimination already hampers FSWs' rights to health information and services. *Sao Huang* efforts have furthered such obstacles. *Sao Huang* is also a main driving factor for FSWs to move to 'safer' locations, increasing FSWs' invisibility thus weakening service accessibility. *Sao Huang* promotes distrustful relationship and tension between FSWs and public service departments, including that of health provision, which makes it even more difficult for health department to access FSWs.
Conclusion: *Sao Huang* is a wide-spread national policy which needs to be restructured in order to adapt to the growing needs for HIV response in China. The research group is organizing evidences from the research to draft a paper advocating for changes in this particular policy.

THAD0202

Eight-country study of three-year program to strengthen and expand HIV-related legal services for people living with HIV and key affected populations: what did we learn about scale-up?

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Background: The enabling legal environment has long been identified as critical to rights-based responses to HIV. In the 2011 Political Declaration on HIV/AIDS, UN Member States committed to supporting legal services as well as monitoring the impact of the legal environment on HIV prevention, treatment, care and support. Research shows that legal services in developing countries remain under-resourced, of variable quality, ad hoc and reactive, often with poor case documentation and weak links with the Health and Justice Ministries.
Methods: A study on HIV and legal empowerment was commissioned to place the program in a broader access to justice paradigm. In each country, a comprehensive needs analysis or an environmental scan was undertaken to determine the needs, available services and gaps in HIV-related legal services. A local organization already providing legal services was given technical and financial support to improve quality and scale up, including documentation of their work. Regional and international consultations were held to promote sharing on management challenges, and substantive issues such as criminal law, needs of women and girls, and access to treatments for HIV. An independent end of program evaluation was undertaken in early 2012.
Results: A review of results in program countries and other contexts revealed success factors such as: engagement of outreach workers to create demand for services; women friendly and child friendly services can increase uptake; opportunities exist to mainstream HIV-related legal services into existing government services; service (such as child care) can increase access and assist sustainability,

particularly for female clients; technical assistance can improve case documentation and hence advocacy for science-based policy and law reform.
Conclusion: Legal empowerment and access to justice approaches are essential elements of the enabling legal and policy environment for the response to HIV. They are needed to help take prevention, care, treatment and support to scale.

MOPDD0201

Are we listening? What sex workers know about prostitution policy and risk of HIV

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Background: Existing prostitution policies directly affect an individual's ability to protect oneself from risk of HIV/AIDS in terms of access of services and ability to negotiate safety. We examine the policies as they are written, but also from the perspectives of those they are directed toward. This panel offers an explicit analysis of policy related to sex work, prostitution, and trafficking through the perspectives of sex workers, including the criminalization of prostitution in general as well as specific policies and practices (i.e., Condoms as Evidence (DC), Prostitution Free Zones (DC), and End Demand (Chicago).
Methods: Our goal is to analyze policy through direct communication (in-depth interviews, surveys and case studies) related to criminalization of prostitution in general with a focus on specific policies including Condoms as Evidence, Prostitution Free Zones, and End Demand Campaigns. Our research includes 34 in-depth interviews, 50 surveys, and 6 case studies and is representative of Washington, DC, the southwest and northeast areas of the country.
Results: Trafficking and prostitution policies undermine HIV programs and the health of those individuals toward whom they are targeted because

- Stigma and fear discourage sex workers from seeking out health services, which can further endanger the worker as well as his/her clients and partners.
- Quick and risky negotiations with clients because of criminalization leads a worker to operate from a less empowered place from which to negotiate specific sexual activities safely
- New anti-trafficking legislation criminalizes organizations if they provide certain services to a person they believe is trafficked but don't take the person to the police.

Conclusion:

- Existing policies must be analyzed with these questions in mind and revised/reframed to place individuals' safety and health at the forefront
- Sex worker and sex worker rights activists must be at the forefront and integral to these discussions and reworking of policies.

MOPDD0204

Criminalizing condoms: how policing practices put sex workers and HIV services at risk

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Background: In many countries police practices are dramatically out of sync with declared government policies to prevent HIV by promoting access to condoms. Police confiscation and destruction of condoms held by sex workers and outreach workers impair sex workers' access to condoms. Police treatment of condoms as evidence of criminal activity and as tools for extortion threatens sex workers' ability to safely carry condoms and negotiate their use with clients.
Methods: In a joint research effort, community groups in Kenya, Namibia, Russia, South Africa, the United States, and Zimbabwe administered detailed questionnaires to 139 sex workers and 40 outreach workers.
Results: Research revealed that police routinely stop and search sex workers and confiscate their condoms. In some locations, police destroy sex workers' condoms by burning them, cutting them up, driving on them, or throwing them in the garbage. Police confiscation and destruction of sex workers' condoms increases their vulnerability to HIV. Sex workers reported having unprotected sex with clients after police took their condoms. In some cases, police use condom possession as justification to detain or arrest a person on charges of engaging in sex work, or as leverage to extort bribes or sexual favors. Sex workers sometimes do not carry condoms or refuse condoms from health care providers because they fear condoms will get them in trouble with police. Police further impede sex workers' access to condoms by surveilling and harassing outreach workers and taking or destroying condoms meant for distribution.
Conclusion: Policing practices are undermining messages of condom accessibility and acceptability crucial for disease prevention and the promotion of individual and public health. Policing tactics and guidelines must be brought into alignment with international best practices to prevent HIV. As a first step, governments should eliminate laws that criminalize sex work and other structural obstacles to police reform.

MOPDD0206

The legal framework of sex work and its interface with HIV: barriers for a sustainable response to HIV programming in Bangladesh

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Background: Due to the current legal frame work of sex work in Bangladesh sustainable HIV prevention interventions among Female Sex workers (FSWs) is a major challenge. It is clear from experience gained so far that social marginalization & disempowerment that characterize FSWs community are the key vulnerabilities that need to be addressed before any interventions related to HIV can be successfully adopted by them with ownership.
Methods: The first ever national congress of FSWs in Bangladesh organized by Save the Children was participated in by 1000 FSW around the country from 29 FSWs networks. They discussed legal and policy issues related to sex work and its consequences. This allowed an opportunity for shared experience from leading national, international organizations working with FSWs for last 20 years to have an analysis of the legal framework of sex work among Bangladesh.

Results: Hotel or Street, in any settings FSWs are not in a legal position to say no and or insist client for negotiating safe sex. According to anti- prostitution law two or more FSWs cannot work together which interferes with the ability to form collective resistance to violence, abuse & unsafe sex. On the other hand Police and Municipality law creates fear of Arrest hinders community outreach and FSW is hidden: this means it is difficult to identify, contact & build trust and avoiding arrest prevails over safer sex. Also Police powers harasses peer educators, carrying condoms seen as 'promoting', 'soliciting' & 'carrying on' sex work. Due to criminalization of Brothels prevention program cannot ensure 100% condom use, frequent raids disrupt HIV services.
Conclusion: The legal and policy framework requires radical restructuring to reduce legal sanctions and social marginalization and allow capacity building will work for sex workers community to build a sustainable HIV AIDS program in partnership with other stakeholders including government in Bangladesh.

D93 - Intellectual property and trade regimes and access to HIV treatment and diagnostic medical devices

WEAD0401

Killing the Doha Declaration and access to ARVs: one free trade agreement (FTA) at a time

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Background: In the past several years FTA negotiations have proliferated across the developing world. Why have PLHIV been protesting these FTAs and what provisions do they contain that could really impact access to medicines? Is this all conjecture or is there evidence to show the impact?
Methods: FTAs negotiated by the EU, US and Japan were examined. Chapters on intellectual property have been analysed. Evidence from FTAs already in existence and their impact on access to medicines was collected. FTA negotiations with India, Malaysia, Vietnam, Thailand, Brazil and South Africa were covered.
Results: Although there are some variations in the intellectual property provisions demanded in FTAs by the EU and US their primary aim is to decrease the space for generic production of medicines including ARVs. Provisions like data exclusivity (a new monopoly on off-patent medicines), extention of patent terms beyond 20 years, enforcement measures that will have a chilling effect on generic production, interfere with judicial independence and put shipments of medicines at risk of being seized feature in these FTAs. In addition the investment chapter puts government actions to ensure access to medicines or provision of health-care at risk of MNC's legal cases filed in private, international arbitration.
Conclusion: In 2001 the price of ARVs crashed from $10,000 per person per year to $350. In 2001, governments around the world signed the Doha Declaration stating that international trade rules on intellectual property should not come in the way of providing access to medicines for all. FTAs go well beyond these international trade rules that are already resulting in higher prices of newer ARVs and medicines for Hepatitis C. Understanding the nitty gritty of the demands made in these FTAs is crucial to effective advocacy on the FTAs and for the proper involvement and consultation of PLHIV and health groups by their governments.

