

and discrimination, which in turn affect their access to housing, employment, healthcare and put them in a high risk of STD. These characteristics are shared with sex workers, injecting drug users and men who have sex with men. However, gender identity has led to a particular combination of vulnerabilities, ultimately resulting in a much higher risk of HIV infection among the male-to-female transgender population as mentioned above.

Methods We conducted an exploratory descriptive study and collected data with surveys, in-depth interviews, focus groups and ethnographic strategies with 18 transgender women. The collected information was analysed, taking into account the following dimensions of interpretation: 1-Love, erotic, and sexual relations. 2- Gender and sexual identities. 3-Sexual behaviour and practices. 4-Self-care, HIV-risk perception and life goals.

Results Transgender women believed that they needed to perform an overtly feminine identity (hyperfeminine). They think this performance involves taking sexual risks assigned traditionally by the social space such as street prostitution. In this role transgender women's negotiation power is significantly reduced. Many transgender women assumed and accepted this gender disparity social structure that increased their vulnerability to STI/HIV.

Conclusions This research intended to identify the most significant ways in which sexuality is represented and imagined within the culture of transgender women in Colombia. Special emphasis was placed on discovering transgender women's logics, or thinking processes, which are capable of perpetuating their high vulnerability to HIV/AIDS. Transgender women in Colombia construct their gender identities within contexts of stigmatisation, social marginalisation, and multiple symbolic and physical forms of violence. Our work critiques approaches based on androcentrism that perceive gender identities as essential and fixed, and assume sexual binaries that oppress the lived experience of human bodies. We propose a peer-led educational strategy focused on the deconstruction and reconstruction of gender identities and interventions with transgender women that reduce stigma through enhancing autonomy, joy, and self-care. We argue that these are the central elements for a "life with quality" in which equal citizenship can be exercised.

P2-S5.04 BEHAVIOURAL RISKS AND HIV/AIDS KNOWLEDGE IN ADOLESCENT STREET CHILDREN AND THEIR HEALTH IMPLICATIONS

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Background In Pakistan social and ethical bindings are major constraints to launch effective awareness campaign or vaccination trial against HIV transmission. Lack of awareness coupled with high risk behaviour could result in AIDS epidemic among adolescents and street children as in these groups coercive and transactional sex is common. We aimed to examine adolescent's behavioural risks and their knowledge about HIV/AIDS. Sources of information regarding HIV/AIDS were analysed for risk behaviour in relation to social factors.

Methods Cross-sectional study was conducted in rural and urban areas of Rawalpindi to gather information from street children (n=148, mean age 17 years). Multivariate analysis was performed to see effect of residential site and gender on AIDS concepts.

Results Among surveyed population, 14% had heard of HIV vaccine and 50% believe HIV vaccine could develop infection. About 33% ever had sex and 10% revealed >1 partner per year. 5% had knowledge about HIV status of partner see Abstract P2-S5.04 Table 1. A high degree of risky behaviour activities correlated with those

Abstract P2-S5.04 Table 1 Multivariate ANOVA for HIV/AIDS knowledge

	Main effect		Interaction Site × Gender
	Site	Gender	
MANOVA test (Pillai's F value)	2.17	4.45	1.43
HIV/AIDS transmission route	<1	<1	<1
Discussion about HIV/AIDS	1.2	2.21	1.53
Behavior risks	<1	<1	2.25

children who lived in rural areas. Urban area street children were found to explore more sources to grasp HIV information. We found limited availability of documented information to compare the present observations.

Conclusions Both the adolescents and street children with poor knowledge about HIV are involved in risky behaviour. Our study propelled the need to consolidate, where relevant, community mobilisation for HIV prevention research throughout the country. Moreover, cross-country documentation must be improved for wider sharing of knowledge. A planned approach with educational sessions seems imperative for developing an effective sexual health safety program.

P2-S5.05 RISK PROFILES OF WINNIPEG STREET POPULATIONS: A LATENT CLASS ANALYSIS

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Background Sexually transmitted and bloodborne infection (STBBI) risk is multifaceted and can involve a complex interplay between sexual behaviours, substance abuse and mental health conditions. In Winnipeg, Manitoba Canada we conducted a study to better understand the interconnectedness and overlap of these conditions and behaviours.

Methods Data from the Social Network study phase III (SNS III) were collected in the fall and winter of 2009 using semi-structured in-person interviews (n=600). Sampling was by respondent driven sampling and targeted street populations. The average mean age was 37 (SD=14.8) and the gender distribution was relatively equal (males constituted 53%). Latent class analysis was used to identify unobserved or latent subgroups (ie, risk profiles) to explore the extent of overlap between risky sexual behaviours, substance use choice (crack, alcohol, solvents, injection drug use), and mental health conditions. Six individual level items constituting risky behaviours and five network or environmental level risk behaviours were used in the latent class analysis. Individual items included: Ever diagnosed with a mental health condition, ever used crack, daily binge drinking, ever used solvents, ever injected drugs and knowing your sex partner has multiple other sex partners while social network items included: the proportion of your social network members who drink alcohol, use crack, sniff solvents, inject drugs, or are sex partners. Fit indices of G2, AIC, and BIC were used in assessing model fit. Additionally, the model fit was assessed by examining the relationship between items and their conditional latent class by strength of homogeneity (closeness to 0 or 1) and by whether there was evidence of good separation of latent classes.