WEAD0402

ARV patents on the rise? An analysis of ARV patent status in 69 low- and middle-income countries

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Background: There has been widespread concern about the impact of patents on access to low-cost generic antiretroviral (ARV) drugs in low- and middle-income countries (LMIC). Patents can hinder competition, which has provided sustainable price reductions for the older generation, less-widely-patented ARVs. However, until recently, limited data on patent status in developing countries hampered a full understanding of the implications of pharmaceutical patenting in these countries.
Methods: We compared patenting trends for 12 molecules invented pre-1995 and 12 invented post-1995, the year the WTO TRIPS Agreement came into force. We used data from the Medicines Patent Pool ARV Patent Database, the most comprehensive and regularly updated source of such information, providing information on 69 countries accounting for 84% of PLHIV in LMICs. We analyzed trends regarding: the number of molecules for which patents were applied for in a given territory, the number of LMICs with ARV patents, the expected date of patent expiration, and the implications for the development of and access to fixed-dose combinations (FDCs).
Results: Since 1995, pharmaceutical companies are filing for patents in a greater number of LMICs and for a greater number of molecules, such that newer ARVs are more widely-patented than older drugs. A patent on just one drug in a 2- or 3-drug FDC can pose barriers for accessing the entire FDC, and such patents can pose problems in up to 80% of territories for which data was available.
Conclusion: Since 1995, pharmaceutical companies are filing for patents in a greater number of LMICs and for a greater number of molecules, such that newer ARVs are more widely-patented than older drugs. A patent on just one drug in a 2- or 3-drug FDC can pose barriers for accessing the entire FDC, and such patents can pose problems in up to 80% of territories for which data was available.

WEAD0403

Intellectual property rights and access to HIV/AIDS medicines in french speaking African countries: issues, problems and prospects

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University of Pretoria, Faculty of Law, Pretoria, South Africa

Background: The french speaking countries of African 'have been struck the hard by the pandemic. In recent years, however, the governments have made concerted efforts in combating the disease. With the support of international organisations programs on treatment, care and education have increased. However, a recurrent problem has been the difficulties of making HIV/AIDS medicines accessible. Stringent intellectual property laws act as a stumbling block to access to HIV/AIDS medicines.
Methods: Presentation of a panoramic view of the problems created by stringent intellectual property laws and how they affect access to HIV/AIDS medicines. Analysis of various approaches to facilitate access to HIV/AIDS medicines. Proffering recommendations for reforms.

Results: Demonstrating that the patent regime of the Bangui Agreement to which most Francophone African countries have signed is hampering access to HIV/IADS medicines and that there is an urgent need for reform.
Conclusion: Though the coming into force of the WTO and the TRIPS Agreement ushered in a new dynamic on when and how countries had to use certain measures to provide, promote and protect access to HIV/AIDS medicines, french speaking African countries still have certain limited policy spaces for which to manoeuver and improve access to medicines. Most of them are signatories to international and regional treaties which creates rights to health obligations. Subsequent developments after coming into force of TRIPS have tended to tilt towards supporting access to medicines. The sad problem though is regional policy incoherence and countries' entering into treaties with TRIPS plus provisions. Fortunately, international law provides enough justification for enacting access to medicines pieces of legislation. Making maximum use of TRIPS flexibilities, incorporating human rights perspectives in intellectual property treaties, forging a strong alliance with civil society are just some of the measures needed by french African countries in increasing access to HIV/AIDS medicines.

WEAD0404

Impact of anti-counterfeiting measures on access to generic ARVs in developing countries

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Background: Over the past decade, the issue of counterfeit medicines has been seen as a burgeoning public health concern, requiring immediate action. Some decisionmakers have advocated for addressing the counterfeit issue through legislative measures targeting intellectual property enforcement. During this process, the term ''counterfeit medicine'' has been defined in ambiguous and confusing ways that have numerous legal interpretations, and thus intended and unintended consequences. One particular issue is the conflating of counterfeit medicine with generic drugs, which has and will continue to impede access to generic ARVs in developing countries.
Methods: My study consists of a political and legal analysis of three anti-counterfeiting efforts and their impacts on access to generic ARVs in developing countries, with a particular focus on East Africa.
Results: My analysis begins with a brief discussion and overview of some definitions of counterfeit medicine used by WHO and under the TRIPS agreement. The analysis will then explore anti-counterfeiting efforts in Kenya, in the East African Community, and in Anti-counterfeiting Trade Agreement (ACTA). I then explore an example in each context of how these measures have or will impede access to generic ARVs in developing countries.
Conclusion: Based on this analysis, the anti-counterfeiting measures examined pose a real and dangerous threat to accessing generic ARVs in developing countries. The counterfeit definitions used conflate generics with counterfeit medicines. Thus, a clearer and more concise definition of counterfeit is needed to avoid negative implications for generic ARVs. Finally, the real public health concern at issue here is addressing the safety quality and efficacy of medicines, and anti-counterfeiting measures do not adequately address these concerns. Therefore, rather than trying to deal with substandard medicines through intellectual property rights enforcement, other policies need to be developed that not only address the real issue, but also do not pose a threat to accessing generic ARVs.

WEAE0102

Compulsory licence and access to medicines: economic savings of efavirenz in Brazil

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Background: Since 2006, Brazil has attempted to negotiate lower prices with the patentee of Efavirenz in two grounds: a) EFZ was being sold at more affordable prices in countries with the same level of development and with less people in need of treatment than Brazil; b) generic versions were much cheaper. Considering the Brazilian policy of universal access of ART for PLWH, the offer of reducing 30% on the drug cost was still unsatisfactory (US$ 1,14 per pill).
Methods: Comparison of prices and case study aproach. The reference price of comparison was the last proposed by Merck for Brazil in 2007 of US$ 1,14 per pill. The total savings presented exclude the 1,5% of royalties that Brazil paid due to the Compulsory Licence.
Results: The government strategies to maintain a sustainable coverage of treament for those in need allowed firstly to issue a compulsory licence to import generic versions of EFZ, and thereafter to estimulate local production by the government industries. The savings with EFZ 200mg, purchased of international generic supliers, were of US$ 1.042.568,99; with EFZ 600mg, imported of international generic suplies, of US$ 63.992.537,16 and with EFZ 600mg locally manufactured of US$ 29.763.749,72. Amounting to a total saving of US$ 94.798.855,87 from 2007–2011.
Conclusion: The economic savings that were enabled with the compulsory licence were essential for the increased access to Efavirenz in Brazil. It is important to emphasize that the adoption of mechanism also boosts the strenght of the government to negotiate prices of other medicines and to stimulate the capacity of national pharmaceutical production and the transferring of technology.

D94 - Human rights and legal protection and empowerment of PLWHA and key populations at higher risk

MOAD0205

Human right as a key component of harm reduction strategy targeting people using drugs in Morocco

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Background: Morocco is facing a rising HIV epidemic among people using drugs (PUD). HIV prevalence among PUD ranks from 7% to 38% according to recent studies as HIV prevalence in general population is estimated to be 0.1%. This major change in epidemic pattern led Moroccan stakeholders to pay more attention to PUD. A first national harm reduction (HR) strategic plan (2008–2011) has allowed some needles and syringes programs as well as methadone for 80 people out of other HR services.

But PUD are facing legal and social barriers acting as potential barriers for access to HIV prevention, care and treatment. Country is

in need to assess those barriers in order to design a more comprehensive approach to mitigate and reverse HIV among PUD.
Methods: National HIV/AIDS community based organization ALCS has managed a cross sectional study in 3 North cities. 300 PUD recruited through outreach programs were asked to answer a questionnaire including 9 questions designed to assess human right violation from police officers, health professional and closed environment. Human right violation was defined as a break in national endorsed civil rights or break in national health good practices.
Results: 99.8% of PUD have been victims of at least one of those 9 violations with following sub scores: 87% from police officers (eg. non legal custody) and 49% from health professional (eg. non access to emergency hospital units). 60% has faced situation closed to human exploitation with drug smugglers or other PUD (including sexual intercourse against drug). Famility is also a major cause of human right violations.
Conclusion: Human Right should be considered as a central component of HR interventions in Morocco. At a time the country is designing HR scaling up it could improve PUD access to health services and alleviate family burden.

TUAD0104

Model of human rights protection of sex workers exposed to forced HIV/STI testing through combination of court litigation and psycho-social support

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Background: In Macedonia, sex workers are among the most discriminated communities. Due to self stigma and no trust in the system, our experience shows that SWs almost never report perpetrators or demand protection via litigation. This made us aware about the complexity of raising awareness to litigate cases of human rights breaches.

In November 2008 a systematic human rights violation by state happened when 23 SWs were unlawfully arrested and forcibly tested for HIV/HepC. Seven SWs were found HCV positive and criminally charged. Encouraging sex workers to demand justice, HOPS developed a complex model of legal, psycho-social and media support.
Methods: After the incident, HOPS created intervention team of lawyer, outreach worker, social worker and psychologist for free information and support for emotional trauma and possible lawsuits. For the first time 13 SWs raised 2 court cases against institutions and media, and defended themselves in the criminal case. 3 years after, 2 cases finished, 1 is ongoing, but the SWs successfully resisted fears and remained motivated to follow through. Consequently, 7 criminally charged SWs were sentenced on parole, and the civil suit against state institutions was won.
Results: SW in Macedonia are at risk for rights violation. Strategic litigation is a powerful protection tool, and while free legal aid is crucial, effective support should address emotional and other aspects of marginalization and resisting the state without fearing victimization. Trusted outreach and social workers, skilled psychologists and peer support must be part of the supportive model, involving the media and allies to create supportive environment.
Conclusion: Promoting the success of this model nationally and regionally, in order for organizations working with marginalized groups to adopt it in motivating them to report violence and use disposable mechanisms, including litigation. These positive outcomes will empower SWs in our country to seek justice.

WEAD0203

When sex is a crime: ending the criminalization of HIV-positive women's sexuality in the United States by using grass roots advocacy and leadership development to eliminate criminal HIV exposure and transmission laws

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Background: HIV criminalization laws are championed as protecting women. But HIV-positive women are increasingly prosecuted under these laws, resulting in unique violations of their sexual, reproductive and parental rights. 38 U.S. states and territories have criminal HIV exposure and transmission laws that increase HIV stigma and hinder HIV testing. Yet few tools exist to support anti-HIV-criminalization advocates, especially women.
Methods: In 2011, the Positive Justice Project (PJP) - a consortium working to end abuses of the criminal law against HIV-positive people - conducted community forums focused on HIV-positive women in four states with active HIV-specific criminal law prosecutions: Louisiana, Kansas, Missouri, and Illinois. HIV-positive advocates, public health officials, and attorneys attended. Local advocates, especially HIV-positive women, engaged to reframe the HIV criminalization conversation. Panels of local and national experts opened each forum and provided legal advocacy tools - fact sheets, model legislation, and ''know your rights'' cards - to eliminate local HIV criminal laws. Participants then developed advocacy strategies.
Result: Since October 2011, 125 people have been reached through PJP forums; thousands more through PJP and partner websites. PJP forums increased community knowledge of the impact of HIV criminalization laws on women, and provided general and women-specific advocacy tools to build an infrastructure at the state level to monitor and challenge existing laws. With technical assistance from PJP, HIV-positive women founded local advocacy groups in the four forum states to eliminate state criminalization laws; began monitoring criminal prosecutions and discriminatory practices; and put a woman's face to the consequences of HIV criminal laws.
Conclusion: HIV-positive women's engagement in turning the tide of the epidemic by personally advocating for elimination of criminal HIV exposure and transmission laws has increased awareness of the breadth of the laws' harms. Further policy research and political will is needed to support advocates to fight discriminatory criminal laws.

WEAD0205

Advocating against the criminalization of HIV non-disclosure: an analysis of community-led, science-based criminal law reform in Ontario, Canada

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Background: The established critique of criminalizing HIV exposure/transmission focuses on issues of public health impact and human rights. Although important, this critique offers little guidance on how to practically oppose criminalization in local settings. Successful advocacy requires developing a literature on the impacts of strategies undertaken by advocates in various jurisdictions. This paper contributes to that literature through an analysis of the social organization of criminal law reform in Ontario, the centre of Canadian HIV-related prosecutions.

Methods: This paper is based on the experiences of members of the Ontario Working Group on Criminal Law and HIV Exposure (CLHE), a key participant in advocacy against criminalization in the province. Drawing on a studies in the social organization of knowledge perspective (Smith, 1990), it systematically identifies the key factors shaping CLHE's activities and reflects on the outcomes of CLHE's principal strategies.

Results: CLHE has emphasized the dissemination of research and political lobbying to create a stronger presence, in the criminal justice system, of scientific evidence on factors that reduce HIV transmission risk (a key element of the legal test in cases of HIV non-disclosure). Four initiatives have been key: (1) The mobilization of criminal defence lawyers and the identification of qualified expert witnesses have resulted in favourable judicial decisions; (2) a campaign to establish prosecutorial guidelines has been an effective community mobilization tool, but has stalled at implementation due to lack of provincial buy-in; (3) a proactive media campaign has, for the first time in Canada, generated widespread favourable mainstream media coverage of opposition to criminalization; (4) political lobbying has helped prevent harmful interventions in 2 cases recently heard by the Supreme Court of Canada.

Conclusion: Science-based criminal law reform led by a community organization can enhance legal defense, mobilize allies and impact media coverage, but faces challenges of engagement with provincial criminal justice authorities.

THAD0203

A handbook on HIV, law and human rights for the judiciary: a critical tool in a human rights-based HIV response

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Background: The HIV epidemic has raised new and complex legal challenges, leading to a wide range of judgements on HIV-related matters. Given the diversity of issues and the quickly evolving science, judges need more opportunities to take stock of developments relevant to the cases before them. If properly informed and supported, the judiciary can help create the legal and social environment necessary to roll back the HIV epidemic.

Methods: An advisory committee of sitting and retired judges, judicial trainers, and legal experts from around the world was constituted to inform the scope, format and content of the handbook. Issue experts prepared chapter outlines and draft texts which were shared with the advisory committee for detailed feedback. The final text includes case summaries, key principles, plain language explanations of the science and treatment of HIV, statistics, and factors to consider when adjudicating cases.

Results: The result is a comprehensive and user-friendly handbook for the judiciary, suitable for use as a reference manual and in judicial training sessions throughout the world. Issues addressed include: discrimination, criminalization of HIV exposure, sexual assault and domestic violence, drug policy and the rights of people who use drugs, women's rights in family and property law, HIV-related treatment and healthcare, key populations at higher risk of HIV exposure, and judging during the HIV epidemic.

Conclusion: The handbook for judges is a unique resource with significant potential to provide judges with a contextualized understanding of key HIV-related issues, and thus improve rights protections for people living with and affected by HIV. This potential will be maximized through judicial training sessions and commitment by governments to include the judicial sector in strategies to attain universal access. The tools and training needed by judges are distinct from existing HIV-related resources therefore targeted, sensitive approaches are needed.

THAD0204

Using courts to eliminate discrimination in women's property and inheritance laws in southern Africa

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Background: It is well-documented that discrimination in women's access to property and inheritance hinders an effective response to HIV. However, in southern Africa, where HIV prevalence still remains high, numerous laws on property and inheritance rights explicitly discriminate against women. Law reform efforts are slow and in many cases have been ineffective resulting in discriminatory laws remaining in place. Approaching courts through litigation as a means of striking down such laws is underutilized in southern Africa.

Methods: In an attempt to accelerate the revision and/or striking down of laws discriminating against women in property and inheritance rights, we are using litigation before domestic courts to effectively strike down laws that discriminate against women with respect to property and inheritance in southern Africa.

Results: A number of cases have been filed. A case challenging a customary law rule denying women the opportunity to inherit from their father's estate is in the Botswana High Court; the Lesotho Constitutional Court will hear a challenge to a law denying women the right to succeed to chieftainship; and the Malawi Constitutional Court is expected to issue a decision on whether courts are permitted to only take monetary contribution to property into account when determining property distribution at the time of divorce. In each of these cases, the relief sought is a change in the discriminatory law. In all cases, the countries have constitutional provisions protecting women from discrimination. Decisions in the cases are expected by June 2012.

Conclusion: Law reform measures are critical to revise laws that facially discriminate against women with respect to property and inheritance rights. However, for relatively fast and effective reform, more advocates should approach courts asking them to strike down discriminatory laws.

D95 - Ethics (including research, clinical, public health and professional ethics)

MOPDD0401

The HPTN 052 HIV treatment as prevention trial: a case study of ethical considerations in human research conducted in low- and middle-income countries (LMIC)

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Background: The HPTN 052 study authors randomized 1763 HIV-serodiscordant couples (HIV infected partner CD4 count of 350–550/mm^3) in 9 countries (8 LMIC) from June,2007–May, 2010 into an ''early-therapy group'' (median CD4 = 442, treatment started at enrollment,) and a ''delayed-therapy group''(median CD4 = 428, treatment delayed until CD4 count $\leq$250 or development of

Table 1. ARV Country Guidelines

052 Country Guideline	Year	ARV Initiation Recommendation	Guideline Met for 052 ''Delayed-Therapy Group''
Botswana	2008	WHO Stage 3	No
Brazil	2008	Clinically significant symptoms suggestive of advanced disease (not AIDS) or CD4 200–350 when VL > 100,000	No
India	2007	WHO Stage 3 with no CD4 Consider if WHO Stage 3 and CD4 < 350	No
Kenya	2005	WHO Stage 3 and CD4 < 350	No
Malawi	2008	WHO Stage 3 regardless of CD4	No
South Africa	2010	CD4 < 350 + TB	Cannot Determine
Thailand	2010	Asymptomatic with CD4 < 350 HIV-related symptomatic (not AIDS) with CD4 of any value	No
United States-DHHS	2009	All patients with CD4 < 350	No
Zimbabwe	2007	WHO Stage 3 with no CD4 Consider treatment with WHO Stage 3 and CD4 < 350	No