Results The 2-, 3-, 4-, and 5-class LCA models were compared. Goodness of fit indices favoured the 4-class model. For the 4-class model indices were: G2=1115, df=2000, AIC=1209, BIC=1415. Class prevalence of the 4 latent classes were: 31% were at high risk for all individual and network items, 25% constituted another latent class labelled as low-risk, 21% constituted a subgroup who were labelled as "loners" and exhibited high risk for mental

Abstract P2-S5.05 Table 1. 4 Latent class model of Winnipeg street population risk profiles

Class membership probabilities: Gamma estimates (SEs)					
Class	1	2	3	4	
	0.2474 (0.0254)	0.3099 (0.0315)	0.2137 (0.0243)	0.2289 (0.0325)	
Item response probabilities: pestimates (SEs)					
HSA14_:	0.0335 (0.0482)	0.7211 (0.0372)	0.6719 (0.0473)	0.7207 (0.0467)	Mental health (even been dx)
ALC2_:	0.3754 (0.0461)	0.8494 (0.0627)	0.4599 (0.0505)	0.0623 (0.0433)	Binge drinking (>5 drinks)
CRS1_:	0.3158 (0.0540)	0.9773 (0.0166)	0.9128 (0.0342)	0.9258 (0.0315)	Crack use
SSU1_:	0.1425 (0.0349)	0.5256 (0.0414)	0.5068 (0.0525)	0.5541 (0.0516)	Solvent use
idu1_:	0.0488 (0.0285)	0.6211 (0.0404)	0.6698 (0.0568)	0.6879 (0.0525)	Injection drug use
SNSX7_new_:	0.1944 (0.0403)	0.7745 (0.0368)	0.0052 (0.0069)	0.6961 (0.0511)	Sex partners have multiple part
SNID1_:	0.1784 (0.0398)	0.5803 (0.0407)	0.3842 (0.0483)	0.7888 (0.0477)	Network members' IDU
SNALC_:	0.6019 (0.0459)	0.9870 (0.0158)	0.4698 (0.0500)	0.4151 (0.0713)	Network members' alcohol use
SNCRACK_:	0.0136 (0.0137)	0.6265 (0.0408)	0.3629 (0.0498)	0.4515 (0.0549)	Network members' crack use
SNODU_:	0.4989 (0.0462)	0.8380 (0.0331)	0.4820 (0.0497)	0.5634 (0.0518)	Network members' other drug use
SNSX1_:	0.5883 (0.0496)	0.9872 (0.0121)	0.1129 (0.0572)	0.9958 (0.0068)	Network members are sex part.

health issues as well as individual crack, solvent use, and injection use but no network level correlates while the fourth latent class (23%) was distinguished for engaging in risky sexual behaviours and having these risky behaviours be supported at the social network level.

Conclusions Latent class analysis demonstrated that there are indeed subgroups of vulnerable populations who warrant targeted interventions given their different risk profiles. This type of investigation offers a public health population segmentation strategy to plan for future targeted prevention efforts that can more effectively address the special needs of these subgroups of vulnerable populations.

P2-S5.06 BEHAVIOURAL INTERVENTIONS FOR REDUCING HIV INFECTION IN WORKERS IN OCCUPATIONAL SETTINGS, A COCHRANE SYSTEMATIC REVIEW

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Background HIV in the workforce has a negative impact on economic growth and development of affected countries. The workplace provides an important avenue to prevent HIV by providing easy access to workers who might have similar high risk sexual behaviour because of the nature of their work. Objective of this systematic review is to evaluate the effect of behavioural interventions on high risk sexual behaviour to prevent HIV among workers.

Methods We searched electronic databases to locate studies. Only randomised control studies in occupational settings or among workers identified as high risk groups were included. The outcome measures were: indicators of high risk sexual behaviours, uptake of Voluntary Counselling and Testing (VCT), and incident cases of HIV. We excluded health workers, sex workers, injection drug users and Men who have sex with men because these are already in other reviews.

Results We included 4 studies but we had incomplete data from one. All the studies were from developing countries in Asia and Africa with a total of 7994 participants. We grouped the studies in the following comparisons: Uptake of VCT was increased when

provided in workplace compared to voucher for testing only, RR=14.0 (95% CI 11.8 to 16.7), HIV incidence was not reduced, RR=1.4 (95% CI 0.7 to 2.7). Education caused a non-significant decrease in sex with extra partner RR=0.7 (95% CI 0.3 to 1.8) and unprotected sex, RR=0.9 (95% CI 0.5 to 1.4). More intensive Information, motivation and behavioural (IMB) skills training increased the use of condom, RR=2.8 (95% CI 1.6 to 4.1) and decreased sex with commercial sex workers, RR=0.8 (95% CI 0.80 to 0.96) in a very high risk group of truck drivers.

Conclusion VCT might not be effective in reducing HIV incidence in workplace intervention, and delivering voluntary counselling and testing on-site at workplace increases the uptake of VCT. However, education, and Information, motivation and behavioural (IMB) skills training might be worthwhile in reducing risky sexual behaviour and increasing condom use, especially when delivered with high intensity in the workplace.

P2-S5.07 COST OF THE AVAHAN HIV PREVENTION PROGRAMME FOR HIGH RISK GROUPS: RESULTS FROM 23 DISTRICTS FROM FOUR SOUTHERN STATES IN INDIA

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Background It is estimated that 2.27 million people are living with HIV or AIDS in India. The epidemic is concentrated and predominately driven by marginalised groups. The Avahan Programme in India is one of the largest HIV prevention programmes targeted at high risk populations within a single country in the world. It provides grants to state lead partners (SLPs), who in turn provide grants to non-government organisations (NGOs) at the district level to deliver multi-component interventions (including peer outreach, STI services, and structural interventions). This study presents the costs of implementing these interventions to female sex workers, men who have sex with men and transgender from 23 districts in the four Southern states of India over 4 years.

Methods Financial and economic costs were prospectively collected. Costs by input and activity, unit costs of interventions between 2004 and 2008 were analysed. Economic costs are presented in US \$ 2008 using 3% discount rate.