Table 2. ARV International Guidelines

International Guideline	Year	ARV Initiation Recommendation	Guideline Met for 052 ''Delayed-Therapy Group''
International AIDS Society-USA	2008	All patients CD4 < 350	No
	2010	All patients CD4 < 500	No
WHO/UNAIDS	2010	All patients CD4 < 350	No

Table 3. Research Ethics Guidelines

Reseach Ethics Guidelines	Ethics Guidelines/Recommendations	052 Compliance with Guidelines/ Recommendations
WMA Declaration of Helsinki-Ethical Principles for Medical Research Involving Human Subjects (2008)	- Research subject wellbeing takes precedence over all other interests. - When research combined with medical care, research study will not adversely affect health of research subjects.	No
UNAIDS/WHO Guidance Document: Ethical Considerations in Biomedical HIV Prevention Trials (2007)	Internationally recogznized treatment regimens, including ARVs, must be accessible to subjects who become HIV-infected during a trial.	Cannot determine treatment availability and follow-up of 052 subjects who sero-converted during trial.
UNAIDS Guidelines for Biomedical HIV Prevention Trials (2010 Draft and 2011 Final Version)	Research teams may need to modify their HIV care and treatment access plans in line with updated national guidelines.	No

AIDS).Subjects with a current/previous AIDS defining illness were excluded.WHO Stage 3 subjects were eligible; baseline viral load was not an exclusion criterion. Results were released, based on data collection to February 21, 2011 with 90% of couples enrolled a median 1.7 years. The study was designed and occurred while ARV initiation guidelines were evolving giving rise to 2 questions: researchers′ duty to offer subjects treatment at trial onset or mid-trial according to current guidelines and use of the word ''early'' to describe the study results.
Methods: The dates and recommendations of country /international guidelines for ARV initiation were cross checked against the study period, inclusion /exclusion criteria and triggers for ''delayed-therapy group'' treatment. The 052 study protocol was assessed against recognized international research guidelines.
Results: Tables 1 and 2 show that during the 052 study period, contemporaneous country/international guidelines for ARV initiation recommended substantially earlier triggers for treatment than those used in the 052 ''delayed-therapy group''. The use of the 052 word ''Early'' relative to recommended treatment triggers is not reflective of those contemporaneous guidelines. Table 3 shows that the 052 study protocol may be inconsistent with international research ethics guidelines.
Conclusion: The 052 ''delayed-therapy group'' did not receive ARVs in accordance with national/international guidelines. The 052 descriptor ''Early'' is inaccurate relative to standard ARV initiation guidelines. According to contemporary research ethics standards the wellbeing of subjects should be paramount, requiring provision of the current standard of treatment to clinical trial subjects-in this case to the ''delayed-therapy group''.

MOPDD0402

Thought experiment examining the ethics of HIV testing policies

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Background: HIV testing is a major part of HIV prevention efforts across the globe. In US and World Health Organization (WHO) HIV testing guidelines, opt-out testing has replaced voluntary confidential testing as a means of combating low rates of HIV testing. The success of opt-out testing is not assured, particularly due to financial, legal, operational, and cultural barriers, such as limited reimbursements for testing, obstructive laws that require written consent, limited access to healthcare, and poor compliance by care providers in testing patients perceived to be low-risk for HIV infection. Alternative methods of promoting HIV testing warrant analysis in comparison to opt-out testing.
Methods: HIV testing policies were hypothesized empirically and identified in the scientific and popular press. Each method was analyzed for consistency with WHO policy on HIV testing, which emphasizes the '3 Cs' of proper human rights-centered HIV testing. These conditions require that HIV testing must be: confidential, complemented by counseling, and informed, voluntary consent.
Results: We identified incentivized testing, anonymous mandatory testing, and names-based mandatory testing as alternatives to voluntary confidential and opt-out testing. Incentivized testing, in which a person's ''willingness'' to be tested is rewarded, e.g., with money, is voluntary but potentially coercive to those of lower socioeconomic status. Incentivized testing is in limited use but large-scale implementation would need to be names-based in order to avoid significant fraud. Anonymous mandatory testing using de-identified codes that allow verification that a person has undergone HIV testing preserves confidentiality but is involuntary. Names-based mandatory testing violates confidentiality and volition.
Conclusion: Though each HIV testing policy provides counseling, opt-out testing remains the only ethical approach for the promotion of HIV testing as it avoids coercion and loss of privacy. Financial, legal, operational, and cultural barriers to greater uptake of opt-out testing must be removed so that ethically unacceptable HIV testing policies are avoided.

MOPDD0403

Cost effectiveness of two transport strategies for retention of young mothers and infants enrolled in a phase IIb, TB vaccine clinical trial in Siaya, Kenya

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Background: Study participants are reimbursed for transport costs incurred when travelling for clinic visits. Reimbursement also compensates for time spent in the clinic and is important for participant motivation and retention. In impoverished communities, determining adequate reimbursement is challenging. Under-compensation leads to low recruitment/retention rates, high mortality and missed trial endpoints. Ethical Committees cap reimbursements as overcompensation leads to undue influence. We sought to examine reimbursement practices, their impacts on costs and study participation in an ongoing tuberculosis vaccine trial.
Methods: Mothers in rural Western Kenya were approached to recruit their infants. Once enrolled, they come for seven scheduled visits and an average of two unscheduled/sick visits in a span of two months. Reimbursement was set at a rate of $4 per visit regardless of distance and cost incurred. Distances to clinic were measured by study staff. Furthest distance covered is 30km costing $6. Where the reimbursement rate was unacceptable to the mother given cost or critical study visits would be missed, mothers were ferried to clinic by designated vehicles at a cost of $18 per subject.
Results: Of 144 participants enrolled after 7 months, 57(40%) were under-compensated when compared to the costs incurred in attending study visits and expressed dissatisfaction with amounts reimbursed. Of these, retention rate was 99%.118 of sick participants attended clinic and 30(20%) sought care elsewhere due to cost. Participant satisfaction was not measured.
Conclusion: High retention rates were achieved despite under-compensation but at a cost three times higher compared to cost of directly reimbursing the mothers. Given the challenges of conducting trials in areas with limited infrastructure, there's need for continuing dialogue between investigators and Ethical Committees regarding amounts given to participants which may be based on a gradient of reimbursement according to distances travelled. There's room for educating mothers/participants on research ethics and non monetary research participation benefits.

MOPDD0404

Exploring research participants' perceptions and comprehension of the informed consent process in a pre-exposure HIV prevention study in Zimbabwe: a case study

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Background: Ensuring informed consent is a complicated component of research, particularly with HIV prevention research conducted in poor settings. An inherent challenge characteristic of the informed consent process for HIV prevention studies is making sure that subjects understand that participation does not increase exposure to HIV and does not necessarily protect them from HIV. It is important to continuously monitor the informed consent process.
Methods: In June- September, 2011, gender-specific in-depth interviews (n = 20) were held with interviewees who had been purposively selected from participants who had exited a vaginal HIV prevention study in Harare, Zimbabwe. An interview guide was used to elicit views around the informed consent process. Discussions were conducted in mother tongue and audio-recorded. Audio-recorded data were transcribed, translated verbatim into English, coded using NVivo 8 and analysed using grounded theory principles.
Results: Key information about study was given, as subjects articulated study aims well. However, it appeared that the informed consent process had been rushed and some participants had not had enough time to decide. Moreover, some participants reported that due to both excitement and anxiety, they had felt pressured to sign consent forms before comprehending some aspects of the study. Some mentioned that they had found it difficult to ask questions about the study. Both the study procedure and duration had not been fully explained. There were mixed feelings on importance of male partner involvement in decision-making around study participation, with some feeling that spouses should have been involved and others stating that partner consultation did not matter.
Conclusion: This study elicited some of the issues that characterise the informed consent process for clinical trials conducted in poor settings. It also highlighted the need for researchers' ingenuity in order to come up with strategies that tailor the informed process to suit the specific needs and circumstances of individual participants.

MOPDD0405

'It doesn't work that way around here': lessons learned from an HIV community-based research study conducted in a hospital setting

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Background: Conducting community-based research with people living with HIV requires maintaining both individual and collective ethical standards. Research teams need to be cognisant of individual and community conceptions of informed consent, risks and benefits, and confidentiality. Although much has been written about challenges to obtaining ethics approval for HIV CBR, there have been fewer opportunities to describe ethical issues which emerge over the 'life' of these projects. This presentation addresses this gap by describing the ethical tensions which emerged during an HIV CBR study conducted in a hospital setting.
Methods: Using a case study analysis, this presentation draws on field notes, minutes from team meetings, and reflexive memos to offer a critical chronology of decisions made to improve ethical practice in one HIV CBR study. Various disciplinary (nursing, social work, public health) and stakeholder (clinician, coordinator, researcher, participant) perspectives are highlighted and contrasted to show how 'ethics' was understood and negotiated.
Results: We discuss the range of issues that emerged at the intersections of HIV, drug use, negotiating clinical space, and piloting innovative arts-based methods. Issues of cognition and HIV required the use of a multi-step informed consent process. Research team members balanced the need to support participants with reminders while being conscious of not creating undue pressure to participate. Maintaining confidentiality proved challenging because of the way space and time are managed in a clinical setting. The sensitive nature of the study and proposed group data collection necessitated changing the study design from group to individual data collection techniques to protect confidentiality. Interestingly, this happened despite having undertaken preliminary community consultations to determine the best approach.
Conclusion: Our findings highlight the importance of understanding and integrating both individualistic and communitarian ethical concerns, remaining flexible about design issues, and maintaining clear and open lines of communication between all project stakeholders.

D96 - Children's rights and HIV

MOAD0101

Implementation of a model of psychosocial approach to strengthen HIV/AIDS treatment adherence of children and adolescents in south Lima

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Background: The implementation of this model comes from the minimum interventions of the Peruvian health system towards HIV/AIDS positive children and adolescents. The objective is to establish a program that provides children and adolescents with a caring, quality and confidential service. The model would contribute to reduce stigma and discrimination towards this specific HIV/AIDS positive population in South Lima.
Methods: The implementation of the model required training sessions to HIV positive children and adolescents of poor families, family members of low educational level, some quechua speakers and teachers from local schools. The topics of the trainings were the following: 1) human rights, stigma and discrimination, 2) self-care for children and adolescents, 3) diagnosis management, 4) psychotherapeutic issues with family members. Teachers and community leaders participate on a specific training on sensitization and advocacy.
Results: 31 HIV positive children and adolescents were trained on self-care and human rights. 28 families of HIV positive children received psychosocial support and their capacities and knowledge have been strengthened. 45 community leaders are more knowledgeable and sensitive on topics related to HIV/AIDS stigma and discrimination and can reproduce the training. 73 teachers are trained on topics related to HIV and children, stigma and discrimination and reproduced training to students, family members, in order to reduce rejection of HIV positive children and adolescents within their communities.
Conclusion: HIV/AIDS positive children and adolescents are more assertive and self-confident towards stigma and discrimination. Families and fathers of HIV positive children and adolescents are

prepared to assume responsibilities, self-care and care of their children. An informed community and school would strengthen the process of reduce stigma and discrimination and reinforce adherence to treatment.

D98 - Punitive laws and practices around HIV transmission, sex work, drug use and homosexuality

MOAD0201

Tougher policy on French illegal drug users: what impact on risk reduction?

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Background: In the 2000s, France's policy on illegal drug users has become increasingly stringent. The National AIDS Council wanted to assess the impact of this punitive policy on risk reduction policy targeting drug users, notably injection drug users.
Methods: Around thirty hearings were held with representatives of the relevant authorities (Ministries of Home Affairs, Justice, and Health), HIV/AIDS control associations, associations specialized in addiction and related issues, and drug user self-help groups. A review of the literature was also undertaken.
Results: Policies on illegal drugs have focused on strengthening sanctions against drug users. From 2001 to 2007 the number of arrests for drug offences increased by 106%. Accusations relating to drug use represented 85% of all offences during the period in question. Consequently, the cost of this punitive policy, estimated at 590 million Euros in 1995**,** is now much higher. In comparison risk reduction policy seems to be underfunded. Risk reduction centers have a budget of 30 million Euros and are only present in three-quarters of French counties (*départements*). Furthermore, this punitive framework means risk reduction tools, notably those targeting women, young people, people in detention, vulnerable users, and injection drug users have not been sufficiently diversified.
Conclusion: The punitive policy on drug users has been made a top policy and budget priority, with risk reduction policy relegated to second place. This policy has hindered the development of pragmatic risk reduction measures, such as medically supervised injection centres, or prison-based needle exchange programs, adapted across the country to support the most vulnerable populations.

TUAD0102

Tightening the laws on prostitution in France: what impact on prevention?

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Background: In 2003, France adopted a law against procuring and soliciting in order to discourage the practice of prostitution. The National AIDS Council wanted to assess its impact on sex workers in terms of prevention.
Methods: Around thirty hearings were held with representatives of the relevant authorities (Ministries of Home Affairs, Social Affairs, and Health), specialist police units and associations involved in the subject: associations campaigning and working on health and community health, social reintegration, abolition of prostitution, and sex workers' unions. A field investigation was also carried out within a community health association. Finally, all gray literature was analyzed.
Results: The 2003 law has undermined sex workers, the majority of whom are foreigners, without directly protecting the victims of procuring. Accusations against sex workers multiplied twenty-fold in the first half of the 2000s, before dropping slightly. There has been no increase in accusations for procuring. The activity has shifted to more isolated locations, under clandestine conditions with greater exposure to violence. The prevention work carried out by community health associations has become increasingly difficult, partly due to uncertainties regarding the availability of subsidies. The police and health authorities have not managed to cooperate effectively.
Conclusion: The introduction of a punitive law has complicated prevention work targeting sex workers. In a hostile legislative context, it seems important to support and reinforce community health actions by means of a comprehensive approach combining prevention, access to health care, social and human rights.

TUAD0103

Criminalization of condoms in the United States: why sex workers and HIV services are at risk

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Background: HIV infection is higher among sex workers than in the general population, yet sex workers often lack access to HIV prevention services. A police practice that interferes with HIV prevention is using condoms as evidence of prostitution.
Methods: A multi-method investigation of the practice of using condoms as evidence of prostitution was conducted in New York City, Washington, D.C., Los Angeles and San Francisco between October 2011 and April 2012. In-depth interviews with hundreds of sex workers, their advocates, outreach workers, police, prosecutors, judges, and public health officials were conducted, combined with legal and policy analysis.
Results: Police engage in the routine and widespread practice of using the presence of condoms on individuals to profile them as prostitutes, to threaten arrest and as a basis for arrest on charges related to prostitution. In San Francisco, police and city regulators use condoms as a basis for arrest in clubs frequented by transgendered persons, in massage parlors and other businesses. In New York City, prosecutors introduce condoms into evidence to support prostitution charges. In Washington D.C. police confiscate condoms found on persons they identify as sex workers. In Los Angeles, sex workers follow what they believe to be the ''three-condom rule'', fearing arrest for exceeding a routinely enforced limit. In each city these practices take place in a wider context of police harassment and abuse of sex workers and those perceived to be engaging in sex work, including verbal and physical degradation and other misconduct. Transgendered women and LGBT youth are particularly targeted.
Conclusion: Human rights abuses make some sex workers less likely to carry condoms, particularly those most vulnerable to arrest, such as undocumented immigrants. The criminalization of condoms interferes with the right to health and undermines public health objectives of universal access to disease prevention.

WEAD0201

Criminal prosecutions for HIV non-disclosure, exposure and transmission: overview and updated global ranking

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Background: Many jurisdictions continue to inappropriately prosecute people living with HIV (PLHIV) for non-disclosure of HIV-positive status, alleged exposure and non-intentional transmission. Although most HIV-related criminal cases are framed by prosecutors and the media as being cases of ′deliberate′ HIV transmission, the vast majority have involved neither malicious intent nor has transmission actually occurred or the route of transmission been adequately proven.
Methods: This global overview of HIV-related criminal laws and prosecutions is based on latest data from GNP+ Global Criminalisation Scan and media reports collated on criminalhivtransmission.blogspot.com. Final ranking will be based on the total number of prosecutions by July 1 2012 per 1000 PLHIV.
Results: At least 63 countries have HIV-specific criminal laws and at least 48 countries have used HIV-specific (n = 19) or general laws (n = 31) to prosecute HIV non-disclosure, exposure or transmission. Despite growing national and international advocacy, prosecutions have not diminished, particularly in high-income countries, with the greatest numbers in North America. Since 2010, prosecutions have taken place in Belgium and Republic of Congo for the first time. In 2011, although HIV-specific laws were suspended in Denmark and rejected in Guyana, Romania passed a new HIV-specific criminal statute. In Africa, the continent with the most HIV-specific criminal laws but with few known prosecutions, Guinea, Togo and Senegal have revised their existing HIV-related legislation or adopted new legislation in line with UNAIDS guidance.
Conclusion: Given the lack or inadequacy of systems to track HIV-related prosecutions in most places, it is not possible to determine the actual number of prosecutions for every country in the world. These data should be considered illustrative of a more widespread, but generally undocumented, use of criminal law against people with HIV. Improved monitoring of laws, law enforcement, and access to justice is still required to fully understand impact on HIV response and PLHIV.

WEAD0202

The impact of HIV/AIDS criminalization on awareness, prevention and stigma in the: a qualitative analysis of stakeholders' perspectives in Ontario, Canada

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Background: In Canada, the exposure and/or transmission of HIV is punishable by criminal law. The objective of this study was to investigate the impact of HIV/AIDS criminalization on awareness, prevention, and stigma as outlined in the literature and from the perspectives and experiences of stakeholders in the HIV sector in Ontario, Canada.
Methods: For the scoping review, we searched 11 databases, and reviewed (in duplicate) the results for any articles addressing topics related to HIV criminalization. We then identified stakeholders (policy/content experts, executive directors and frontline workers from community-based HIV/AIDS organizations) and invited a purposive sample to participate in one-on-one, semi-structured interviews.
Results: The search yielded 1301 results; 147 articles were included, most of which were case reports, editorials, commentaries and essays (n = 136), with only 11 primary studies. Interviews explored perspectives on criminalization and its impact on prevention efforts, community awareness of prosecutions, and stigmatization of people living with HIV/AIDS. Findings highlight confusion regarding behaviours constituting ''significant risk,'' resulting in difficulties in the application of legal precedent, as well as uncertainty regarding HIV knowledge in the general public. Findings also highlighted uncertainty regarding the behavioural changes attributable to criminalization, but suggest that it contributes to disincentives for testing and disclosure, fears of secondary disclosure and false accusation, strained therapeutic relationships, HIV related stigma, and barriers for promoting shared responsibility for safer sex. Participants recommended guideline development to ensure optimal use of criminal law in case related to HIV/AIDS non-disclosure.
Conclusion: This study provides further insight into the impact of HIV/AIDS criminalization in the community. Further research is necessary to characterize the impact from the perspective of people living with HIV/AIDS and to inform ongoing policy discussions.

WEAD0204

Punishing HIV: how Michigan trial courts frame criminal HIV disclosure cases

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Background: Sociologists have recently become interested in the rise in prosecutions across the country under criminal HIV disclosure statutes. These law vary in their specifics, but generally make it a crime for HIV-positive individuals to have sex without first disclosing their HIV-positive status. Yet, despite a number of sociological explorations of how HIV-positive individuals relate to these laws, we know very little about how these laws are actually applied on the ground. This paper addresses this gap by exploring how legal actors in Michigan trial courts struggle to frame disclosure cases in terms of medicine and/or the law.
Methods: Using a database of prosecutions provided by the Michigan State Police, this study analyzes court transcripts from forty prosecutions for HIV non-disclosure. The police dataset included the sentencing dates, counties, and the court′s disposition for cases prosecuted between 1992 (the year the law first was prosecuted) and 2010. In order to request their corresponding court transcripts, these data were cross-referenced with local news reports in order to identify the defendants. This research design was reviewed (and deemed exempt from further review) by the University of Michigan′s Institutional Review Board.
Results: I argue that these cases can ultimately be understood as a contest to frame the disease as disease or crime. Prosecutors frame defendants as what Thomas Shevory has called ''HIV monsters'' using legal discourses of negligence, harm, and morality. Their accusers, on the other hand, are framed as undeserving and helpless victims. Defense attorneys attempt to diffuse these arguments by relying on medical discourses that frame disease as victimless and deserving of treatment, not punishment.
Conclusion: This analysis is the first empirical study to show how HIV disclosure cases are legally argued on the ground. Moreover, this study demonstrates empirically how medical problems become transformed into crime, a poorly understood social process.

THAD0201

Knowledge and experience of HIV and the law amongst global key populations: global focus group feedback and recommendations for policy change

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Background: Laws criminalizing certain behaviors, and HIV non-disclosure, exposure and transmission are resurgent in developed and developing countries around the world. This study set out to understand how laws impact health seeking behavior and what coping mechanisms result amongst different key populations and to recommend policy changes.
Methods: A qualitative four-part questionnaire was developed and used in 27 focus groups carried out by community members during August and September 2011 in all regions of the world. More than 240 participants (51% PLHIV) from 32 countries, selected by their affiliation with a key population, took part in the study. Participants were asked non-identifying information such as HIV status, associated population group, gender, and housing situation. The hundreds of pages of feedback were analyzed for common themes across geographic region and population grouping. Common trends were then verified to develop key findings.
Results: Results show that individuals are being deterred from seeking health services when their behavior is criminalized. Evidence revealed that laws criminalizing HIV and certain behaviors promote the persecution of people living with HIV. HIV-specific criminal laws are reinforcing or increasing the stigma and discrimination that inhibit access to health services and undermine treatment. Evidence also demonstrated that legal protections for people living with HIV and key affected populations are insufficient or unenforced.
Conclusion: The current goals of accessing HIV prevention, treatment and care services are being undermined where the legal environment is unable to enforce laws protective of individuals at high risk of or living with HIV. Measures to be taken include: supporting anti-stigma and HIV education campaigns, specifically within the judicial system and amongst law enforcement; opposing and repealing HIV criminal laws; and promoting access to legal aid. Quantitative prevention research on HIV criminal laws and rates of HIV testing would be useful in statistically proving what was discussed in this study.

THAD0205

Making multi-collaborative partnerships work and worth it: experience in working with Philippine National Police and Quezon City Police Department to address the use of condoms as evidence of prostitution among sex workers

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Background: In 2010, Action for Health Initiatives (ACHIEVE), Inc. conducted a research wherein evidence was found that the broad language of national anti-prostitution and anti-trafficking laws hinder effective HIV prevention initiatives among sex workers in the city. Considered as ''victims'', sex workers are ''rescued'' while establishments are raided by police authorities using condoms as evidence of prostitution or trafficking. These hamper condom distribution and outreach activities of HIV prevention workers.
Methods: To address this issue, ACHIEVE, in partnership with the Quezon City Health Department (QCHD), held a series of consultative workshops, individual meetings and interfacing meetings with the Philippine National Police (PNP) officers, Quezon City Police Department (QCPD) officials and the local entertainment establishment organization in January 2011. The consultations sought to build partnership by forming memorandum of agreement (MOA) between QCPD and QCHD to end the conflicting law enforcement practice of using condom as evidence of prostitution.
Results: Bureaucracy, strict hierarchy within the Police Department and the very fast turnover of officials were identified as constraints in partnership-building with the police. However, the support given by the Quezon City Health Department and the sex work establishment owners association and the community help in convincing police officers and sensitizing them during the process despite their strong moral positions against sex work. After seven months, a MOA was drafted subject for adoption by PNP Chief of Police.
Conclusion: While the MOA was refused to be signed by the PNP Chief of Police, the process opened many doors for partnerships and for alternative next steps. These include increased support from the Quezon City STI/AIDS Council and garnered support from police officials of various QCPD and PNP offices who were not previously partnered with. The Quezon City Committee on Health also committed to provide support in implementing rights-based and issue-based HIV education among frontline police officers.

MOPDD0202

Condoms as evidence: police, sex workers and condom confiscation in Zimbabwe

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Background: The moralisation and criminalisation of sex work in Zimbabwe creates serious barriers to sex workers realising their rights. This research sought to examine the specific role played by the police in violating the rights of sex workers. The lack of rule of law means police have extensive powers and often act with impunity. This research sought to highlight the impact of the behaviour of law enforcement on the health and human rights of sex workers, particularly around the issue of condoms used as evidence of sex work.
Methods: Twenty-one sex workers and six outreach workers were interviewed in Bulawayo, Zimbabwe. The research considered the relationship between police and sex workers, specifically the confiscation of condoms.
Results:

- All 21 sex workers interviewed characterised their relationship with the police as bad, as 17 of the 21 sex workers cited harassment and intimidation from the police.
- 17 of 21 sex workers said they had been arrested on charges related to sex work.
- Sex workers said that the police practice of confiscating and destroying condoms or harassing and arresting sex workers with condoms had affected their ability to negotiate condom use in a variety of ways.
- 5 of 21 sex workers said police had confiscated their condoms.
- Those who had condoms taken from them, reported between 2 and 9 such encounters with police during the previous 12 months.

Conclusion:

- The Ministry of Justice should encourage interaction and dialogue between sex workers and organisations working with sex workers and law enforcement agents.
- The results also reflect the importance of ensuring that sex workers and organisations working with sex workers participate in the development of Zimbabwe's national HIV/AIDS Strategy.
- A government working group should be created to explore the decriminalisation of sex work.

MOPDD0203

The impact of laws criminalizing commercial sex clients and third parties on the health and safety of sex workers based on the street and in drug venues: a Canadian case study

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Background: A significant body of work has examined the impacts of laws criminalizing commercial sex on sex workers' health and safety. However, the impacts of laws criminalizing clients and third parties (i.e. managers, receptionists, cleaning staff . . .) on sex workers have hardly been documented. In Canada, sex work is criminalized through provisions against being found in a bawdy-house, running a bawdy-house, living on the avails of prostitution and communication for the purposes of prostitution. These are used to arrest sex workers, clients and third parties.
Methods: Stella is an organization by and for sex workers. The analysis of the impact of the different legal provisions criminalizing commercial sex on the health and safety of female and transgender sex workers specifically based on the street and in drug venues (i.e. crack houses, shooting galleries...) arises from available documentary data, reports on violent incidents through our aggressors' list and also from our observations and personal experience.
Results: The criminalization of clients under the 'communicating' law places sex workers based on the street and in drug venues at greater health and safety risks by limiting their choice of clients and ability to negotiate safer sex, and causing displacement to dangerous and isolated areas far from HIV prevention and outreach services. The provisions against bawdy- houses create a greater risk of homelessness as it is grounds for eviction, including from social housing.
Conclusion: Often justified as ''protecting'' sex workers, the laws against clients and third parties actually place sex workers at greater risk, especially as they preclude the opening of safe indoor spaces. Take note that drug use legislations also increase these risks when discriminating sex workers.

D105 - Human and food security

MOPDD0301

Food insecurity and HIV: concepts and measurement tools in the HAART era

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Background: Food insecurity and HIV are part of a vicious and self-perpetuating cycle. In 2009, the World Health Assembly mandated the World Health Organization to report on global nutrition and HIV activities. However, the literature lacks definitional consensus for food insecurity in the context of HIV.
Methods: Using a standard literature review methodology, the aim was to describe and evaluate current definitions of food insecurity and measurement tools in the context of HIV. This study critically reviewed:

i. operational definitions of food insecurity and its sub-types;
ii. clinical and survey measurement tools to assess food insecurity;
iii. program monitoring and evaluation tools to assess performance of food security interventions at the population-level.

Results: Epidemiologically validated tools have been used to measure food insecurity, hunger, and dietary diversity at the individual, household, and community levels. Some of these have been developed and validated in HIV-endemic countries. Examples of tools used with HIV-positive populations include household food insecurity scales and nutritional assessment measures such as dietary intake. Food safety, however, is seldom addressed in the HIV literature. Increasingly, there is a global movement towards integrating food security and HIV indicators across multiple organizations to strengthen program performance. With HAART expansion, profiles of food insecure people living with HIV/AIDS are shifting and measurements must reflect individual, social, and cultural factors such as over/under nutrition, resource constraints, food supplementation, literacy, and addiction.
Conclusion: Further research is needed to harmonize definitions of food security and its indicators in order to facilitate comparisons. Measurement tools need to be validated in both low and high resource settings, with different ethnic populations and genders and with HIV-positive populations to build a more comprehensive knowledge base.

MOPDD0302

Severe household food insecurity is highly prevalent and associated with suboptimal breastfeeding practices among HIV-positive women in rural Uganda

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Background: Ugandan guidelines recommend 6 months of exclusive breastfeeding (EBF) for HIV-infected women with continued breastfeeding (BF) for at least 1 year. Food insecurity has been posited to be a barrier to adherence to infant feeding recommendations. We therefore explored if greater food insecurity was associated with suboptimal breastfeeding (BF) practices.
Methods: Data on food insecurity and BF practices and beliefs were collected among HIV-infected pregnant and BF women on antiretroviral therapy (ART) participating in the PROMOTE trial (NCT00993031) in Tororo, Uganda. Food insecurity was assessed using the Household Food Insecurity Access Scale (HFIAS). BF practices were determined using monthly maternal reports from a prospective cohort of 143 PROMOTE infants born between March 6, 2010 and October 9, 2011. Beliefs about food insecurity and BF were assessed using a purposive sample of 32 BF PROMOTE subjects who participated in in-depth interviews (IDIs) in July and August 2011.
Results: Food insecurity was very high; 82.5% were from severely, 14.7% moderately, and 2.1% mildly food insecure households. Median (inter-quartile range) HFIAS score was 17 (12–22). The prevalence of EBF was 89.5% and 66.9% at 3 and 6 months respectively; the prevalence of BF at 12 months was 84.1%. In multivariate logistic regression adjusting for socio-demographics and HIV-stage, the odds (95% confidence interval) of EBF at 6 months was 0.16 (0.03–0.86) for women in severely food insecure households compared to those in non-severely food insecure households. Consistent with this, IDIs revealed that BF participants associated insufficient nutritional intake with difficulties adhering to infant feeding recommendations: 75.0% were concerned about adequate breast milk production and 46.9% reported experiencing problems while EBF, e.g. unsatisfied baby.
Conclusion: Severe food insecurity is associated with suboptimal EBF. The mitigation of food insecurity may increase the duration of EBF among HIV+ women in rural Uganda.

MOPDD0305

Impact of food assistance on clinic attendance among patients on antiretroviral therapy in Haiti

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Background: In resource limited settings (RSL) such as Haiti, people living with HIV/AIDS face great challenges in maintaining adequate nutrition.The evaluation of the benefits of nutritional supplementation(NS) programs on HIV clinic attendance among HIV infected subjects in developing countries is limited.This abstract focuses on the assessment of the rate of timely antiretroviral therapy (ART) visit attendance for a cohort of patients before food assistance, while receiving food assistance, and after receiving food assistance by using electronic pharmacy visit data.
Methods: Our study population included 2654 patients that received at least 6 months of ART prior to receiving NS between October 2007 and January 2011 at the GHESKIO Centers. Using pharmacy visit data, we calculated the number of late visits (at least 6 days after the scheduled visit date) during the 6 months before receiving NS from the World Food Program (WFP), during the approximate 6 months of WFP supplementation , and the 6 months after the receipt of WFP supplementation.
Results: Among 2654 patients, from a total of 4098 scheduled visits for the period : November 2007- December 2011: there were 1625 late visits during the 6 months period prior to NS which indicates that 39% of the scheduled visits were late visits , there were 1291 late visits during the 6 months of NS ie 31% of the scheduled visits were late visits, and 1135 late visits during the 6 months after NS ie 27% of the scheduled visits were late visits.
Conclusion: Our findings demonstrate that food assistance plays a key role in the regularity of the visits to the pharmacy, which is associated with ART adherence. NS should be part of the package of care and support offered to all patients on ART, particularly those with advanced immunodepression who are so desperately in need.

D106 - Disasters and HIV

THPDD0101

Access to HIV prevention, care and treatment in refugee camps setting in 21 countries: review of key indicators

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Background: UNHCR and its partners aim to ensure that refugees have similar access to HIV prevention, care and treatment services to that of local surrounding populations, and that HIV status is not used to discriminate against refugee rights to asylum, protection and assistance. HIV-related information is monitored systematically to ensure adequate protection and assistance to refugees.
Methods: HIV indicators collected routinely at the health facility level through UNHCR's Health Information System implemented in 21 countries where refugees live in camps, as well as review of indicators collected annually through HIV focal points at field level were analysed from 2008–2011.
Results: By 2011, 81% of pregnant women had access to PMTCT programmes compared with 53% in 2008. 89% of countries had camps with satisfactory universal precautions. 78% of countries were implementing interventions addressing at least one high risk group. The six UNHCR programmes directly managing a blood bank reported 100% of blood screened before transfusion. Fifteen countries reported implementing clinical management of rape survivors; 77% of survivors received PEP within 72 hours. The proportion of countries in Africa, Asia and South America where refugees have similar access to ART as host populations reached 91% by end of 2010. Advocacy against mandatory testing for HIV and for inclusion of refugees in country HIV National Strategic Plans remained stable.
Conclusion: Access to protection, prevention, care and treatment has increased in most of the 21 countries hosting refugees in camps. HIV programming in emergency and protracted situations is possible and effective.

THPDD0102

Poor treatment outcomes among both refugees and host community accessing highly active antiretroviral therapy (HAART) from Kakuma refugee camp in northwestern Kenya

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Background: Given the importance of adherence to HAART for treatment success, our objective was to evaluate if refugees and the local host community attending a rural refugee camp clinic had acceptable adherence and virologic outcomes.
Methods: We conducted a cross-sectional survey among refugee and host community ART clients ($\geq$18 years) in a rural camp-based clinic in Kakuma, north-western Kenya. Data sources included a structured questionnaire, a pharmacy-based measure of HAART prescription (Rx) refills over 24 months prior to study start, and HIV viral loads measured on dried-blood spots. Key outcomes were unsuppressed viral load ($\geq$1000 copies/mL) and optimal adherence ($\geq$95% Rx refill rate).
Results: In refugees and host clients, 85% (n = 73) and 86% (n = 86), respectively, of all clients not lost to follow-up ($\geq$6 months without HAART Rx refill) participated. Median age (years, IQR) was 36 (31–41) vs. 32 (27–38) (p = 0.02),% females was 67 vs. 66 (p = 0.91), median time on HAART (weeks, IQR) was 156 (43–264) vs. 139 (34–225) (p = 0.43), first available CD4 (IQR) was 196 (136–320), n = 61 vs. 198 (119–289), n = 76 (p = 0.28). Most clients (63%) were taking zidovudine, lamivudine, and nevirapine (twice-daily). Similar proportions of refugee and host clients on treatment for $\geq$25 weeks had unsuppressed viral load (88% vs. 89%, p = 0.92; 89% overall). The proportion optimally adhering to pharmacy claim schedule was 79% overall (85% vs. 75%, p = 0.14). In multivariable analyses, refugee status was not independently associated with unsuppressed viral load. A longer time since HIV diagnosis (ORadj = 6.81, 95% CI 1.20–38.58, p = 0.02) and $\geq$8 household members (ORadj = 0.10, 95% CI 0.02–0.55, p = 0.01) were independent risk factors.
Conclusion: When available, virologic measures are valuable for monitoring program effectiveness. No differences in treatment outcomes were detected between refugee and host clients; however, levels of viral suppression were unacceptable. Possible reasons include past adherence lapses. Detailed investigations exploring reasons for the poor virologic outcomes are underway.

THPDD0103

Acceptable adherence and treatment outcomes among refugees and host community on highly active antiretroviral therapy (HAART) in an urban refugee setting in Kuala Lumpur, Malaysia

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Background: There are few data evaluating adherence to HAART and virologic outcomes in clinics attended by urban refugees. Our primary objective was to evaluate if urban refugee and host community clients were maintaining acceptable treatment outcomes.
Methods: We conducted a cross-sectional survey among adult clients ($\geq$18 years) receiving HAART from a public clinic in Kuala Lumpur, Malaysia. Data sources included a structured questionnaire with self-reported adherence measures, a pharmacy-based measure of HAART prescription (Rx) refills over 24 months prior to study start, and HIV viral loads. Key outcomes were unsuppressed viral load (cut-off $<$40 copies/mL) and optimal adherence ($\geq$95Rx refill rate).
Results: We recruited 90% of all eligible refugees (n = 153) appearing on a UNHCR database and 81% (n = 148) of serially-recruited host community clients. Refugees were younger (median age 35y IQR 31–39 vs. 40y IQR 35-48; p $<$ 0.001), more likely to be female (36% vs. 21%, p = 0.004), to have been on HAART for less time (61weeks IQR 35–108 vs. 153weeks IQR 63-298; p $<$ 0.001),and to have a lower routine CD4 (278 cells/μL, IQR 182–423 vs. 350 IQR 202–486; p = 0.03). Similar proportions of those on treatment for $\geq$25 weeks from both groups had achieved viral suppression (81% vs. 84%, p = 0.54) and optimal adherence as measured by Rx (74% vs. 66%, p = 0.15), and by self-reported one-month recall (72% vs. 70%, p = 0.79). Refugee status was not independently associated with the outcome (ORadj = 1.62, 95% CI 0.64–4.09; p = 0.31). Independent risk factors were female sex (ORadj = 0.39, 95% CI 0.14–1.05; p = 0.05), optimal adherence to Rx (ORadj = 0.42, 95% CI 0.24–0.73; p = 0.002), travel in the past year (ORadj = 3.64, 95% CI 1.43–9.30; p = 0.008), and 25–50 weeks between diagnosis and treatment start (ORadj = 1.66, 95% CI 0.56–4.96; p = 0.01).
Conclusion: Refugees′ adherence to HAART and viral suppression was similar to the host community and at acceptable levels. Our findings support a policy of equal HAART provision and support to refugees and the host community in this urban setting.

THPDE0205

Adherence to highly active antiretroviral therapy and treatment outcomes in conflict-affected and forcibly displaced populations: a systematic review

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Background: For HIV-positive persons, optimal adherence ($\geq$95% of tablets taken as prescribed) to highly active antiretroviral therapy (HAART) is required to prevent development of drug resistance and treatment failure. Forcibly displaced populations such as refugees and internally-displaced persons may face unique challenges with respect to adherence and succeeding on HAART. To this end, we performed a systematic review of the literature on adherence to HAART and treatment outcomes in conflict-affected and forcibly displaced populations, assessed the quality of the evidence, and make suggestions for future research.
Methods: MEDLINE, EMBASE, and Global Health databases for 1995–2011 were searched using the OVID platform. A backwards citation review of subsequent work that had cited the OVID results was performed using the Web of Science database. ReliefWeb and MSF websites were searched for additional grey literature.
Results: We screened 297 records and identified 17 reports covering 15 quantitative and two qualitative studies. Three-quarters (11/15) of the quantitative studies were retrospective studies based on chart review; five included $<$100 clients. The geographic distribution was limited, and studies in North America and Africa were disproportionately represented. The range of optimal adherence prevalence was 87-99.5% and good treatment outcomes were also reported. The qualitative studies suggested that food security, community-based volunteers, health workers and social networks were important for maintaining adherence.
Conclusion: Results to date have been encouraging, though most studies had relatively weak designs. Given the diversity of settings where forcibly displaced persons are diagnosed with HIV and treated with HAART, further studies on adherence and treatment outcomes are needed to support HAART scale-up and justifications for inclusion of these vulnerable groups in national treatment plans. There is also a need for systematic and replicable measurement of adherence in future studies among these groups.

D109 - Education and child welfare

MOPDD0304

HIV-related orphans and vulnerable children: schooling, nutrition and community support among three provinces in Cambodia

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Background: HIV has multidimensional effects that pose unique challenges to development in Cambodia. One effect is a large number of orphans and vulnerable children (OVC). Many OVC are less likely to access regular schooling and have low levels of social, financial and psychological support as well as wider community support. KHANA provides a program of community based care and support including social welfare, nutrition and schooling support for these children.
Methods: KHANA collected data among OVC reached by community based care and support to assess changes in nutrition and schooling as well as care and community support between 2009 and 2011. The sample size was 194 in 2009 and 316 in 2011. Both surveys used cluster sampling with a take-all approach, using health center catchment areas as clusters and the same data collection tools. Chi-square test was used to detect changes in schooling, nutrition and community support.
Results: There was a significant increase in OVC regular access to schooling (83.1% vs 96.2%, p-value $<$0.001). The level of change was larger for girls (77.8% vs. 95.9%, p value $<$ 0.001) than boys (87.5% vs. 96.6%, p-value $<$0.006) reaching similar outcomes. Reports of daily meal reduction due to not enough food decreased from 53.1% to 39.2% (p-value $=$0.002). Reports of periods of inadequate food supply during the year dropped from 36.1% to 16.5%. There were increases in community support to OVC, with psychological and schooling supports both increasing significantly by 32% and 45% respectively.
Conclusion: The findings highlight positive changes in some aspects of social support among OVC. The children reached with community based care and support demonstrated increased psychological support and access to regular schooling. Socio economic status as measured by secure access to food also improved significantly. These improvements are likely due to contributions from KHANA program as well as increased community and family support.

D110 - Social welfare

WEPDD0302

Disability grant terminations and virologic and immunologic response to ARV treatment

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Background: The question of the potential role of income support in an ARV treatment programme is of particular relevance in South Africa, where individuals too ill to work qualify for a specific form of income transfer, or, as it is called in South Africa, a social welfare grant, namely the disability grant (DG). ARV patients face the dilemma of trading off a stable source of income against their current and/or future health and adhering sub-optimally to ARV treatment so as to not lose the grant.
Methods: This paper employs a pooled longitudinal, panel dataset from two Free State cohort studies of public sector ARV clients to determine how disability grant terminations may impact on virologic and immunologic treatment outcomes. Linear and logistic multivariate random-effects (RE) regression models are employed to assess the impact of grant terminations on CD4 counts, viral load (RNA) and viral suppression.
Results: The findings suggest that the termination of access to a disability grant does in fact translate into poorer treatment outcomes, particularly in the first year of ARV treatment. Disability grants impact negatively on viral suppression regardless of treatment duration [OR 0.253, 95% CI 0.087–0.733]. Disability grant terminations at the outset of ARV treatment initiation impacts negatively on CD4 counts [$-$103.8, 95% CI $-$164.6 $-$43.0], log of viral load [4.07, 95% CI 2.58–5.56] and viral suppression [OR 0.019, 95% CI 0.002–0.181] at 3–12 months on ARV treatment.
Conclusion: Social welfare officers and health care teams, in particular physicians considering applications for the renewal of a disability grant, should take particular care when deciding to refuse applications for the renewal of a short-term grant in the early phases of the ARV treatment career. In the longer term, healthy ARV clients should be referred to welfare-to-work programmes to eliminate dependency on social welfare grants.

Abstract Coding Guide
Example: **MOAA01** = (Weekday) **MO** – (Session type) **AA** – (Session order) **01**
Weekdays: SU (Sunday), MO (Monday), TU (Tuesday), WE (Wednesday), TH (Thursday), FR (Friday)
Session types: oral abstract sessions – AA (Track A), AB (Track B), AC (Track C), AD (Track D), AE (Track E), AX (Cross-Track), LBA (Late Breaker Track A), LBB (Late Breaker Track B), LBC (Late Breaker Track C), LBD (Late Breaker Track D), LBE (Late Breaker Track E), LBX (Late Breaker Cross-Track); oral poster discussions sessions – PDA (Track A), PDB (Track B), PDC (Track C), PDD (Track D), PDE (Track E) PDX (Cross-Track)
Session order: 01, 02, 03, 04, etc.